

CONGRESS 8<sup>th</sup>

# EORNA

THE COLOSSUS OF PERIOPERATIVE NURSING

4 - 7 MAY 2017 Rhodes Island, GREECE

Rodos Palace  
International  
Convention Centre

[www.eornacongress.eu](http://www.eornacongress.eu)



## ABSTRACT BOOK

CONGRESS SECRETARIAT



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# ABSTRACT BOOK





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## Welcome Address

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Dear Colleagues,

On behalf of the Organising Committee, it is a great pleasure to welcome to the **8<sup>th</sup> Congress of the European Operating Room Nurses Association (EORNA)**, held in Rhodes island – Greece from the **4<sup>th</sup>** to the **7<sup>th</sup>** of **May 2017**.

This is a great moment bringing together all committed nurses, leaders and perioperative professionals.

The scientific program offers delegates a wide range of innovative and interesting topics, with oral presentations, poster sessions and workshops. This congress is an excellent opportunity to enhance and strengthen your knowledge for improving perioperative care. During this congress you will also share knowledge and experience with colleagues from over 40 countries.

Greece is famous for being the cradle of Western civilization. Greek culture, had a powerful influence on our history and our world especially in philosophy, art and science.

Greece is also the country of Hippocrates, the physician considered as one of the most outstanding figures in the history of medicine and as the “father of western medicine”.

Today, in our profession, we use many medical terms that derive from Ancient Greek.

Rhodes is famous worldwide for the “Colossus of Rhodes», one of the Seven Wonders of the Ancient World. Rhodes, located between the West and the East became an important meeting point of various civilizations, cultures and religions.

The congress theme is: The Colossus of perioperative nursing. If you describe someone as a colossus, you mean that he is extremely important and great in ability. We, perioperative nurses, are “the colossus” to provide the best, the more secure perioperative care to the patient.

The Colossus of Rhodes was a symbol of peace and unity for the people who were living in the beautiful Mediterranean island of Rhodes. In perioperative nursing practice, we do not work alone, but as a team. In a united team, we communicate, we have common goals. Teamwork is more than just working together, it is bringing out the best of everyone’s strengths, the key in ensuring quality perioperative care.

We trust this will be a very fruitful congress for everyone!

**May Karam**

EORNA President

**Dimitris Poulis**

Organization Committee Chair

**Jaana Perttunen**

Scientific Committee Chair





# Committees

## Organizing Committee



Chairperson  
**Dimitris Poulis, Greece**



Vice Chair / Secretary / National Exhibitors  
International Exhibitors & Sponsors  
**Ioannis Koutelekos, Greece**



Member / National Associations & Promotion  
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Treasurer  
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Scientific Programme  
**Jaana Perttunen, Finland**



International & National Associations International  
Exhibitors & Sponsors /EORNA President  
**May Karam, France**

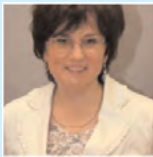


Legal and Fiscal Affairs & DNS  
**Olivier Willième, Belgium**

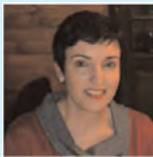
## Scientific Committee



Chairperson  
**Jaana Perttunen, Finland**



**Emese Berczi, Hungary**



**Miguel Graça, Portugal**



**Helga Guðrún Hallgrímsdóttir, Iceland**



**Maria Loureiro, Belgium**



**Britta Nielsen, Denmark**



**Filiz Ogce, Turkey**

## Priority Session Speakers



### ROGER HUCKFELDT, MD, CLCP

Dr. Huckfeldt joined the Mercy system in 1999 as the Medical Director for St John's Level One Trauma and Burn Center in Springfield, MO. He completed his Medical Degree at Creighton University School of Medicine in Omaha Nebraska in 1987. Dr. Huckfeldt completed a General Surgery residency program and Surgical Critical Care Fellowship at the University of Missouri-Columbia and a Trauma Fellowship at Oregon Health Sciences University in Portland Oregon before returning to the University of Missouri as a staff surgeon and Director of Trauma.

Dr. Huckfeldt has been involved in Medical research for most of his career and served as Medical Director of St John's Medical Research Institute.

Palm Medical was founded by Dr. Roger Huckfeldt, a trauma and burn surgeon with more than thirty years of healthcare experience. Dr. Huckfeldt's experience includes an extensive clinical background, product development and commercialization efforts and significant medico-legal experience.

Now retired from the operating room, Dr. Huckfeldt maintains an active role in health care through Palm Medical. In the medico-legal environment, Dr. Huckfeldt utilizes his vast clinical experience to perform case reviews, certified Life Care Plans, and Healthcare Alternative Dispute Resolution. Dr. Huckfeldt also remains active in product development from idea to final commercialized product.



### JANE REID

Jane has enjoyed a career of Nursing posts in acute care, and Higher Education, roles in immediate past years have included President of the Association for Perioperative Practice (AfPP), Nurse Advisor WHO 2nd Global Challenge Safe Surgery Saves Lives (Geneva), Associate Dean (Nursing and Allied Health Professions) Bournemouth University and Nurse Advisor to the National Patient Safety Agency (NPSA).

Jane's current portfolio includes, Clinical Lead Wessex Patient Safety Collaborative, Regional Lead (South of England) for Sign up to Safety, and Non-Executive Director Salisbury Hospital NHS Foundation Trust. Jane also operates as an independent advisor in support of NHS Improvement, in the field of Never Event investigation/safety improvement.

Special interests include, professionalism, human factors, patient safety, continuous quality improvement, healthcare ethics and law.

Jane is a former President of the International Federation of Perioperative Nurses (IFPN)

In 2013 Jane was recognised by the UK Health Service Journal (HSJ) in association with Barclays International Banking and the NHS Leadership Academy, as one of the most inspirational women leaders, in UK healthcare.



### SUZY KIMPEN

**Magic is something you make**

My name is Suzy Kimpen (45 year) and I've been working in operating rooms for more than 20 years. During my professional journey as a RN, a transplantation coordinator, a teacher, a staff member and a coach/consultant I've met the most beautiful people and professionals. I've been given opportunities in teaching, mentoring and professional growth. In 2006 I've read this life changing article written by Prof. David Cooperidder and Prof. Suresh Srivastava about Appreciative Inquiry. Realizing that there was another way of looking at life felt like a big relief! Since that moment I've been studying Appreciative Inquiry not only to become an expert in this field but to find a way to help my colleagues in healthcare to change the way they look at their beautiful jobs.

In 2011 my thirst for knowledge and training has led me to CWRU in Cleveland where I was trained by Prof. Ron Fry. In Belgium I followed CIGO and I continue to expand my knowledge and I hope to start my PhD in the near future. Through action research I want to help healthcare professionals to take charge of their life's and find the spirit to stay focused on their own qualities and the beauty of their work. I want to dedicate my life to this work.

My motto: "I have never tried that before so I think I should definitely be able to do that!"



### STALIKAS ANASTASSIOS

Anastassios Stalikas is a Professor in Psychology Department, at the Panteion University of Social and Political Sciences, Adjunct Professor at McGill University in Canada, and President of the Hellenic Society of Positive Psychology. He has authored more than 10 books, 60 chapters, and over 200 articles and papers in the international scientific community. His work centers on the role of positive emotions in the protection and enhancement of psychological and physical health. In addition to his teaching and research activities he is a psychotherapist, consultant and coach. His clinical, training and coaching work is guided by his research findings, while at the same time these same activities generate his research questions. Over the last 20 years he has been invited for talks, workshops, seminars, and courses in more than 15 countries and in four continents. He rides his bike and he plays the saxophone.



KEYNOTE Lecture

PRIORITY SESSIONS





## KEYNOTE LECTURE 1

### UNDERSTANDING VIOLATION AND MIGRATION IN THE PERIOPERATIVE SETTING – IT'S IMPACT ON QUALITY PATIENT CARE/POSITIVE OUTCOMES AND STAFF EXPERIENCE. ORGANISATIONAL DRIFT PUTS PATIENTS AT RISK

*Jane Reid, UK*

## KEYNOTE LECTURE 2

### WHAT'S ALL THE FUSS WITH POSITIVE EMOTIONS? ALL YOU WANTED TO KNOW ABOUT POSITIVE EMOTIONS AND YOU DID NOT DARE ASK

*Anastassios Stalikas, Greece*

Positive Psychology is the youngest and fastest developing branch of Psychology. Positive psychology has enriched, broadened and deepened the scope of Psychology, and focuses on talent development, personal growth, well-being and happiness.

We start our talk by establishing the conceptual framework of Positive Psychology and the conceptual relationships, overlaps and complementarity to other branches of Psychology. We emphasize the terms 'positive' and 'negative' and we outline how Positive Psychology is indeed complimentary and not oppositional to 'Negative' Psychology.

One of the main and fundamental assumptions of Positive Psychology centers on the beneficial role of experiencing positive emotions. The role of positive emotions has been largely neglected by most theories of emotion in Psychology. Most psychological theories of emotions focus almost exclusively on the role and the functions of negative emotions for human functioning, motivation and behavior. Positive psychology has presented new theories regarding the role of positive emotions for optimal human functioning. In this talk we will argue for, and present research evidence that supports the argument regarding the beneficial role of experiencing positive emotions for our physical health and psychological well-being.

More specifically we will outline the relationship between positivity and longevity, physical and psychological health, productivity, cognitive functioning, relationships and resilience. We will argue that positive emotions protect, heal and boost physical and psychological health.

In the third part of this talk we will underline the importance of the manner we perceive, interpret, make sense, and ascribe meaning to events. We will argue that we construct reality and that our emotional states shape the way we construct, experience and narrate reality.

Finally, in the last part of the talk we will present methods, practices and processes that facilitate and increase positivity, aiming at increasing our psychological resilience and our overall sense of well-being.

**KEYNOTE LECTURE 3****WE CAN BE THE CHANGE WE WANT TO SEE IN AN OR, USE THE POWER OF APPRECIATION!*****Suzy Kimpen, Belgium*****KEYNOTE LECTURE 4****RESPIRATORY PROTECTION OVERVIEW*****Roger E. Huckfeldt, USA*****Introduction**

Surgical smoke is present in operating room (OR) environments where procedures are performed using heat-producing devices (e.g., electrosurgery units and lasers).<sup>1</sup> Approximately 90% of both open and endoscopic procedures generate some level of surgical smoke.<sup>2</sup> As the use of these heat-producing devices continues to increase to support today's surgical techniques, there is a corresponding increase in exposure to the smoke generated during these procedures, which may pose certain health risks. Surgical smoke has been found to contain toxic gases and vapors, bioaerosols, bacteria, and viruses, all of which can cause adverse health conditions.

The United States Occupational Health and Safety Administration (OSHA) estimates that 500,000 health-care workers (HCWs) in the OR, including surgeons, anesthesia providers, nurses, and surgical technologists are exposed to electrosurgical or laser smoke annually.<sup>3</sup> A local exhaust ventilation (LEV) should be used during all smoke generated procedures and effective respiratory protection masks worn by the surgical staff to reduce the risk of occupational exposure to surgical smoke and its associated hazards.

**Disease Transmission**

Research indicates that disease is transmitted through surgical smoke. One study found, the presence of irritant, carcinogenic, and neurotoxic compounds in electrosurgical smoke, which may have significant implications for the health and safety of operating room personnel.<sup>4</sup> In another study, the collected laser plume was shown to contain papillomavirus DNA.<sup>5</sup> And yet another study, confirmed that the application of electrocautery to a cluster of melanoma cells releases these melanoma cells into the plume; and these cells are viable and may be grown in culture.<sup>6</sup>

Generally, within five minutes of using electrosurgery during a procedure, particulate matter in the immediate area increases from a baseline measurement of approximately 60,000 particles per cubic foot to over one million particles per cubic foot.<sup>7</sup> In addition, it takes the typical OR air handling system approximately 20 minutes to return particle concentrations to normal after the procedure has been completed.



In a study comparing smoke condensates induced by the use of CO<sub>2</sub>-laser and electrosurgery indicated that the total mutagenic potency observed was comparable to that of cigarette smoke:

- Using the CO<sub>2</sub> laser on one gram of tissue is like inhaling the smoke from three unfiltered cigarettes in 15 minutes.<sup>8</sup>
- Using electrosurgery on one gram of tissue is like inhaling smoke from six unfiltered cigarettes in 15 minutes.<sup>8</sup>

### Airborne Contaminates

Ask any member of the surgical team, and they will tell you surgical smoke can be seen and smelled. The components of surgical smoke are the gaseous by-products of the breakdown and vaporization of tissue protein and fat.<sup>9</sup> Surgical smoke is comprised of 95% water or steam and 5% cellular debris in the form of particulate matter, which contains chemicals, blood and tissue particles, intact viruses, and intact bacteria. The water acts as a carrier for particulate matter contained in surgical smoke. The concentration of these by-products produced during electrosurgery or laser depends on the type of tissue, power density, and length of time the energy is used on the tissue. The chemical composition of surgical smoke has been well documented.<sup>10</sup> (Table 1)

Table 1 - Chemical Contents of Surgical Smoke<sup>10</sup>

Acetonitrile	1-Decene	4-Methyl phenol
Acetylene	2,3-Dihydro indene	2-Methyl propanol
Acrolein	Ethane	Methyl pyrazine
Acrylonitrile	Ethyl benzene	Phenol
Alkyl benzene	Ethylene	Propene
Benzaldehyde	Formaldehyde	2-Propylene nitrile
Benzene	<i>Furfural</i>	Pyridine
Benzonitrile	Hexadecanoic acid	Pyrrole
Butadiene	Styrene Hydrogen cyanide	Styrene
Butane	Indole	Toluene
3-Butenenitrile	Methane	1-Undecene
Carbon dioxide	2-Methyl butenal	Xylene
Creosol	6-Methyl indole	

Acetonitrile 1-Decene 4-Methyl phenol Acetylene 2,3-Dihydro indene 2-Methyl propanol Acrolein Ethane Methyl pyrazine Acrylonitrile Ethyl benzene Phenol Alkyl benzene Ethylene Propene Benzaldehyde Formaldehyde 2-Propylene nitrile Benzene *Furfural* Pyridine Benzonitrile Hexadecanoic acid Pyrrole Butadiene Styrene Hydrogen cyanide Styrene Butane Indole Toluene 3-Butenenitrile Methane 1-Undecene Carbon dioxide 2-Methyl butenal Xylene Creosol 6-Methyl indole

### Health Concerns

Pulmonary irritation and inflammation, transmission of infection, and genotoxicity are the major health concerns associated with surgical smoke. Additionally, after repeated exposures to surgical smoke, OR staff have reported signs and symptoms that include burning and watery eyes, nausea, and headaches.<sup>11</sup> Table 2 lists the potential health hazards associated with exposure to surgical smoke.

Table 2 – Potential Health Hazards of Surgical Smoke<sup>11</sup>

Acute and chronic inflammatory respiratory changes (i.e., asthma, chronic bronchitis, emphysema)	Eye irritation	Lightheadedness
Anemia	Headache	Nasopharyngeal lesions
Anxiety	Hepatitis	Nausea or vomiting
Carcinoma	Human Immunodeficiency Virus (HIV)	Sneezing
Cardiovascular dysfunction	Hypoxia or dizziness	Throat irritation
Colic	Lacrimation	Weakness
Dermatitis	Leukemia	

The size of the particles in surgical smoke is also an important consideration in assessing the respiratory hazards of surgical smoke. The smaller the particle size, the farther it can travel to affect the non-scrubbed surgical team members, in addition to those who are scrubbed.<sup>12</sup>

Typical particulate sizes are:

- Tobacco smoke = 0.1 to 3.0 microns
- **Surgical smoke = 0.1 to 5.0 microns**
- Bacteria = 0.3 to 15.0 microns
- Human immunodeficiency virus (HIV) = 0.15 microns

A study measuring the speed and distance of smoke particles reported the range of 9 to 18 meters (29.52 to 59.05 feet) per second.<sup>13</sup>

### Surgical Masks and Respirators

#### Surgical Masks

Surgical masks are a commonly used protective equipment in the operating room. Surgical masks are intended for use as a barrier to protect the wearer's face from large droplets and splashes of blood and other body fluids. They can also reduce the spread of infectious liquid droplets (carrying bacteria or viruses) that are created when the wearer coughs or sneezes. They are not designed to protect the wearer from inhaling airborne bacteria or virus particles and are less effective than respirators. There is no clear evidence that disposable surgical face masks worn by members of the surgical team would reduce the risk of wound infections after clean surgical procedures.<sup>14,15,16</sup> It is important to note that the filtration efficiency of surgical masks varies; however, in general, surgical masks filter particles to approximately **5 microns in size**. Approximately 77% of the particulate matter in surgical smoke is 1.1 microns and smaller.

#### Respirators

In certain clinical situations where the potential for exposure to airborne contaminants and infectious agents exists, the use of respiratory personal protective equipment (PPE), may be required. Several types of respirators are available today; however, the ones most commonly used by HCWs generally fall into the category of air-purifying filtering facepiece respirators (FFRs).<sup>17</sup> These personal protective devices cover at least the nose and mouth and are composed of a filter that prevents the passage of a wide size range of hazardous airborne particulate matter, including very small (**0.3 microns or larger in diameter**) dust particles and infectious agents from entering the wearer's breathing space.<sup>18,19</sup> All filtering facepiece respi-



rators must pass the specified standard certification tests. Further, all healthcare providers need to be fit tested to ensure that the HCW is wearing a surgical respirator that can provide a good facial seal and, therefore, the expected level of protection.<sup>20</sup> Every time a respirator is donned, the HCW should perform the manufacturer's recommended user seal check method to ensure that an adequate seal has been obtained. If the individual feels air coming in or going out around his or her eyes or chin or his or her glasses begin to fog during a user seal check, the respirator should be adjusted or replaced. It is important to note that user seal checks are not substitutes for fit tests.

In the United States, testing for respirators is done by the National Institute for Occupational Safety and Health (NIOSH). In Europe, respirators are tested against the relevant European Standard under the PPE Directive 89/686/EEC. Following (Table 3)<sup>21</sup> are some of the minimum filtration requirements according to US and European standards. It is important to recall that respirators help reduce exposure to airborne contaminants but do not prevent the inhalation of all particles.

Table 3. Respiratory Standards and Filter Efficiency<sup>21</sup>

Standard	Classification	Filter Efficiency
NIOSH 42 CFR 84	95	≥ 95%
NIOSH 42 CFR 84	99	≥ 99%
NIOSH 42 CFR 84	100	≥ 99.97%
EN149	FFP1 (filtering facepiece)	≥ 80%
EN149	FFP2 (filtering facepiece)	≥ 94%
EN149	FFP3 (filtering facepiece)	≥ 98%

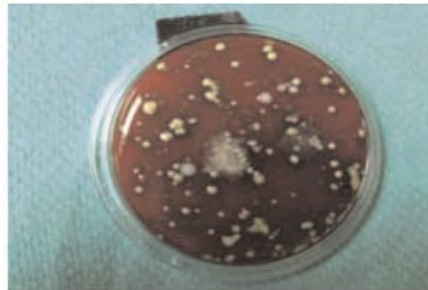
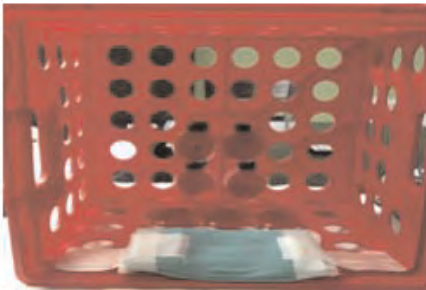
Surgical masks and respirators are disposable, single-use devices that should be worn during a single patient encounter by one person; they should not be shared between wearers.<sup>22</sup> They should be discarded when it becomes wet or visibly dirty; damaged or deformed; and when it becomes contaminated with blood, respiratory or nasal secretions, or other bodily fluids from patients. They should not hang around the neck of staff or be worn outside of the OR. When discarded, hands should not touch the mask but rather the top of the mask to remove. Generally, masks should be worn for up to 3 hours. Typically, surgical masks are available in only one size. While respirators offer options such as small, small/medium, medium, medium/large, and large. Both surgical masks and respirators come in a variety of shapes.

#### [Study Comparing Protection Offered by Surgical Mask VS N95 Respirator](#)

A study conducted by Huckfeldt, et al recommended that the use of an N95 surgical mask/respirator should be considered during the use of electrocautery and laser and also during the care of isolation patients to protect the HCW; it should also be considered when providing care to immunocompromised patients, including those with open wounds, in order to protect those patients.<sup>23</sup> The study compared the protection provided for the patient from microorganism transfer from the wearer when an N95 surgical mask/respirator or a standard surgical mask was worn. In this study, 10 healthy volunteers were recruited to evaluate the amount of live organisms transmitted from the wearer's oral cavity through either an N95 surgical mask/respirator or surgical mask over a two-hour wear period. A square box was fitted with contact blood agar plates secured in a pattern previously tested to provide best microorganism collection (see Figure 1).



Figure 1 – Breathing Box and Agar Plate



Each test subject placed his head in the box with the chin comfortably resting on a chin rest for a two-hour period breathing normally. The plates were incubated at 37° Celsius (98.6° Fahrenheit) for 48 hours; colony forming units were then counted and recorded. The two-hour period was performed three times by each test subject; without a mask, with a standard surgical mask, and with an N95 surgical mask/respirator. In this study, fit testing was not performed with the N95 mask to represent the realistic pattern of use in a health care setting. The results demonstrated that during the 2-hour period during which the N95 surgical mask/respirator was worn, there was a reduction of 80.4% of collected microorganisms in comparison to the unmasked period; the standard surgical mask only provided a 50.4% reduction. Therefore, an N95 surgical mask/respirator provides improved protection for the wearer and may provide improved patient protection from transfer of microorganisms that could lead to healthcare associated infections.

#### Summary

It is well documented that surgical smoke contains potentially harmful, mutagenic biological materials, gases, and particulates and members of the surgical team continue to be exposed to the hazards of surgical smoke. To reduce occupational exposure to certain airborne particles contained in surgical smoke, local exhaust ventilation (LEV) and a surgical respirator is recommended.

Recommendation V of the AORN Recommended Practices for Laser Safety in Perioperative Practice Settings states, "Potential hazards associated with surgical smoke generated in the laser practice setting, should be identified, and safe practices established."<sup>24</sup> While LEV is noted to be the first line of protection against surgical smoke, respiratory protection (i.e., a fit tested surgical N95 FFR or high-filtration surgical mask) should be worn during procedures that generate surgical smoke as a secondary protection measure against residual smoke that escapes capture by LEV. This recommendation also includes that respiratory protection, at least as protective as a fit-tested N95 FFR, should also be considered for use in combination with LEV in disease transmissible procedures and also during high-risk or aerosol transmissible disease procedures, as noted in the Recommended Practices for Electrosurgery.

(Paper adapted from Respiratory Protection in Surgery – Continuing Education; AORN 2014)



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# CLINICAL Lesson





## INJURED PATIENT MANAGEMENT: FROM SITE OF ACCIDENT TO DEFINATE CARE

**A. Kamparoudis, K. Fortounis, P. Kamparoudi, N. Sikalias, A. Kotsampassaki,  
K. Alexiou, K. Kiroplastis**

Trauma is the number one cause of death during the first four decades of life (ages 1-44years). It represents the 60% of childhood mortality and a globally is one of the biggest financial, social and health problem. Almost 30% of deaths due to trauma will take place in the first 4 hours. Rapid and efficient specialized pre-hospital and hospital care could reduce that percentage (Time is a killer). This is exactly what defines the "golden hour", inside its time frame most of the critical problems must be tackled, before the trauma patient tolerance and reserves are exhausted (Golden hour-optimize the chance of survival).

The management of the patient comprises a) pre-hospital care b) in hospital management c) rehabilitation and social reintegration.

### A. PRE-HOSPITAL MANAGEMENT

In case of multiple injuries patients survival estimation is crucial (Triage). **Triage** is the categorization of trauma patients according to their requirements for treatment in combination with the available resources. During pre-hospital care the ABCDE algorithm is implied to manage patients. Special care must be taken in maintaining an open airway, control of external bleeding and shock, patient immobilization and transfer to the nearest trauma center.

### B. IN-HOSPITAL MANAGEMENT

Is comprised by the initial assessment and care in the emergency department and the definite care in the operating room or the intensive care unit. This requires rapid **primary survey and simultaneous resuscitation of vital functions and thorough secondary survey and assessment and at the end final definite care.**

#### 1. Primary survey and resuscitation in the Emergency department

Recognition and management of fatal injuries is a priority. This is the reason why the ABCDE algorithm is implied in the primary survey, established by the A.T.L.S. program (Advanced Trauma Life Support).

**A "Airway"** Airway maintenance with cervical spine protection and O<sub>2</sub>

**B "Breathing"** Control of Breathing and ventilation

**C "Circulation"** Control of circulation with external hemorrhage control

**D "Disability"** and neurologic status

**E "Exposure/Environmental control"** Completely Undress the patient, but prevent hypothermia

**In continuation, form of management is dependent by the hemodynamic status and the need for surgical intervention**

A patient who is hemodynamically stable, if there is no requirement for surgical intervention and according to the severity of the injuries will be transferred for definitive care to the High Dependency or the Intensive care Unit.

Hemodynamically stable patient, who is in need of surgical intervention, will be transferred to the operating room and then to HDU or ICU.

Hemodynamically unstable patient who doesn't need surgical intervention will be transferred to ICU.

Hemodynamically unstable patient who needs surgical intervention will be transferred immediately to the operating room for "damage control" intervention to avoid the establishment of the **"lethal triplet"**. **That triplet comprises: hypothermia, metabolic acidosis, clotting derangement** and further degradation of the patient.

In the present course and with the aid of actors playing the role of patients, we will mainly focus in pre-hospital care and initial management in the hospital emergency department.



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# ORAL Presentations





## PARALLEL A1 THE WELL-BEING OF THE NURSES

**OP01**

### SHARE THE CARE! STRESS AND CAN WE BECOME MORE RESILIENT TO THIS EPIDEMIC?

**Donnelly Teresa-Tansey Greg**  
**Ireland**

A Motivational Presentation on Coping with Stress!

#### Background and Introduction:

In recent years there has been an increasing interest in the psychological impact of the work environment on health care workers (Alves 2005). Stress may cause illness indirectly via a behavioural path through an increase in inadequate coping behaviours such as increased smoking and alcohol use as a pressure shield. Stress may also cause illness through a direct physiological pathway where the changes in stress hormones have a direct effect on organs such as the heart and the gastro-intestinal tract, cholesterol levels and the immune system (McCarthy, 2010). Occupational stress is prevalent among nurses. It can result in long term physical and psychological illness, role conflict and job dissatisfaction (Lambert and Lambert, 2001, Alves, 2005, Sveinsdottir et al, 2006). There is now a greater need for workforce flexibility and sharing of services. Working in this type of environment is potentially very stressful (McCarthy, 2010). The author is a clinical nurse manager in the Operating Department. The interest in carrying out a study on stress has been generated by personal experience of working in potentially stressful situations. This is due to reduced resources such as staff shortages, poor skill mix, increased work demands and sometimes obsolete equipment with inadequate replacement or maintenance. The author's interest was further increased by exploring the work environment and witnessing increasing work demands. Staff at times have shortened or no breaks and very often don't finish their shift on time due to lists over run. She has also observed colleagues stressed behaviour in practice noting a high rate of absenteeism due to illness. Informal discussion with colleagues suggests stress is prevalent. This led her to examine the literature surrounding stress and the nursing profession.

The possession of affirmative personality traits such as temperament, cognitive ability to adapt, fast decision making and the aptitude to seek solutions are all associated with high resiliency. Grafton et al (2010) list traits associated with resilience to include coping, self-efficacy, optimism, placidity, tolerance, faith, ability to adapt, self-esteem, and a sense of humour. Resilience is recognised as one of the central concepts to prevent and recover from mental illness. Knowles et al (2011) reported that a person's degree of resilience is influenced by rudiments including Culture, Health beliefs, Social support (friends and family), Determination, Past experience with hardship, Ability to balance risk and protective factors, Self-efficacy, Hope, Self-esteem and Coping.

The author advises that recognising the benefit of resilience may help reduce nurse's stress and illness associated with stress. Resilience may reduce attrition and improve retention of much needed nurses. It is important to consider it is an innate quality that can be nurtured.

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## DETERMINATION OF THE EFFECT OF ORGANIZATIONAL STRESS ON THE FATIGUE OF OPERATING ROOM NURSES

**OP02**

**Akansel Neriman, Turkey**

**Neriman Akansel<sup>1</sup>, Mehmet Akansel<sup>2</sup>, Hülya Yanık<sup>3</sup>**

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**Introduction and Aim.** Fatigue is wide problem among nurses. Especially nurses who work in shifts tend to be tired than the nurses working during the day(3). The aim of this study was to evaluate the effect of organizational stress on the fatigue of operating room (OR) nurses.

**Material /Method.** This study was done with OR nurses working in a university hospital. 80 nurses were eligible for this study but we were able to obtain data from 46 nurses(response rate 57.5%). Data collection form consisted of demographic variables, Short form of Job Strain Questionnaire(1) and Piper Fatigue Scale (PFS)(2). Mann WU, KW and Spearman rho were used for statistical analysis of data.

**Results.** The mean age of nurses was 35.39±6.23 years; 87% were female. 84.8% of nurses reported having middle income and 37% of them have a chronic disease. Plenty of them (82.6%) work as alternating scrub and circulating nurse. Average of daily working time of nurses is 13.12±7.40 hrs/day, 43.83±3.61 hrs/wk. mean work experience in OR nurse was 11.372±7.48 years. More than half of nurses (52.2%) expressed feeling tired for months and their fatigue scores were 144.3±42.62 according to PFS. Gender, marital status, education level, family type and income level have no influence on fatigue levels on nurses (p>0.05). However statistically meaningful relationship was found with scores of total Job Stress Questionnaire and all subcategories of PFS. It was determined that social dimension has an influence on cognitive/mood of OR nurses. Statistically meaningful relationships were found between cognitive/mood dimensions and duration of working time; affective meaning dimensions with having chronic illnesses, sensory dimension with the task in the operating room (p<0.05). There is a meaningful relationship between the feeling of being tired and total score obtained from PFS, ability dimension of organizational stress also has an influence on behavioral/severity affective meaning dimensions of PFS.



**Conclusion.** It was determined that organizational stress has an influence on fatigue of OR nurses. Preventive measures should be taken to reduce the organizational stress among OR nurses.

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**OP03**

## SAFETY OF PERSONNEL IN PERIOPERATIVE ENVIRONMENTS

**McLeod Bonnie**  
**Canada**

### Safety at the Sharp End of the Stick

The safety of patients and employees in healthcare have historically been separately managed and regulated. Despite efforts to reduce injury rates for employees and adverse events for patients, healthcare organizations continue to see less-than-optimal outcomes in both domains.

Many workplace safety issues that directly affect the nurse also have an indirect effect on patient safety, and the two should never be addressed in isolation from one another. Nurses today routinely deal with critical issues related to the provision of safe patient care; however, they often do not pay attention to their own workplace safety issues.

The presenter will outline the six key risk areas for perioperative personnel injury and discuss strategies for risk mitigation and avoidance.



## EVALUATION OF VERBAL ABUSE IN THE OPERATING THEATER AND ITS CORRELATION WITH COMMUNICATION QUALITY AMONG PHYSICIANS AND PERI OPERATIVE NURSES

**OP04****Stefanidis Iordanis****Greece****Stefanidis I.<sup>1</sup>, Sarafis P.<sup>2</sup>, Niakas D.<sup>3</sup>, Malliarou M.<sup>3</sup>**<sup>1</sup> Ippokratio General Hospital, General Operating Theatre<sup>2</sup> Cyprus Technological University, Nursing Department<sup>3</sup> Hellenic Open University

**Introduction:** The most common form of abuse in Operating Room is verbal abuse. Recurring verbal abuse has negative effects more specifically in the whole surgical team's morale; it may also lead to lower productivity and increase errors in the operating room. Bad communication causes lack of collaboration or teamwork interactions between nurses and doctors in hospitals and it may jeopardize patient safety.

**Aim:** The aim of the study was the determination of the frequency and the consequences of verbal abuse on perioperative nurses and surgeons and their correlation with the communication between perioperative nurses and surgeons.

**Methods:** it is a research synchronical study that took place in all Operating rooms of 12 General and University Hospitals in Salonica (3 private and 10 public) and our sample included 150 perioperative nurses and 65 surgeons. Verbal Abuse Scale as well as Jefferson Scale of Attitudes toward Physician–Nurse Collaboration was used in this study along with demographics. A higher total score reflects a more positive attitude toward physician–nurse collaborative relationships. For the data analysis, the statistical package SPSS v.20 was utilized.

**Results:** The majority of perioperative nurses (135/150, 89%) stated that they have experiences of verbal abuse in the workplace. The most frequent types of verbal abuse that was reported by the operating room nurses were unreasonable assignments of responsibility and accusations (mean 3.19; SD 1.26). Almost all surgeons (61/65; 95%) reported that they were subjected to verbal abuse inside the Operating Theater. Both surgeons (mean 4.39; SD 1.36) and perioperative nurses (mean 4.89; SD 1.59) considered the experienced verbal abuse to be from a moderate to a severe degree a stressful experience. A significant result was that perioperative nurses agree that surgeons should be specifically trained in the establishment of co-operative relationships with nursing personnel ( $U=2845.5$   $p=0.002<0.05$ ) and that interrelation approaches should be established in order to create positive working relationships between surgeons and perioperative nurses something that should be included in their educational programs ( $U=2883$ ,  $p=0.001<0.05$ ).

**Conclusions:** Findings of this study generally confirmed our expectations. The vast majority of health professionals in the operating room states that verbal abuse incidents happened in presence of others, and perioperative nurses stated that blame and accusations is the most common form of verbal abuse. Despite the different approaches that surgeons and perioperative nurse have about teamwork, it is very positive that surgeons scored high in Jefferson scale as well as perioperative nurses, showing that perioperative nurses and surgeons began to see the importance of their professional communication and interdisciplinary cooperation by the same perspective. Shared training experiences can modify socially prescribed stereotypical roles and can contribute to a better acceptance of professional roles.

**Keywords:** verbal abuse, verbal violence, operating room nurses, physicians, operating theater, communication, working environment, Interprofessional cooperation



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Preferred type of presentation: oral

**PARALLEL B1 MAGICAL MYSTERY TOUR****A FUSE MAGICAL MYSTERY TOUR: WHAT'S YOUR ENERGY IQ?****OP05**

**Munro Malcolm**  
**USA**

**Brenda C. Ulmer, RN, MN, CNOR**

Surgical energy—does the array of surgical energy devices available to surgeons sometimes seem shrouded in mystery and complexity? Gone are the days when the primary hemostatic devices were sutures, the “bovie” or bipolar. From radiofrequency generators, to ultrasonics to microwave to radiofrequency ablation, the possibility of methods to dissect tissue and provide hemostasis seem endless. Do you have questions about electromagnetic interference, patient return electrodes, pacemakers, and implantable electronic devices?

Do you ever wonder if perioperative team members have the skills and the knowledge to use the devices safely and do no harm? As part of a postgraduate continuing medical education course, 48 experienced SAGES (Society of American Gastrointestinal and Endoscopic Surgeons) surgeons took an energy exam, and out of 11 answers, just 6.5 (59%) were correct. Fully one-third of the test takers did not know how to correctly handle a fire on a patient, 31% did not know which device was least likely to interfere with a pacemaker, and 13% did not know that thermal injury can extend beyond the jaws of a bipolar instrument. What is your Energy IQ? AORN and SAGES collaborated to develop a Fundamental Use of Surgical Energy (FUSE) curriculum to train all perioperative team members on the safe use of electrosurgical instruments and devices. Join us on a FUSE journey that is neither magical nor mysterious, but based on sound scientific principles of the safe use of energy. The program will be divided into three sections with information on radiofrequency electrosurgery and electromagnetic interference with implanted electronic devices. The program will conclude with an overview of the FUSE certification exam, followed by a FUSE exam audience challenge to help gauge your FUSE IQ. The FUSE exam is expanding around the globe to train all perioperative team members on how to use electrosurgery devices and accessories safely.

**OBJECTIVES**

1. Identify fundamentals of radiofrequency electrosurgery (Part 1)
2. Describe the integration of surgical energy and patient cardiac rhythm devices (Part 2)
3. Relate the dangers of surgical smoke and the importance of smoke evacuation (Part 3)
4. Describe the FUSE program and review the FUSE Certification Exam (Part 4)



Objectives	Content	Presenter
1. Identify fundamentals of electro-surgery	<ul style="list-style-type: none"> <li>I. Nomenclature in radiofrequency (RF) electro-surgery.</li> <li>II. Physics of RF electrosurgery</li> <li>III. Functions of an electrosurgery generator ESU</li> <li>IV. Mechanisms of RF energy effects on cells and tissues.</li> <li>V. Differences between vaporization/cutting and desiccation/coagulation</li> </ul>	Malcom Munro
2. Describe the integration of surgical energy and patient cardiac rhythm devices	<ul style="list-style-type: none"> <li>I. Identify patients with implanted devices that might be adversely affected by RF energy.</li> <li>II. Surgical devices that can cause electromagnetic interference (EMI).</li> <li>III. Steps to determine how to use RF energy on a patient, in an elective situation or emergent situation, with an implanted electrical device.</li> <li>IV. Strategies to minimize electromagnetic interference (EMI) from RF energy on a Cardiac Implanted Electronic Device (CIED).</li> <li>V. Potential adverse effects of electromagnetic interference (EMI) on a Cardiac Implanted Electronic Device (CIED) during and after the use of RF.</li> <li>VI. Elements needed for preoperative evaluation of a patient with a Cardiac Implanted Electronic Device (CIED).</li> <li>VII. Situations in which a magnet placement may be indicated for a patient with a Cardiac Implanted Electronic Device (CIED).</li> <li>VIII. Identify modifications that need to be made when monitoring a patient with the Cardiac Implanted Electronic Device (CIED).</li> </ul>	Thomas Robinson
3. Describe FUSE and review contents of the FUSE certification exam.	<ul style="list-style-type: none"> <li>I. Explanation of FUSE exam and certification</li> <li>II. Audience participation/contest answering questions from the FUSE exam</li> </ul>	Pascal Fuchshuber



## A FUSE MAGICAL MYSTERY TOUR: WHAT'S YOUR ENERGY IQ?

**OP06****Robinson Thomas****USA****Brenda C. Ulmer, RN, MN, CNOR**

Surgical energy—does the array of surgical energy devices available to surgeons sometimes seem shrouded in mystery and complexity? Gone are the days when the primary hemostatic devices were sutures, the “bovie” or bipolar. From radiofrequency generators, to ultrasonics to microwave to radiofrequency ablation, the possibility of methods to dissect tissue and provide hemostasis seem endless. Do you have questions about electromagnetic interference, patient return electrodes, pacemakers, and implantable electronic devices?

Do you ever wonder if perioperative team members have the skills and the knowledge to use the devices safely and do no harm? As part of a postgraduate continuing medical education course, 48 experienced SAGES (Society of American Gastrointestinal and Endoscopic Surgeons) surgeons took an energy exam, and out of 11 answers, just 6.5 (59%) were correct. Fully one-third of the test takers did not know how to correctly handle a fire on a patient, 31% did not know which device was least likely to interfere with a pacemaker, and 13% did not know that thermal injury can extend beyond the jaws of a bipolar instrument.

What is your Energy IQ? AORN and SAGES collaborated to develop a Fundamental Use of Surgical Energy (FUSE) curriculum to train all perioperative team members on the safe use of electrosurgical instruments and devices. Join us on a FUSE journey that is neither magical nor mysterious, but based on sound scientific principles of the safe use of energy. The program will be divided into three sections with information on radiofrequency electrosurgery and electromagnetic interference with implanted electronic devices. The program will conclude with an overview of the FUSE certification exam, followed by a FUSE exam audience challenge to help gauge your FUSE IQ. The FUSE exam is expanding around the globe to train all perioperative team members on how to use electrosurgery devices and accessories safely.

### OBJECTIVES

5. Identify fundamentals of radiofrequency electrosurgery (Part 1)
6. Describe the integration of surgical energy and patient cardiac rhythm devices (Part 2)
7. Relate the dangers of surgical smoke and the importance of smoke evacuation (Part 3)
8. Describe the FUSE program and review the FUSE Certification Exam (Part 4)



Objectives	Content	Presenter
1. Identify fundamentals of electrosurgery	<p>VI. Nomenclature in radiofrequency (RF) electrosurgery.</p> <p>VII. Physics of RF electrosurgery</p> <p>VIII. Functions of an electrosurgery generator ESU</p> <p>IX. Mechanisms of RF energy effects on cells and tissues.</p> <p>X. Differences between vaporization/cutting and desiccation/coagulation</p>	Malcom Munro
2. Describe the integration of surgical energy and patient cardiac rhythm devices	<p>IX. Identify patients with implanted devices that might be adversely affected by RF energy.</p> <p>X. Surgical devices that can cause electromagnetic interference (EMI).</p> <p>XI. Steps to determine how to use RF energy on a patient, in an elective situation or emergent situation, with an implanted electrical device.</p> <p>XII. Strategies to minimize electromagnetic interference (EMI) from RF energy on a Cardiac Implanted Electronic Device (CIED).</p> <p>XIII. Potential adverse effects of electromagnetic interference (EMI) on a Cardiac Implanted Electronic Device (CIED) during and after the use of RF.</p>	Thomas Robinson
3. Describe FUSE and review contents of the FUSE certification exam.	<p>XIV. Elements needed for preoperative evaluation of a patient with a Cardiac Implanted Electronic Device (CIED).</p> <p>XV. Situations in which a magnet placement may be indicated for a patient with a Cardiac Implanted Electronic Device (CIED).</p> <p>XVI. Identify modifications that need to be made when monitoring a patient with the Cardiac Implanted Electronic Device (CIED).</p> <p>III. Explanation of FUSE exam and certification</p> <p>IV. Audience participation/contest answering questions from the FUSE exam</p>	Pascal Fuchshuber



OP07



Objectives	Content	Presenter
1. Identify fundamentals of electrosurgery	<p>XI. Nomenclature in radiofrequency (RF) electrosurgery.</p> <p>XII. Physics of RF electrosurgery</p> <p>XIII. Functions of an electrosurgery generator ESU</p> <p>XIV. Mechanisms of RF energy effects on cells and tissues.</p> <p>XV. Differences between vaporization/cutting and desiccation/coagulation</p>	Malcom Munro
2. Describe the integration of surgical energy and patient cardiac rhythm devices	<p>XVII. Identify patients with implanted devices that might be adversely affected by RF energy.</p> <p>XVIII. Surgical devices that can cause electromagnetic interference (EMI).</p> <p>XIX. Steps to determine how to use RF energy on a patient, in an elective situation or emergent situation, with an implanted electrical device.</p> <p>XX. Strategies to minimize electromagnetic interference (EMI) from RF energy on a Cardiac Implanted Electronic Device (CIED).</p> <p>XXI. Potential adverse effects of electromagnetic interference (EMI) on a Cardiac Implanted Electronic Device (CIED) during and after the use of RF.</p> <p>XXII. Elements needed for preoperative evaluation of a patient with a Cardiac Implanted Electronic Device (CIED).</p> <p>XXIII. Situations in which a magnet placement may be indicated for a patient with a Cardiac Implanted Electronic Device (CIED).</p> <p>XXIV. Identify modifications that need to be made when monitoring a patient with the Cardiac Implanted Electronic Device (CIED).</p>	<p>Thomas Robinson</p> <p>Pascal Fuchshuber</p>
3. Describe FUSE and review contents of the FUSE certification exam.	<p>V. Explanation of FUSE exam and certification</p> <p>VI. Audience participation/contest answering questions from the FUSE exam</p>	

**PARALLEL C1 CAN QUALITY PROMOTE SAFETY?****DETERMINATION OF THE KNOWLEDGE LEVEL AND BEHAVIOR OF OPERATING STAFFS IN THE EVENT OF RISKY TOUCH/INJURY****OP08****Birgül İZDEŞ BELGİN Sevban ARSLAN Aslıhan ULU Evşen NAZİK**

**Introduction:** Health workers are affected from the risks that may arise in the operating room(1).According to studies, it is reported that the operating room sare the most risky unit in terms of drilling/cutting tools injury(2,3).

**Aim:**This study is carried out the purpose of determination of the knowledge level and behavior of operating staffs in the event of risky touch/injury.

**Materials and Methods:** Descriptive study was conducted with the employees (n:72) operating room of a university hospital between 01 June 2016-30 June 2016. Data were collected through a questionnaire that was prepared scanned the literature by the researcher.

**Results:** Looking at the distribution of tasks 47.2% (34) have seven nurses, , 25% (18) doctors, 19.4% (14) engineers, 8.3% (6 ) it is technicians. Participants' the average of the total work year was 11.6±9.2. It was determined that the 86.1%(62) had received training related to injury of cutting/drilling tools, 73.6%(53) was exposed to injury but 52.8% (28) reported the injury of those people who participated in this study. It is determined that the objects causing injury mostly are 67.9%(36) the needle tip and 22.6%(12) lancet. The most common events that cause injury; 30.2%(16) of a surgical operation. The question“Do you received any protective measures during the injuries of cutting/drilling tools?” was answered as “Yes” by %75.5'i(40), 56.6% of those who said yes(30) reported that the used gloves. The question “What do you do for protecting yourself from injury?”was answered by44.4%(32) use of protective equipment, 23.6%(17) accept all patients infected.

**Conclusion:**The knowledge and behaviour of the workers reated to risky touch/injury. However, health workers should be trained to be familiar with the desirable level.

**The implications for perioperative nursing:** Because they are more exposed to the operating room staff stab wounds to the examination of information on this issue and provide training to employees based on results it is important.

**KeyWords:** Operating room, knowledge, behavior.

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References:

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**OP09**

## DEVICE RELATED BURN INJURIES OCCURRED IN THE OPERATING ROOMS OF A HEALTH GROUP DURING THE PERIOD 2014-2016

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**Background:** The operating room (OR) incorporates an increasingly complex array of equipment. Malfunction or misapplication of these devices can endanger the well-being of both the patient and the staff. The OR team should be familiar with any equipment that is used, but in particular, the principles of electrical devices must be thoroughly understood. As patient safety is the number-one priority for perioperative care, and keeping patients and staff members safe during the use of electrical devices is essential, the OR staff should incorporate a system of checks to prevent accidents [1, 2].

Skin burns in the operating room are due to different causes. Common causes of skin burns include (1) electrical (radio frequency, electro surgery etc.), (2) thermal (direct contact—heating pads), (3) chemical (skin preparation solutions etc.), and (4) mechanical (adhesive electrodes) [3, 4].

**Methods:** We reviewed all electrical device-related injuries occurred in our operating rooms between January-2014 and May-2016. The data derived from adverse event reports and the clinical quality indicators results that monthly reported to the OR administrators.

**Results:** During the period of January-2014 and May-2016, 193.902 patients had surgical operation in our institution. We encountered 20 device-related burn injuries, 15 of which were diathermy burns. Two of the burns were occurred in accordance with the use of patient warming blankets. Another two burns' cause was Magnetic Resonance Imaging used in neurosurgery. In one case the device was dental drill. The general rate of burn injuries was 0,01 %.

**Conclusion:** Electrical device-related injuries in the operating room are infrequent, but these injuries accepted as adverse events and OR team members are responsible to prevent patients from harm arising from the misuse of devices.

**Keywords:** electrical device, burn injuries, patient safety, operating room

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## PROMOTING PATIENT SAFETY: RECOGNIZING AND MANAGING INTRAOPERATIVE DISTRACTIONS

**OP10**

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Perioperative nurses complete tasks with a focused priority- keeping the patient safe and harm free throughout their surgery. Perioperative nurses' attention is often interrupted and drawn to more urgent tasks. This can result in omissions of actions or deviations from normal practice; ultimately resulting in adverse events (1). Most studies to date have examined the relationship between distractions and surgeons' performance (2). There is limited literature that explores the effects of distractions on perioperative nurse attention. Distractions that occur during critical moments of the intraoperative phase (i.e surgical counts and specimen management), are seldom studied.

Current understanding of the impact of distractions is being challenged in health care. It is imperative to research the manner in which we practice to improve patient outcomes. The purpose of this research study is to quantify and establish a baseline measurement of distractions affecting nursing tasks (surgical counts and specimen handling) during the intraoperative phase. The following research questions will be studied:

1. What are common distractions that affect nurses during surgical counts and specimen management?
2. How often do distractions occur during surgical counts and specimen management?
3. What effect do these observed distractions have on nurse attention during surgical counts and specimen management?

A Prospective Observational study design will be utilized. Data will be observed in 20 General and Thoracic Surgery cases at a hospital in Toronto. A Seven-point ordinal scale will be used to measure the level of observed interference the distractions have on the nurses' attention. Study findings will create awareness around the prevalence of distractions during critical moments in surgery. James T. Reason's System Centered approach to errors will be utilized as the theoretical framework (3). This data will be utilized to promote Standards of Practice dedicated to patient safety and provide a baseline against which improvements can be measured.

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# OP11

## STANDARD OPERATING PROCEDURE: SPECIMEN COLLECTION

**Haime Kathleen**  
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As perioperative nurses, we strive to provide the best care possible every day. Specimen analysis is an integral part of patient care in the operating room (OR) and errors in specimen management can have detrimental effects. According to the Association of periOperative Registered Nurses (AORN, 2016), 53% of errors in specimen management occur in the pre-analytical phases, 38% occur in the analytical phase, and 6% occur in the post-analytical phase (1). Not only can errors in pathology cause financial burdens due to unnecessary rework, extra steps, and longer hospital stays, but errors can potentially cause negative effects for patients (2). Although errors in specimen collection have been identified as an issue in the past and strategies have been implemented to rectify the number of errors, errors are continuing to occur. Recently, in Newfoundland and Labrador an investigation has been launched into a laboratory that incorrectly diagnosed the stages of 9 women who had breast cancer (3). All of these women were needlessly treated with an aggressive drug therapy that has a small percentage of side effects to the heart, lungs, and liver.

According to the Operating Room Nurses Association of Canada (2015) we are to follow the health care facility's policy of specimen collection and management (4), but currently, the University Health Network (UHN) policy is outdated and undergoing revision. The lack of guidelines that staff can follow allows for inconsistencies in practice. This presentation will outline the common errors made during the pre-analytic phase of specimen collection; the current standards for specimen management; and the steps taken to develop a standard operating procedure (SOP) to decrease these errors.

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## POST-OPERATIVE COMPARTMENT SYNDROME: CAN WE PREVENT IT?

**OP12****Saulan Mary****USA**

Post operative Compartment Syndrome (CS) is a condition in which increased pressure within a limited space (Osteo-fascial in extremities) compromises the circulation and function of the tissues within that space after lengthy surgery.

A literature review on CS was conducted to determine risk factors and relevance to our cancer population. Retrospective review of 55,281 patient records through an IRB approved protocol was conducted to understand the scope of the problem and to identify risk factors such as patient's weight, gender and length of surgery.

This was an evidence-based practice project to reduce the rates of post operative CS.

The aim:

- Identify risk factors in our patient population
- Develop initiatives for prevention
- Detect early signs and symptoms of post operative CS
- Educate multidisciplinary team about risks & treatment

As a result of this evidence based nurse driven project, the following initiatives were implemented:

1. Identification of all high risk patients for CS through pre-operative screening
2. Collaboration with Nursing Informatics to develop alerts in electronic medical record for patients that meet high risk criteria for CS
3. Revision of positioning procedure  
Change of practice in positioning high risk patients  
Inclusion of Intra-operative "4 hour Positioning Time Out"
4. Development of positioning algorithm
5. Education & training of perioperative nursing staff, anesthesia provider and surgical team on positioning patients
6. Education on identification, detection and early treatment of CS
7. Development of CS Post operative Order set

Post-operative compartment syndrome is a rare but a life threatening complication after surgery that hasn't been addressed. This project changed practice in positioning patients and educated perioperative registered nurses and other staff to this debilitating surgical outcome and will help to prevent future cases. Prevention, early detection and prompt treatment are the key in averting this devastating post-operative complication.

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Abstract for oral presentation



**PARALLEL A2 EFFICIENCY IN OR**

**OP13**

**SAFETY IN OUR OR'S; A SWEDISH NATIONAL PROJECT**

***Antoniadou Irini***  
***Sweden***

Lack of communication and collaboration in the continuity of patient care in surgical interventions leads to medical errors and requires changes in routines. With the ambition to reduce patient injuries, Patient insurance LÖF initiated in 2011 a national "Project Safe abdominal surgery". The project is implemented by the Swedish Surgical Society, the Swedish Society for anesthesia and intensive care, the Swedish Operating Room nurses association and several other professional organizations with the main aim to decrease the risk of health damage in surgical procedures in the abdomen. Additionally, also to identify strategies for reducing risks related to the interaction between surgery and anesthesia.

Poor communication between surgical and anesthesia unit staff may put at risk patient safety. Some of the findings from this project suggested strategies to improve patient safety was e.g. a standardized national health declaration; consistent use of admission notes; same systems for documentation of medical information; weekly and daily scheduling of surgical programs; use of the WHO checklist; team communication during surgery in the OR; surgeons report to postoperative unit orally/written, multidisciplinary forums for evaluation of high-risk patients etc. Within the perioperative care procedures the Operating room nurse can contribute in many of the previous listed suggested strategies and support daily each patient for a good and safe care.



## A NEW MODEL OF PERIOPERATIVE CARE

**OP14****Pulkkinen Maria****Finland**

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**Background:** Earlier research findings show that when a caring encounter is established where the nurse informs the patient about the perioperative process and its proceedings and educates the patient, a significant impact on postoperative pain and the recovery from surgery can be achieved (1,2,3,4). Also, anxiety increases the postoperative pain and slows down the recovery from surgery (5).

**Focus of interest:** To develop a new high quality caring model, that enhances continuity of care improving patient safety (6), patient satisfaction and job satisfaction of the perioperative nurses. This model emerges from the model of the perioperative dialogue (7,8).

**Intervention:** The one and same anesthesia nurse takes care of the patient during the entire perioperative process and even pays the patient a visit to the ward the day after surgery.

**Clinical evaluation:** **a)** The authors conducted earlier a pilot study, where the new perioperative model of caring was tested with patients (n=19) undergoing a hip or a knee replacement surgery under spinal anesthesia (9). The study findings showed that the patients experienced the new model of perioperative care as beneficial. They also experienced the emotional support as crucial. Thus, the new model influenced patient satisfaction, individual care and patient safety. The nurses' experienced, they had time caring for each patient in a satisfying way participating the patients' in their care. **b) clinical testing.** The encouraging results from the pilot aroused new research questions, which led to a new forthcoming research study. In this study the objective is to explore the effect of the new perioperative practice model on patient outcomes (satisfaction, surgery-related anxiety and quality of life), nursing outcomes (organizational engagement), and organization outcomes (timeline of surgical care process).

**Implications for perioperative nursing:** To provide all patients high class patient-centered and safe care.

**Keywords:** perioperative care, continuity, patient safety, nurse engagement

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## OP15

### LEAN AS A DEVELOPMENT FORCE IN CLINICAL PRACTICE

**Janhonen Maria**  
**Finland**

**Authors:** 1) Rauta, Satu 2) Janhonen, Maria, 3) Skants, Noora Presenter: Rauta, Satu. RN, MNsc, Clinical Nurse Specialist, Helsinki University Hospital

Our department, Peijas Operating Department L, is a part of Helsinki University Hospital (HUCH), the biggest healthcare provider of Finland, with 23 hospitals and 22000 employees. We started in 1990 by performing day surgery procedures. Nowadays 55 % of our patients stay at the hospital 1–3 days after the surgery. Over the years the number of operations has gradually increased and was approximately 4500 in 2015. Main surgical specialities are orthopaedics and urology. We have eight operating theatres and a 20 bed recovery room as well as a patients' sitting room.

Our staff comprises 46 registered nurses, a nurse manager and 2 assistant nurse managers. An additional 3 nurses manage our scheduling. Auxiliary personnel, cleaning personnel and staff from the central sterilisation unit are important co-workers in our care processes. Nurses rotate by working in different specialities and roles as anaesthetic, circulating, scrub or post-anaesthesia care nurses. As a profession we have the obligation to give good nursing care for our patients. General ethical principles and ethical codes designed for our profession are guiding our daily practice.

As a health care provider we have given a promise to the patients and to our stakeholders: To give safe, quality and efficient care and to act effectively and productively. The basis of our nursing care is defined in a Professional Model in Nursing Care (HUS 2015). According to it our nursing care is patient centered, evidence based, safe, inter professional and collegial. The performance is based on our values: human equality, patient-centeredness, transparency, trust and mutual respect, creativity, innovation and high quality and effectiveness.

In nursing care our aim is to reach good outcomes. Our core mission as nurses is to recognize the patients' care needs, to plan, perform and evaluate our caring tasks. Our decisions concerning nursing interventions are based on evidence; which can be led from research or clinical expertise. It is of full importance to take into account patient's own preferences, opinions and experiences.

The basic concept of **lean management** system is based on Training within Industry -method and Toyota Production System. In addition to industry, it has later been successfully used by leading healthcare organizations worldwide to increase quality, safety, capacity, patient satisfaction, and cost effectiveness (Barnas and Adams 2014). Helsinki University Hospital has recently started to educate lean advisors and to use lean management methods.

We started a new lean project focused on issues related to the morning schedule of our surgical unit with 8 operation theatres using cross-functional teams, value stream analysis, A3, visual management, and daily huddles. The primary outcome measures were the first patient's arrival time in the operation room, starting time of first operation, and patient safety by incident reports. Here we describe whether this lean project also had effects on nursing intensity level measured by RAFAELA system (Frilund and Fagerström 2009). The results will be analyzed by March of 2017.

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## IMPROVED OPERATING ROOM UTILIZATION

**OP16****Laniado Iris****Israel****Iris Laniado, OR, MA; Eran Bar, Economist; Carmit Nadav, OR, MA**

### **Background**

Operating rooms are the heart of activity in hospitals and they have a clear influence on the quality of medicine, quality of services, wait times and the economic health of the hospital. Hospital management has always placed great emphasis on improved operating room utilization and has acted to improve this through adoption of new technologies. In 2013, the Israel Ministry of Health announced a program to measure and improve operating room utilization.

### **Objectives**

The objective of the present study was to increase operating room utilization. Specifically, wait times to surgical procedures were targeted as a means to increase operating room utilization, increase hospital income and promote surgical team synergy.

### **Methods**

A steering committee was appointed including the deputy director of the hospital, the hospital economist, industrial/managerial engineers, the chief anesthesiologist (who also serves as operating room manager) and the operating room head nurse. MSD, a company specializing in improving operating room utilization through the OR-E method, was consulted. Department chairs of the various surgical departments were updated regarding study objectives, and their cooperation was elicited in elucidating the current operating room situation for a period of three weeks. Data were collected by the nursing staff. The following measures were recorded: time of patient entry into the operating room; operation start time; operation end time; time of arrival at the PACU; and time to operating room entry of the next consecutive patients. Three time periods were assessed: the beginning of the surgical day; wait time between surgeries; time to the conclusion of the surgical day. Additionally, the operating room schedule was compared to the actual performance of operations throughout the day.

### **Results**

A number of delays associated with operating room activities were identified including those involving patient exit from the operating room; wait for the cleaning crew; cleaning times; wait for operating room; wait for operating team after patient entry to operating room; room preparation after the patient is already in the operating room; prolonged waking time; and wait time for orderlies.

### **Conclusions and Recommendations**

We recommend that the operation room develop a strategic plan including a dedicated individual responsible for its execution. We further recommend that a quality audit be conducted quarterly, that a scheduling system be implemented for the long term, and that scheduling patterns be improved in the short term. Finally, inventory and logistical procedures should be reviewed.



## PARALLEL B2 THE STAFF AS THE TARGET

**OP17**

### CHAIN OF MOVEMENTS

**Marquez Cisneros Linda**

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Moving is something we do without thinking of it. It is an automatic system in our body. But what if the way we move is not correct? How do we notice this and how we can change it? I am going to tell you something about move without pain, and going to let you feel the automatic movement patterns. Some things will feel unnatural, but not all the unnatural feelings are wrong. I will explain what are movement chains and how we can have a positive effect on it. And why is it so important? We all know we have to work longer and work in the hospital is a heavy job. I hope to see you all at my presentation and give you some ideas about rebuild the functionality of the movement chain for stay longer strong and move without pain.

**OP18**

### ATTITUDES FOR CAREGIVING ROLES OF NURSING STUDENTS WHO WERE DOING INTERNSHIP OF SURGICAL NURSING COURSE

**Topcu Sacide**

**Turkey**

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#### Background

Caregiving role is basis of the nursing roles. Nurses are independent when while they are performing the caregiver roles and this role make nursing a profession.<sup>1</sup> In order to build independence and competent professional skills of the nursing students learning and practicing clinical skills helps them and in this process, they develop attitudes for caregiving roles of their profession.<sup>2</sup> Whereas, developing attitudes for caregiving roles can be affected by various factors such as efficient guidance of the teachers and the nurses in clinical area, perspective and affection to the nursing and many other factors.<sup>3,4,5</sup>

#### Aim

The aim of this study was determine attitudes for caregiving roles of nursing students and factors affecting attitudes.

#### Method



The study was conducted with 73 nursing students who had been continuing nursing education in an university in Northwestern Turkey. All of the students were continuing surgical nursing course and doing internship in the surgical clinics. Data were gathered using a Questionnaire Form and Attitude Scale for Nurses in Caregiving Roles (ASNCR) developed by Koçak et al. (2014). Data analysis was performed in SPSS 16.0 and frequency, percentage, mean, standard deviation, student t-test and variance analysis were used for data assessment.

### Findings

In this study, it was found that mean age of the nursing students was 20.882.81, most of the nurses were female (89%), 60.3% of them choosed nursing school willingly and 47.9% of them reported that they would work a nurse foundly. In the clinical experiences, 67.1% of the students believed that guidance of the nurse educators was effective, 72.6% of them thought that nurses working surgical clinics were not qualified guides for surgical nursing. It was found that mean score of ASNCR was 3.760.89, attitude subscale related to the nurses' roles about elimination of the selfcare needs and consulting score was 3.770.91, attitude subscale related to the nurses' roles about protection of the individuals and being respectful their rights score was 3.800.96 and attitude subscale related to the nurses' roles about treatment process score was 3.720.79. It was found a statistically significant relationship between positive feelings of the the nursing students towards their profession and their attitudes for caregiving roles ( $p < 0.05$ ). Also, it was found that efficient guidance of the nurse educators in the surgical clinics affected attitudes for caregiving roles of nursing students ( $p < 0.05$ ).

### Conclusions

This study demonstrated that the attitudes for caregiving roles of the nursing students who were continuing surgical nursing course and doing internship surgical units was good level and efficient guidance of the nurse educators and affection of the nursing profession of the students had positive effects on these attitudes. Especially, in the surgical units, patients care needs are more than many other clinics and so attitudes of the nursing students for caregiving roles are occured and formed. Nurse educators and nurses should be a efficient guide for the nursing students who are doing internship in the surgical clinics, they should make an effort in order to maket the nursing profession endeared by the nursing students and they should assess and improve their attitudes for caregiving roles. Further researchs that will be performed to determine the other factors that affected attitudes of the nursing students for caregiving roles and the relation between attitudes of the nursing students for caregiving roles and clinical area in which they are doing internship are recommended.

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## OP19

### SURGICAL COST AWARENESS SAVINGS: COMBINING TECHNOLOGY AND THE OR TEAM FOR A WINNING OUTCOME

***Watson Wendy***  
***Canada***

The University Health Network in Toronto Canada initiated an OR Supply chain technology transformation project throughout their 40 operating rooms and two sites. The goal was to achieve clinical time efficiencies, patient safety, and surgeon cost data for improved decision making and savings. A very committed inter-disciplinary team worked collaboratively to implement technology to move nurses closer to the patient and away from managing supplies. The old pen and paper world was replaced with a fully integrated system that automated ordering, consignment implant tracking, integration with the contract item master and clinical charting system. All of the background technology and integration reduced the time and steps required for the Nurse to select inventory, clinically chart and have the supplies reordered automatically. Several lean mapping exercises were undertaken to document the process improvements. The results were improved labor and service efficiencies, improved patient safety, increased implant accuracy and traceability. Financial benefits were realized in hard and soft savings resulting in 14 Million over 5 years. The big win was sustainable real- time surgeon procedure cost data for supply transparency and informed product selection. The biggest culture change is that Surgeons and Nurses now are much more cost aware and able to make better choices to promote improved savings and outcomes. Surgeons have had a positive reaction to sharing procedure cost data and have requested it to be “un-blinded” sharing surgeon names to generate conversations. Some early wins have been product selection savings that have increased the number of patients treated without reducing the quality of care. The Impact of this new OR supply cost transparency is the start of an innovative way to contribute to managing the OR by giving surgeons the information they need.

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Prefer – Oral Presentation

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## PARALLEL C2 THE MULTIPLE ASPECTS OF PATIENT SAFETY

SURGICAL COUNT IMPLEMENTATIONS IN THE OPERATING ROOMS:  
AN EXAMPLE FROM TURKEY

OP20

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**Aim:** The study was undertaken to determine the current implementations related to instruments and sponges counts in the operating rooms in Turkey.

**Method:** This descriptive study was carried out with 261 operating room nurses. The data collection tool was a questionnaire which was designed on the Google Drive application using the internet. Thereafter its internet link was distributed throughout Turkey using nursing, surgical nursing and operating room nursing social media websites; the answers were gathered in the same way.

**Results:** Ninety-five percent of participants stated that instruments and sponges were usually counted by the scrub nurses (88.5). Sponges (97.7%), pads (95.4%), tampons (89.2%), surgical instruments (88.1%) and needles (70.4%) were the items which were usually counted. According to 81.6% of the nurses, a written count protocol exists for their hospitals, however, they noted there was a significant difference in implementation among the various institutions ( $p=0.026$ ). While 49.8% of participants stated that the count before surgery was done by nurses, 23.7% reported that the count was performed by operating room employees. Furthermore, 81.2% of the nurses noted that if the scrub nurses were replaced during surgery, the surgical count would be repeated. Nurses stated that last count was usually done just before applying skin sutures (72.7%), and if there were a problem with the count, radiological imaging would be done (73.5%) and the count irregularity would be signed by staff (31.0%).

**Conclusion:** Our results demonstrated that surgical counts were generally done by the scrub nurses. In addition, although most of the hospitals have a count protocol, a serious issue concerns the use of unprofessional hospital employees who carry out this task, thus jeopardizing patient safety to be operating room employees join the count are other problems related to surgical count.

The implications for perioperative nursing: This study enabled us to obtain information concerning surgical count protocol in the operating rooms in Turkey. Since only limited research about surgical counts in our country has been done, this study sheds more light on the changes which need to be made.

**Key words:** Operating room, patient safety, nursing, medical error, retained surgical item.

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## OP21

### FREQUENCY AND RISK FACTORS OF VENOUS THROMBOEMBOLISM IN POSTOPERATIVE PATIENTS: A RETROSPECTIVE REVIEW

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**Turkey**

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**Aim:** To retrospectively review frequency and risk factors of venous thromboembolism in postoperative patients.

**Material and Methods:** This is a descriptive, cross-sectional, retrospective study. The study population included 217.354 patients having surgery in two university hospitals and one education and research hospital in İzmir, Turkey, between 2010 and 2015. Of 217.354 patients, 996 were found to have a diagnosis of venous thromboembolism based on hospital records. Of 996 patients, 123 had postoperative venous thromboembolism based on data from discharge, consultation and diagnostic reports and were included into the sample. Data about risk factors were collected from hospital records by using a patient descriptive characteristics form.

**Results:** The incidence of venous thromboembolism in postoperative patients was 0.5/1000. The mean age of the patients was 60.22±18.56 years. Of 123 patients, 51.20% were male, 30.90% were smokers and 46.30% had an accompanying disease. Of all the patients, 64.20% had major surgery, 27.60% had diagnosis of cancer and 44.70% had a disease causing high risk for venous thromboembolism. Twenty-three point sixty percent of the patients had cardiovascular surgery, 25.20% had general surgery and 29.30% had orthopedic surgery. The patients most frequently had venous thromboembolism following hip fractures. The mean time to develop thromboembolism was 9.76 ± 5.47 days. Although treatment with anticoagulants, 20% of the patients had venous thromboembolism.

**Conclusion:** There are limited data about surgery related venous thromboembolism in the literature and its incidence is 1.6/1000 for all age groups. Consistent with the literature, this study revealed quite a high rate of venous thromboembolism in patients having long hospital stay and those having major surgery like total knee prosthesis and abdominal surgery. Also, cancer patients were found to have a high risk of venous thromboembolism (1-5). The limitation of this study is that some data were missing in the hospital records.

**Key Words:** Venous Thromboembolism, Postoperative Patients, Retrospective Review

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## PIT MODEL (PRESENCE, INTERPRETATIONS AND TOOLS) PATIENTS AND TEAMS IN THE CENTRE - HOW TO GET IT?

**OP22**

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**Israel**

**Editors: Y. Edry, I. Mizrahi, L.Otits, M. Alkobi, B.Broyer, W.Majadly, H.Brill, I. Shwarzberg, P. Gelber, U.Katz, Y.Barakat, G. Yosef, N. Lobanova**

A Project to improve the quality, safety and treatment a patient in Perioperative division.

**Key words:** vision, patient, team, presence, interpretation, tools

**Background:** As part of promoting the concept of “human interest” according to Rambam Health Care Campus, and the vision whereby the hospital staff and the patients at the center of action, we developed new model “PIT” –presence, Interpretations and Tools a unique model created for perioperative division. The purpose of the model to promote quality of care and service, keep patient safety, to determine a uniform policy of information and communication between team members and patients and between teams during the perioperative faze, to change the perceptions of the team treating the patient and understanding patient and team’s needs.

The project mentor is Yifat Mizrahi, organizational psychologist who works with nurse’s teams for many years. In order to achieve the goal, the project leaders have to connect with nursing team’s, patients and their families, meet with them and listen to their voices.

Give the nursing teams’ tools they need, using a soft tool and assertive on the training process.

The process mechanism:

- Establishing a working leading group.
- Preparation and training the working Group, present and explain them the model.
- Information retrieval based on structured questions from patients and families in various stations.
- Analysis of the questionnaires and present to the group.
- Divisional workshop day– where the model is displayed to all teams, split and work in small groups so the team members will be active and involved in the final products, the groups will create slogans, check lists, lists of do and not to do, setting uniform language, set a uniform way to deliver information.
- Analyze the material from the workshop day, create process and check lists.
- Present the products to the nursing teams
- Assimilation process of 3 months.
- Repeating questionnaire for patients and family after six months.
- Ongoing control.

**Conclusion:** The nursing team members must take part and have impact, be involved in every part and decision making in the project, otherwise we couldn’t achieve our previous goals.

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## OP23

### PERCEPTIONS OF PATIENT SAFETY CULTURE IN SURGICAL NURSES' INTRODUCTION AND PURPOSE

Healthcare services, provided to both healthy individuals and ill patients, consist of practices that are sometimes beneficial but sometimes detrimental. Thanks to the measures taken during the presentation of services at health institutions, both patients/individuals and healthcare personnel are protected from possible harm. Patient safety comes to the foreground in healthcare as a means of preventing errors related to the rendering of healthcare and of eliminating injuries and death that may be caused by such errors.<sup>1,2</sup> The Institute of Medicine (IOM) defines patient safety as “the prevention of harm to patients” while the National Patient Safety Foundation describes it as “the avoidance, prevention and amelioration of adverse outcomes or injuries stemming from the processes of health care.”<sup>2,3</sup>

One out of every 10 patients around the world suffer serious consequences as a result of medical errors.<sup>2</sup> Healthcare professionals and hospital administrators, who are the foundation stones of health services, are adversely affected by medical errors.<sup>4,5</sup>

Due to the rapid progress of healthcare services in Turkey, the concepts of patient safety and culture have begun to stand out.<sup>2,6</sup> *Culture* is described as the products of human work that make up the lifestyle of a society while *patient safety culture* refers to the care given to ensuring that all professionals working in institutions in the line of healthcare services, particularly physicians who are in direct contact with patients and their relatives, nurses who conduct supporting actions, and other hospital personnel respect patient rights and protect these rights under all circumstances.<sup>5,7,8</sup> As will be understood from this description, healthcare professionals have a great responsibility and need to act with a systematic and analytical approach that will enable them to take preventive measures in all developing circumstances. For this reason, nurses who maintain one-on-one communication with patients carry many responsibilities with respect to creating a culture of patient safety.<sup>9,10</sup>

Since hospital surgical units are in the majority in constant communication with patients, nurses are at higher risk of making errors.<sup>9</sup> Some surgical settings may not be favorable because of their closed environment and physical surroundings. This may create uncertainties and complexities in terms of the roles assumed by the various members of the surgical team.<sup>12</sup> Because of this, when nurses translate the culture of patient safety into knowledge, attitude and behavior, they have a strong positive effect on preventing medical errors and on establishing patient safety culture.<sup>9,10</sup> Studies conducted in surgical units have shown that nurses’ perceptions of the safety culture are at a moderate level.<sup>1,9,13</sup> This research generally pertains to intensive care and emergency units and there are fewer studies covering surgical clinics of all kinds. This is the pivot point of the present study, which aims to determine the perceptions about patient safety culture of nurses working in surgical units.

#### METHODOLOGY

##### Design and Sample

The study was of descriptive design. The research was carried out over the period May 15 - June 15, 2016 at the surgical units, operating rooms, emergency rooms and intensive care units at 6 hospitals in Istanbul with 217 nurses who volunteered to participate. Before beginning the study, official permissions were obtained (dated June 3, 2016/09.2016.388) from the Marmara University Medical Faculty Ethics Committee and the administrators of the hospitals at which the research was conducted. Additionally, all of the participating nurses submitted their informed consent.

##### Instruments

The data were collected with the “Identifying Characteristics Form” and the “Patient Safety Culture Scale (PSCS).”

The Identifying Characteristics Form contained questions regarding the responding nurse’s age, gender, educational level, civil status, income level, unit of employment, duration of work at the hospital and unit, shift duties/hours at the hospital as well as questions on patient safety.

The Patient Safety Culture Scale (PSCS) was developed in 2011 by Türkmen et al.<sup>14</sup> and contains a total



of 51 items in five subscales. These subscales are management and leadership (17 items), employee behavior (14 items), sentinel events and error reporting (5 items), employee training (7 items) and healthcare setting (8 items). The scale's Cronbach alpha value is 0.96 and it is a 4-item Likert-type scale. The response choices consist of "I totally disagree=1", "I disagree=2", "I agree=3", "I totally agree=4." Each item is scored between 1-4 points. In the calculation of the scale score, the item scores of the subscales are added and the sum is divided into the number of items, yielding a mean score of between 1-4 for each subscale. In the calculation of the overall scale score, the mean scores in the 5 subscales are added and divided by 5 to yield a scale score of between 1-4. The closer the mean score is to the score of 4 the more favorable is the patient safety culture; the lower scores nearing the score of 1 indicates the presence of an unfavorable patient safety culture.<sup>14-15</sup>

#### Data Collection

The researcher collected the data using the method of face-to-face interviews.

#### Data Analysis

The data were expressed in numbers, means, standard deviation (SD) and medians. The comparisons of numerical variables in independent groups were performed with the Mann-Whitney U test, the One-way Anova, the Student t test and the Kruskal-Wallis test. Statistical alpha significance was accepted as  $p < 0.05$ .

#### RESULTS

The mean age of the nurses was  $30 \pm 7.5$  (range:18-53); most were women (85.3%), single (54.4%), high school graduates (59%) and had an income equal to their expenditure (60.8%). Of the participants, 77.4% worked in public hospitals, 30.4% in surgical units and of these, close to all of them (90.8%) were clinical nurses. Of the nurses, 53.9% worked over 40 hours a week. A group of 73.3% of the nurses stated they had worked in their present units for 0-5 years and 59% said they worked on shifts between the hours 8 a.m. - 4 p.m. / 4 p.m. - 8 a.m.

Of the participants, 83.9% had received education on the subject of patient safety and almost all of the nurses (82.5%) had made no event reports in the last twelve months while 47% assessed the patient safety department at their hospital as "Acceptable."

The total score the nurses received on the patient safety culture scale was  $2.64 \pm 0.41$ . When it is considered that mean scores approaching 4 on the PSCS indicate a favorable patient safety culture, it can be said that in this study, the perception of patient safety culture was slightly over the moderate level. The highest mean score received on the scale was  $3.71 \pm 0.93$  on the "employee behavior" subscale. The lowest mean score received on the scale was  $2.60 \pm 0.53$  in the "sentinel incident and error reporting" subscale (Table 1)

**Table 1. Nurses' overall and subscale mean scores on the patient safety culture scale**

Subscales	General (N=217)
	Mean $\pm$ SD
Management and Leadership	2.70 $\pm$ 0.52
Employee behavior	3.71 $\pm$ 0.93
Sentinel Event and Error Reporting	2.60 $\pm$ 0.53
Employee Training	2.78 $\pm$ 0.51
Care Setting	2.61 $\pm$ 0.55
Total Score	2.64 $\pm$ 0.41 (1.14-3.57)

In the comparison of the PSCS total scores according to the nurses' duration of employment at the hospital, statistically significant differences were found. The differences stemmed from the nurses who had worked between 6-10 years. When the nurses' status of receiving training on patient safety and their assessments of their units/departments in terms of patient safety were examined, the comparison of their PSCS total scores exhibited highly significant differences ( $p < 0.001$ ). (Table 2).

Table 3 shows a comparison of the PSCS subscales according to the participants' demographic characteristics. No statistically significant differences were found between the groups in any of the PSCS subscale mean scores in terms of gender, hospital of employment, educational status, economic status, department of employment, the duration of the employment or staff status. The subscale mean scores



of the clinical nurses in the dimensions of sentinel events and error reporting, employee training and care setting were significantly lower than the scores of the nurses working as clinical supervisors.

Statistically significant differences were found between the subscale mean scores of the nurses in terms of the duration of their hospital employment in the dimensions of management and leadership, employee training and care setting. The nurses who had worked 0-5 years displayed significantly lower mean scores in the subscales of management and leadership, employee training and care setting compared to the other groups.

Statistically significant differences were found between the subscale mean scores in terms of the nurses' duration of employment at the department, their work shifts and their weekly work hours ( $p < 0.05$ ). The mean scores of the nurses who worked between 11-15 years in the dimensions of management and leadership and the mean scores of those who worked 40 hours on a 4 p.m.-8 a.m. shift in the dimension of sentinel event and error reporting were high.

When the nurses' status of receiving training on patient safety and their assessments of their units/departments in terms of patient safety were compared with their mean scores on all of the subscales of the PSCS, highly significant differences were found ( $p < 0.001$ ). Nurses who had received training in patient safety and ranked their units/departments as "excellent" displayed high scores in all of the subscales.

### CONCLUSION

The results of the study show that nurses' perceptions of the patient safety culture are at a moderate level. In order to improve the patient safety culture, a focus must be placed firstly on sentinel events and error reporting, and an effective error reporting system must be set up and operated. Regular training programs on patient safety must be organized so that nurses can sustain the dynamism of this culture.

**Table 2. Comparison of the nurses' total mean scores on the patient safety culture scale, by demographic characteristics**

Variables	N (%)	X	SD	Statistical Significance	
				t	p
<b>Hospital of Employment</b>					
University Hospital	49 (22.6)	2.68	0.26	0.764	0.446
Public Hospital	168 (77.4)	2.63	0.44		
<b>Gender</b>					
Male	32 (14.7)	2.61	0.49	-.442	0.659
Female	185 (85.3)	2.65	0.39		
<b>Civil Status</b>					
Single	118 (54.4)	2.58	0.45	-2.656	<b>0.008</b>
Married	99 (45.6)	2.34	0.34		
<b>Educational Status</b>					
High School	25 (11.5)	2.57	0.55	F=2.207	0.088
Associate degree	46 (21.2)	2.75	0.35		
University degree	128 (59)	2.64	0.39		
Master's degree	18 (8.3)	2.48	0.34		
<b>Economic Status</b>					
Income less than expenditure	61 (28.1)	2.63	0.40	F=0.379	0.685
Income equal to expenditure	132 (60.8)	2.66	0.40		
Income more than expenditure	24 (11.1)	2.58	0.46		



Unit of Employment					
Surgical wards	66 (30.4)	2.66	0.33	F=1.712	0.166
Operating Rooms	57 (26.3)	2.71	0.37		
Emergency Room	33 (15.2)	2.66	0.43		
Intensive care	61 (28.1)	2.55	0.48		
Title					
Nurse Supervisor	20 (9.2)	2.77	0.37	1.461	0.145
Clinical nurse	197 (90.8)	2.63	0.41		
Years employed at hospital					
0-5 years	130 (59.9)	2.57	0.43	3.888	0.010
6-10 years	45 (20.7)	2.78	0.39		
11-15 years	22 (10.1)	2.70	0.24		
16 or more	20 (9.2)	2.75	0.34		
Years employed in unit					
0-5 years	159 (73.3)	2.61	0.43	F=1.594	0.192
6-10 years	36 (16.6)	2.76	0.32		
11-15 years	12 (5.5)	2.65	0.30		
16 and more	10 (46)	2.76	0.53		
Hospital shift					
8 a.m. – 4 p.m.	66 (30.4)	2.72	0.36	F=1.704	0.150
4 p.m. – 8 a.m.	3 (1.4)	2.74	0.10		
8 a.m.-4 p.m./4 p.m.-8 a.m.	128 (59)	2.62	0.42		
8 a.m.-8 p.m.	2 (0.9)	2.79	1.07		
8 a.m.-4 p.m./4 p.m.-8 a.m./8 a.m.-8 p.m.	18 (8.3)	2.46	0.39		
Weekly Work Hours					
40 hours	35 (16.1)	2.68	0.34	F=1.658	0.193
40-49 hours	117 (53.9)	2.67	0.36		
50 hours and over	65 (30)	2.56	0.50		
Staff Status					
Staff	188 (86.6)	2.65	0.39	0.631	0.528
Contracted	29 (13.4)	2.60	0.51		
Patient Safety Training Status					
Yes	182 (83.9)	2.70	0.38	5.089	0.000
No	35 (16.1)	2.34	0.42		
Reporting Status in last 12 months					
Never	179 (82.5)	2.66	0.41	F=1.934	0.125
1-2 event reports	28 (12.9)	2.48	0.38		
3-5 event reports	8 (3.7)	2.71	0.39		
6-10 event reports	2 (0.9)	2.85	0.38		
How Unit/Department is Assessed regarding Patient Safety					
Excellent	12 (5.5)	2.85	0.62	F=9.793	0.000
Very good	48 (22.1)	2.82	0.28		
Acceptable	102 (47)	2.66	0.35		
Poor	35 (16.1)	2.44	0.34		
Failure	20 (9.2)	2.32	0.54		



**Table 3. Comparison of the subscale mean scores on the patient safety culture scale, by nurses' demographic characteristics**

Variables	N (%)	1. Management and Leadership		2. Employee behavior	
		X	SD	X	SD
Hospital of Employment					
University Hospital	49 (22.6)	2.78±0.35		2.59±0.29	
Public Hospital	168 (77.4)	2.68±0.56		2.49±0.49	
Test/Significance		Z= -1.550 p=0.270		Z= -1.210 p=0.226	
Gender					
Male	32 (14.7)	2.71±0.70		2.47±0.63	
Female	185 (85.3)	2.70±0.48		2.52±0.42	
Test/Significance		Z= -.031 p=0.976		Z= -.562 p=0.662	
Civil Status					
Single	118 (54.4)	2.65±0.54		2.46±0.48	
Married	99(45.6)	2.77±0.49		2.56±0.41	
Test/Significance		Z=-1.550 p=0.121		Z=-1.454 p=0.146	
Educational status±					
High School	25 (11.5)	2.68±0.62		2.53±0.73	
Associate degree	46 (21.2)	2.77±0.54		2.60±0.38	
University degree	128 (59)	2.70±0.50		2.49±0.49	
Master's degree	18 (8.3)	2.60±0.48		2.36±0.32	
Test/Significance		X <sup>2</sup> <sub>k-w</sub> =3.894 p=0.273		X <sup>2</sup> <sub>k-w</sub> =5.289 p=0.152	
Economic Status					
Income less than expenditure	61 (28.1)	2.74±0.50		2.50±0.46	
Income equal to expenditure	132 (60.8)	2.69±0.52		2.52±0.43	
Income more than expenditure	24 (11.1)	2.70±0.58		2.46±0.55	
Test/Significance		X <sup>2</sup> <sub>k-w</sub> =0.273 p=0.872		X <sup>2</sup> <sub>k-w</sub> =1.006 p=0.605	
Unit of Employment					
Surgical wards	66 (30.4)	2.68±0.41		2.56±0.33	
Operating Rooms	57 (26.3)	2.80±0.57		2.51±0.50	
Emergency Room	33 (15.2)	2.70±0.58		2.46±0.47	
Intensive care	61 (28.1)	2.64±0.54		2.47±0.51	
Test/Significance		X <sup>2</sup> <sub>k-w</sub> =2.135 p=0.545		X <sup>2</sup> <sub>k-w</sub> =1.800 p=0.615	
Title					
Nurse Supervisor	20 (9.2)	2.83±0.54		2.58±0.48	
Clinical nurse	197 (90.8)	2.69±		2.50±0.45	
Test/Significance		Z=-1.667 P=0.095		Z=-1.207 P=0.227	
Years employed at hospital					
0-5 years	130 (59.9)	2.60±0.50		2.45±0.46	
6-10 years	45 (20.7)	2.83±0.52		2.65±0.41	
11-15 years	22 (10.1)	2.93±0.41		2.52±0.42	
16 or more	20 (9.2)	2.82±0.64		2.52±0.46	



	3. Sentinel Event and Error Reporting		4. Employee Training		5. Care Setting	
	X	SD	X	SD	X	SD
	2.69±0.41		2.75±0.38		2.61±0.40	
	2.58±0.56		2.79±0.54		2.61±0.58	
	Z= -1.363		Z= -.541		Z=-.004	
	p=0.173		p=0.588		p=0.997	
	2.57±0.56		2.66±0.58		2.66±0.58	
	2.61±0.53		2.81±0.51		2.60±0.54	
	Z= -.436		Z= -1.678		Z= -.204	
	p=0.662		p=0.093		p=0.839	
	2.51±0.57		2.72±0.54		2.54±0.64	
	2.71±0.46		2.86±0.46		2.70±0.40	
	Z=-2.807		Z=-2.207		Z=-1.932	
	<b>p=0.005</b>		<b>p=0.027</b>		<b>p=0.053</b>	
	2.51±0.66		2.61±0.62		2.54±0.74	
	2.69±0.49		2.92±0.44		2.76±0.51	
	2.62±0.52		2.79±0.51		2.61±0.51	
	2.41±0.50		2.68±0.46		2.36±0.49	
	X <sup>2</sup> <sub>k-W</sub> =4.806		X <sup>2</sup> <sub>k-W</sub> =5.329		X <sup>2</sup> <sub>k-W</sub> =7.416	
	p=0.187		p=0.149		p=0.060	
	2.55±0.54		2.81±0.44		2.56±0.62	
	2.64±0.49		2.81±0.52		2.64±0.53	
	2.54±0.72		2.60±0.59		2.61±0.42	
	X <sup>2</sup> <sub>k-W</sub> =2.007		X <sup>2</sup> <sub>k-W</sub> =2.805		X <sup>2</sup> <sub>k-W</sub> =0.741	
	p=0.367		p=0.246		p=0.700	
	2.63±0.51		2.84±0.36		2.56±0.48	
	2.67±0.44		2.86±0.48		2.73±0.53	
	2.61±0.52		2.90±0.62		2.64±0.63	
	2.50±0.63		2.60±0.57		2.54±0.58	
	X <sup>2</sup> <sub>k-W</sub> =3.236		X <sup>2</sup> <sub>k-W</sub> =6.916		X <sup>2</sup> <sub>k-W</sub> =3.369	
	p=0.357		p=0.075		p=0.338	
	2.86±0.43		2.92±0.59		2.66±0.47	
	2.58±0.51		2.77±0.50		2.61±0.55	
	Z=-2.741		Z=-1.952		Z= -.479	
	<b>P=0.006</b>		<b>P=0.051</b>		<b>P=0.632</b>	
	2.53±0.57		2.71±0.53		2.55±0.57	
	2.75±0.53		2.96±0.45		2.72±0.54	
	2.60±0.38		2.83±0.39		2.63±0.34	
	2.77±0.32		2.83±0.50		2.78±0.54	



Test/Significance		$X^2_{k-W}=11.67$ <b>p=0.009</b>	$X^2_{k-W}=6.24$ <b>p=0.10</b>
<b>Years employed in unit</b>			
0-5 years	159 (73.3)	2.65±0.50	2.49±0.45
6-10 years	36 (16.6)	2.83±0.51	2.62±0.36
11-15 years	12 (5.5)	2.97±0.54	2.43±0.52
16 or more	10 (4.6)	2.81±0.73	2.55±0.63
Test/Significance		$X^2_{k-W}=7.881$ <b>p=0.049</b>	$X^2_{k-W}=4.170$ <b>p=0.194</b>
<b>Hospital shift</b>			
08-16	66 (30.4)	2.79±0.54	2.84±0.08
16-08	3 (1.4)	2.53±0.43	2.57±0.31
08-16/16-08	128 (59)	2.72±0.47	2.86±0.23
08-08	2 (0.9)	2.89±0.47	2.71±0.28
08-16/16-08/08-08	18 (8.3)	3.63±0.53	2.75±0.21
Test/Significance		$X^2_{k-W}=2.15$ <b>p=0.708</b>	$X^2_{k-W}=3.78$ <b>p=0.436</b>
<b>Weekly Working Hours</b>			
40 hours	35 (16.1)	2.77±0.61	2.47±0.50
40-49 hours	117 (53.9)	2.73±0.45	2.55±0.38
50 hours and over	65 (30)	2.62±0.58	2.45±0.53
Test/Significance		$X^2_{k-W}=1.809$ <b>p=0.405</b>	$X^2_{k-W}=0.930$ <b>p=0.628</b>
<b>Staff Status</b>			
Staff	188 (86.6)	2.72±0.50	2.51±0.43
Contracted	29 (13.4)	2.60±0.61	2.52±0.60
Test/Significance		Z= -1.104 <b>p=0.270</b>	Z= -0.985 <b>p=0.325</b>
<b>Patient Safety Training Status</b>			
Yes	182 (83.9)	2.77±0.50	2.56±0.42
No	35 (16.1)	2.38±0.55	2.23±0.53
Test/Significance		Z= -3.878 <b>p=0.000</b>	Z= -3.612 <b>p=0.000</b>
<b>Reporting Status in last 12 months</b>			
Never	179 (82.5)	2.72±0.53	2.53±0.45
1-2 event reports	28 (12.9)	2.55±0.52	2.40±0.43
3-5 event reports	8 (3.7)	2.70±0.33	2.49±0.58
6-10 event reports	2 (0.9)	3.02±0.37	2.46±0.55
Test/Significance		$X^2_{k-W}=1.500$ <b>p=0.472</b>	$X^2_{k-W}=2.775$ <b>p=0.250</b>
<b>How Unit/Department is Assessed regarding Patient Safety</b>			
Excellent	12 (5.5)	2.90±0.66	2.71±0.62
Very good	48 (22.1)	2.95±0.40	2.67±0.31
Acceptable	102 (47)	2.70±0.50	2.54±0.43
Poor	35 (16.1)	2.54±0.43	2.33±0.40
Failure	20 (9.2)	2.32±0.64	2.15±0.53
Test/Significance		$X^2_{k-W}=26.15$ <b>p=0.000</b>	$X^2_{k-W}=26.94$ <b>P=0.000</b>





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## PARALLEL A3 CHECKLIST - A WAY TO IMPROVE THE COMMUNICATION

## OPTIMIZING COMMUNICATION DURING PATIENT HANDOVER USING THE SBAR TECHNIQUE: AN OBSERVATIONAL STUDY BASED ON AN ANALYSIS OF 738 CHECK-LISTS

OP24

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### Abstract

The importance of improving communication during patient handover/transfer procedures taking place between health care professionals working for different facilities when a patient is moved to a different ward, unit, or service has been receiving growing attention and is an international concern. The World Health Organization (WHO) launched the World Alliance for Patient Safety in Washington DC in 2007, which aimed to ensure that relevant information regarding a patient is communicated from one caregiver to all the others involved in patient care.

The aim study was to evaluate the completeness and the reliability of information transmitted between the staff of an operating room and other teams both at the time a patient was entering and at the time he/she was exiting the operating room utilizing a check-list created using the Situation, Background, Assessment and Recommendation (SBAR). The nursing staff had noted that information regarding patients was often incomplete; in particular, the patient's characteristics, the presence of comorbidities, and a list of the patient's personal objects was often lacking or incomplete and this often led to delays in planning patient care. The investigation was carried out by analyzing patient handovers carried out in that surgical unit between 2005 and 2014, a period during which activity per year increased from 1750 to 2332. There were 3216 admittances in 2014 with an average length of hospital stay fell from 6.9 to 5.9 days. Analysis uncovered a rising turnover confirming the importance of improving the communication regarding patients. 737 check-lists focusing on the 4 variables specified by the SBAR technique filled out by operating room staff between June and November 2015 were analyzed.

Situation, Background, Assessment, Recommendation: Analysis, showed that improved communication made possible to overcome lack of documents even at the pre-admittance stage, to eliminate delays in the activities, and to provide complete personalized assistance with a precise, focused transfer of information. All the nurses involved in it were asked to fill out an anonymous questionnaire. Data analysis showed that 92% of the 60 nurses considered the check-list of primary importance in improving communication and, as a result, the quality of their work.

**Key words:** check-list, hospital stay, Situation, Background, Assessment, Recommendation (SBAR), communication



## OP25

### PASSING THE BATON OF INFORMATION TO ENSURE SAFE PATIENT CARE: IMPLEMENTATION AND EVALUATION OF A KNOWLEDGE TRANSLATION INTERVENTION TO IMPROVE TEAM COMMUNICATIONS USING THE SURGICAL SAFETY CHECKLIST

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**Background** Compliance with surgical safety checklists has been associated with improvements in clinical processes such as antibiotic use, correct site marking and overall safety procedures. Yet, proper execution has been difficult to achieve. **Objectives** The overall aim of this knowledge translation (KT) research program was to evaluate the feasibility and acceptability of a multifaceted intervention tailored to promote surgical teams' use of consistent and timely communication in surgery, guided by the Surgical Safety Checklist (SSC).

**Method** The following theoretical and empirical approaches were used to underpin the KT program: 1) realist synthesis methodology to explain the implementation and use of checklists in surgery; 2) barriers analysis using observations and interviews; and 3) process and outcome evaluation.

Using an integrated approach, the Pass The Baton intervention was developed with clinical stakeholders. The KT strategies implemented to support Pass The Baton center on: social influence (opinion leaders, change champions); audit and feedback (information, education, knowledge brokers); and, reinforcement (prompts and reminders).

**Results** The greatest barrier to checklist use was workflow. All KT strategies were implemented consistently. Following implementation, we observed improvements in checklist participation and compliance ranging from 70-94% across teams. Interviews revealed that implementation was feasible and acceptable.



## A TICKET TO RIDE IS EQUALLY IMPORTANT AS THE SAFE SURGERY CHECKLIST

**OP26**

**Peeters Peter**  
**Belgium**

Every hospital tries to ensure safe surgery. Many of them use the Safe Surgery Checklist (SSC) in the operation room. But do we need to wait until we use this SSC to know that the patient is well prepared for surgery. The problem is that there's still a possibility that the patient enters the operation room, even though the surgery has got to be cancelled or moved at that moment for different reasons as incomplete preoperative examination, not sober... There is a direct cost: surgery cancellation, cost per hour, operating theatre time, personnel costs. Indirect cost as these are considerably more difficult to measure: they include early return of the patient and the caregivers, transport and meal cost for family, wasting time of nurses. A good management of a pre-admission unit is important to ensure successful implementation of operational policy and day-to-day running of the Operation Room. A well-prepared patient (as history, a physical examination and preoperative assessment. Lab testing, EKG, X-Ray may be required based on the individual needs in preparation for the surgery) prevents delaying the surgery. 48 Hours before the surgery, the pre-admission unit checks whether the investigations have taken place. When there's no confirmation the surgery got postponed. The day of surgery itself, the surgeon, the anaesthetist and the nurse must confirm, on the ticket to ride, that the patient is ready for his operation. Wherever the patient enters the operation room, the surgery will get started with great certainty.

## EMERGENCY CESARIAN SECTION SIMULATION- MULTIPROFESSIONAL TRAINING IN UNDERGRADUATE NURSING EDUCATION

**OP27**

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### Introduction

The WHO Surgical Safety Checklist (1) was developed to decrease errors and adverse events, increase teamwork and improve communication in surgery. Previous studies have demonstrated that communication plays a significant role in all aspects of errors (2). Joint learning by practitioners and/or students promotes shared practice. An important part of the shared practice is communication, which can be trained successfully in multiprofessional simulations (3). Realistic full-scale simulations improve interpro-



fessional learning (4, 5). Simulation of different procedures enhance the opportunity of skill transfer from learning environment to clinical practice and allow practice of technical skills without the risk of causing harm to a real patient (2).

### Methods

Multiprofessional emergency caesarian section simulation education (MECSSE) started 2011 in the Center of Medical Expertise in Central Finland Health Care District together with JAMK University of Applied Sciences (JAMK UAS). The learning outcomes have been studied during these simulations. The aim of the study was to investigate the effects of the MECSSE to the technical and non-technical skills among nursing students. The data was collected between 2012 and 2016 from nursing students (N=124). They filled the questionnaire before and immediately after the MECSSE. The 5-hour full-scale simulation education consists of theoretical lecture, introduction of the method and two full-scale simulations with debriefings. The participants were nursing and midwife students, anesthesiologists, gynecologists, pediatrics, medical doctor residents, midwives, registered nurses, nurse educators and simulation technicians. The manikins were Laerdal SimMom and Erler Zimmer baby. Statistical analyses were performed with SPSS 23.0 (IBM Corp. Armonk, NY, USA).

### Results

The self-assessment of the nursing students showed that their knowledge, skills and attitude improved remarkably. Furthermore, the results demonstrate that both technical and non-technical skills improved statistically significant ( $p < 0.001$ ). Most of the students perceived, that the simulated patient case was realistic and the simulation practice was useful for them.

### Conclusion

All the measured variables of the technical and non-technical skills improved after MECSSE. The 5-hour full-scale MECSSE is an effective way to gain confidence in perioperative nursing of the emergency caesarian section patient.

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## PARALLEL B3 IMPROVING QUALITY PATIENT CARE

**THE EFFECT OF USING GEL BED DURING THE POST -OPERATIVE PERIOD ON THE DEVELOPMENT OF PRESSURE ULCER IN THE PATIENTS UNDERGOING TOTAL HIP REPLACEMENT SURGERY****OP28**

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The aim of this quasi-experimental study is to depict the effect of using gel bed during the postoperative period on the development of pressure ulcer undergoing total hip replacement surgery. Sample of the study was consisted of 80 patients; 40 in experimental group and 40 in control group, July 2015 -April 2016 at Adnan Menderes University Hospital in [Orthopedic Surgery](#) Operating Room- Orthopedic Clinic. While the gel position pad covering standard operating table was being used for the patients in the experimental group during the total hip replacement surgery, standard operating table was used for the patients in the control group. Data Collection Form including the socio-demographic characteristics of the patients and Braden's Pressure Ulcer Risk Assessment Scale were used in the collection of the data. According the results, pressure ulcer prevalence was 45% in the reanimation unit after the operation. On the third day after the operation, the pressure ulcer prevalence was found to be 25%. It was identified that 1. Stage pressure ulcer developed in the gluteal region in the patients whom pressure ulcer developed. It was determined that pressure ulcer prevalence was 60% in the patients that were in the control group after the operation in the reanimation unit and it was 30% in the patients that were in the experimental group. On third day after the operation, the pressure ulcer prevalence was found to be 12% in the control group and 8% in the experimental group. It was determined that there was a significant relationship between the development of pressure ulcer in the control and experimental group patients after the operation in the reanimation unit and age, hospitalization duration, the type of anesthesia, anemia variable.

It was concluded that pressure ulcer development in the reanimation unit in the operation, using gel bed reduced the development of pressure ulcer.

**Key Words:** Pressure Ulcer, Total Hip Replacement, Operative Period Patient Care



## OP29

# THE PATIENT'S EXPERIENCE OF AMPUTATION DUE TO PERIPHERAL ARTERIAL DISEASE

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## BACKGROUND

Every year more than 1 million limb amputations are performed globally and the main cause is vascular disease. As an amputation has a large impact on the patient's quality of life (1), it is important that the health care providers are able to offer relevant support during the patient's decision- and rehabilitation phase. There is a lack of knowledge of what support the patients' request (2, 3).

## PURPOSE OF THE STUDY

The aim of this study was to describe the patient's experience of an amputation due to peripheral arterial disease.

## METHODOLOGY

Thirteen interviews, analysed with content analysis, were performed with patients who had undergone a lower limb amputation at tibia-, knee- or femoral level due to peripheral arterial disease.

## RESULTS

Preliminary result showed that the patients' felt abandoned during the acute phase. They experienced that they were not participating within the decision and they felt an absence of interest from the health care providers after the amputation. The participants also had a lack of knowledge of the process coming after the amputation. Despite that, the patients felt generally satisfied with the amputation decision, above all, they experienced a relief to be free of pain.

## IMPLICATIONS

The health care providers need improve their ability to involve the patients and to individualize the care. There are needs for developing a care plan enabling the patient to be prepared for the whole process after the amputation. In some cases the decision to amputate is perhaps something to discuss earlier in the process to decrease unnecessary suffering.

**KEY WORDS** Peripheral arterial disease, lower limb amputation, patient experience, qualitative study

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## IMPROVING YOUR PROCEDURE BY IMPLEMENTING FAST TRACK SURGERY AVOIDS DEATH FROM CANCER

OP30

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**Key words:** Fast Track surgery, Metabolic surgery, OR management

As operating room nurse manager at Erasme Hospital, the academic hospital of the Free University of Brussels, Belgium, I was in charge to increase the availability of our OR to perform oncologic surgery. As the OR occupation was maximal and no possibilities to build new OR, we decided to reduce the allocation time of routine surgeries. We therefore studied the feasibility of a new Fast Track organizational model applied to the bariatric surgery and the results we could expect when constricting those activities in order to release more time slots.

This presentation aims to describe the actions of a multidisciplinary working group including nurses from OR and PACU, surgeons and anesthesiologists formed in order to achieve a locally adapted version of this new organization.

First, we observed the practice of a Dutch reference center. We then analyzed and determined what could be put into our own practice, or had to undergo adaptation to match the local uses and the differences we did not want to keep.

Specific new working procedures and new nursing techniques were developed in the operating theater and the surrounding departments to finally lead to a test day.

Two observers were only present to record the different stages of this day and their results were presented and discussed in the working group. From this the implementation of a new organizational model has finally saved time and allowed us to achieve our objectives by releasing 16 hours of operating room per month allocated to semi urgent oncologic surgery. Furthermore, we also found an improvement in the quality of work of all stakeholders related to a better division of labor and greater cohesion around a common and clearly stated goal.

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## PARALLEL C3 PATIENT CENTERED PERIOPERATIVE NURSING

OP31

### EFFECT OF AN ACTIVE SELF-WARMING BLANKET IN PRE- AND POSTOPERATIVE PERIOD IN PATIENTS UNDERGOING LUMBAR SURGERY

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*Belgium*

#### Introduction

Surgical patients who suffer from inadvertent hypothermia (Temp <36°C) are more at risk for wound infections, cardiac complications and blood transfusions.(1) Active prewarming is recommended in the prevention of hypothermia. New devices must be tested before implementing as an evidence based approach in the prevention of hypothermia.

#### Aim

The aim of this study was to evaluate the effect of an active self-warming blanket used in the pre- and post-operative period on core temperature in patients undergoing lumbar surgery under general anesthesia.

#### Methods

Fifty-four patients undergoing lumbar surgery were randomized to receive standard care (n=28) or an active self-warming blanket (n=26) in the pre- and postoperative period. Tympanic core temperature and vital parameters were measured preoperative at admission to operating complex, postoperative at admission to recovery, 30 minutes later and before leaving recovery. Mixed model was used for statistical analysis.

#### Results

The mean core temperature preoperative was 36.4°C and no patient had hypothermia. Postoperative the mean core temperature decreased to 35.7°C with 70% of patients hypothermic. Before leaving Post-Anesthesia-Care-Unit, the temperature increased to 36.2°C with 29% of the patients hypothermic. No significant difference (p=0.707) was found in the pattern of core temperature between control and intervention group. Neither in the pattern of blood pressure (p=0.458), pulse (p=0.136), oxygen saturation (p=0.174) and thermal comfort (p=450).

#### Implications for perioperative nursing

The prevalence of hypothermia in surgical patients undergoing lumbar surgery is high. Despite other stud-



ies have shown effect from active prewarming on core temperature, no effect was found. If active prewarming will be used in the prevention of hypothermia it's recommended to implement it in all stages of surgery.

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**Keywords** Hypothermia – lumbar surgery – active prewarming

## “FAST FROM FOOD BUT NOT CLEAR FLUIDS BEFORE ANAESTHESIA AND SEDATION.”

OP32

A patient quality initiative to reduce the unpleasant side effects of excessive preoperative fasting in surgical patients.

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**Presenter** *Liz Waters*

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**Key Words,**

**Quality Patient care initiative, Clinical Audit, Improved surgical patient outcomes, Multidisciplinary team working. Nutrition and hydration.**

The presenter will outline the progression of a quality patient care initiative led by a consultant anaesthetist and implemented by the theatre user group team members. The development, rollout, clinical audits and implementation of this patient care initiative are the result of multidisciplinary team working with an end goal to improve the patients experience of the pre operative fasting period.

An initial surgical patient clinical audit identified that surgical patients were fasting from food and fluids for excessive times in our hospital some patients fasted from food and fluids for up to 48 hours.

The findings of this audit prompted a literature review and the development of a hospital wide policy guiding staff and patients to a reduced fasting period for food and solids and permitting patients to drink clear fluids up to two hours prior to surgery time.

Excessive fasting periods are unpleasant for the surgical patient and may cause dehydration, electrolyte abnormalities, hypoglycaemia, insulin resistance, headache, confusion, irritability, anxiety and nausea and vomiting.

At the time of abstract submission the policy is awaiting clinical director sign off and then the dissemination, rollout education will commence and following implementation a repeat audit will be conducted six months later.

The presenter will include the findings from that repeat audit in her presentation.

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## OP33

### PATIENTS ARE FASTING FOR TOO LONG

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**Denmark**

**Introduction.** Several articles and studies have previously demonstrated that patients are fasting for a long period of time exceeding the guidelines recommended by the Capital Region of Denmark. This study was initiated in order to examine whether the assumption that patients were subjected to prolonged fasting compared with the recommended guidelines was true. The project also wanted to further examine whether patients were offered various types of liquids up until two hours before operation, according to the recommendations.

**Aims and objectives.** The aims and objectives of the study were focused on four specific selected groups of patients – including children and patients with wounds that demanded debridement. The purpose was to measure in time, for how long they were fasting during a randomly selected period of time. There was also a specific focus on patients with wounds that demanded debridement, and how they were affected by prolonged fasting.

**Method.** The project was designed with both qualitative and quantitative studies by using interviews and questionnaires with the group of patients included in the project.

**Conclusion.** We concluded that the specific period of fasting exceeded the recommended guidelines, and we also found that prolonged fasting severely influenced all groups of patients, particularly patients with wounds that demanded debridement. Patients in general were not offered liquids up to two hours before operation as recommended.

After having evaluated the results from the study it was decided to set up a cross-sectional working group in order to point out specific focus areas, e.g. improved communication between wards and operation theatre, implementation of new routines for giving patients liquids and nutrition, and a specific operation theatre for patients demanding debridement.

**Key words:** Fasting, pre-op waiting time, nutrition, complications.



## POSSIBLE WAYS OF THE EXTENSION OF PREOPERATIVE PREPARATIONS WITH THE ANTIBACTERIAL SHOWER IN UNIVERSITY HOSPITAL BRNO

**OP34**

**Hodov Silvie**  
**Czech Republik**

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**Keywords** Surgical site infection, antibacterial shower

### Introduction

Ensuring of complex preoperative preparation for surgical intervention is an important preventive measure against infection in surgical site – surgical site infection (SSI). The purpose of this study is to prove efficiency of medical remedy with polyhexanid in decolonization of skin of the whole body.

Occurrence of SSI is variable depending on the type of surgical intervention with an average rate of 1 – 5 % [1]. Local skin antibacterial remedies enable to decrease microbial flora before surgical intervention up to 9 times [2]. The purpose of this prospective study is to compare infection occurrence with and without the use of the antiseptic remedy in two different departments.

### Research group and methodology

Recruitment of patients takes place in two departments of University Hospital Brno (FN Brno) from 1 April to 30 June 2016 (with the possibility of prolongation to fulfil necessary number of patients). The total of 80 patients will be put in a randomized study. According to surgical branches they will be divided in two parts. In both departments decolonization will be carried out by the tested remedy on 20 patients and by soap without antimicrobial component on other 20 patients. Before the first decolonization and after the second decolonization bacterial smears will be taken from the site of planned surgical cut. Involved surgical interventions are total endoprosthesis (TEP) of hip joint and abdominoplastics.

### Results

First results will be processed one month after carrying out the last abdominoplastics. Results will be assessed one year after carrying out the last TEP of hip joint.

### Conclusion

According to the results it will be decided about implementation of the tested remedy in all surgical departments of FN Brno.

<sup>1</sup> JINDRÁK, V., HEDLOVÁ, D., URBÁŠKOVÁ, P a kol. Antibiotická politika a prevence infekcí v nemocnici, 1.vyd. Praha: Mladá fronta, 2014, 709 s, ISBN 978-80-204-2815-8

<sup>2</sup> MANGRAM A. J., HORAN T., PEARSON M., et al. Guideline for prevention of Surgical Site Infection, CDC, 1999 [online]. [Cit. 2016-03-12]. <http://search.cdc.gov/search?query=ssi&utf8=%E2%9C%93&affiliate=cdc-main>



**OP35**

## THE EFFECT OF ANXIETY ON THE POSTOPERATIVE OUTCOME IN RELATION TO DEMOGRAPHIC BIOCHEMICAL AND HEMATOLOGICAL PARAMETERS

**Liakopoulou Maria**

**Greece**

**Maria Liakopoulou<sup>1</sup>, Athanasios Sachlas<sup>1</sup>, Andrea Paola Rojas Gil<sup>1</sup>, Stavroula Pavlerou<sup>2</sup>**

<sup>1</sup>*School of Human Movement and Quality of Life, Department of Nursing, University of Peloponnese, Sparta, Greece*

<sup>2</sup>*General Hospital of Tripolis "EVAGGELISTRIA"*

**Introduction:** A surgical procedure can be classified as a traumatic event. Preoperative anxiety is an unpleasant state of tension that results from a patient's doubts or fears before an operation. Excessive anxiety is associated with unfavorable postoperative physiological responses.

The aim of this study was to examine the correlation of severity of anxiety symptoms and stress as a permanent personality trait (trait anxiety) with the postoperative outcomes.

**Methods:** Perspective correlation study was performed, a total of 130 adults (48% females and 52% males age mean  $62,35 \pm 20,433$ ) participated in the survey from Tripolis and Sparta, Greece. Biochemical and hematological analyses were performed at pre and post-surgery. The psychological evaluation included Hamilton Anxiety Rating score (HAS) and State-Trait Anxiety Inventory (STAI).

**Results:** According to the psychological evaluation the majority of the patients indicates mild anxiety severity. Both psychological scores (STAI and HAS) shown increased anxiety ( $p=0,002$ ) previous to programmed surgery in comparison to suddenly surgery. Positive correlation was found between age and STAI ( $r=0,420; p<0,001$ ) and HAS ( $r=0,313; p<0,001$ ). Marital status affects HAS ( $p=0,001$ ) with widowers having the highest HAS score. STAI score was positively correlated with the number of children ( $p=0,004$ ) and negatively correlated with the educational level ( $p<0,001$ ). Both psychological scores (STAI and HAS) were positively correlated with the employment status ( $p=0,006$  and  $p=0,001$  respectively) with retired persons having higher levels of anxiety. Concerning the hematological markers both STAI and HAS scores were negatively correlated with the platelet accounts before and after surgery ( $r=-0,175; p=0,048$  and  $r=-0,176; p=0,045$ , respectively). HAS score was positively related to post-operative  $\gamma$ -GT ( $p=0,0025$ ) and SGOT ( $p=0,005$ ).

**Conclusion:** Preoperative anxiety in adults undergoing surgery was found to affect negatively the platelet account and the liver function. Changes in platelet could potentially be mediated through serotonergic signaling reflecting biochemical changes that occur in the brain when different mental conditions occur. Early recognition of preoperative anxiety is necessary for appropriate interventions.



## PARALLEL A4 DIFFERENT PERSPECTIVES ON THE PERIOPERATIVE NURSING EDUCATION

### QUALITATIVE STUDY OF IMPLEMENTATION COMPETENCE CARDS FOR NEWLY EMPLOYED UNEXPERIENCED NURSES IN THE OPERATION THEATRE

**OP36*****Nikolaisen Sidsel******Denmark***

A qualitative study from 2016, performed by the Educational Committee for Theatre Nursing in the Capital Region, Denmark, shows, how newly employed theatre nurses, supervisors, and nursing managers have perceived, implemented, and adopted the competence cards into daily practice.

#### **Introduction**

In 2012, 10 competence cards, describing basic operating room nursing skills, were designed. The competence cards were developed and enrolled from the Committee to enhance similarity and ensure systematic education to newly employed nurses in the region.

In each card three different issues of the basic nurse competences are to be uncovered during a period of observation by a supervisor and examination of the nurse's knowledge, skills and reflection.

#### **The aim**

The study uncovers how the nurse managers, supervisors, and newly employed inexperienced nurses in the OR perceive the implementation and the value of the Regional competency programme.

The study focus on:

- How the inexperienced OR nurses convert theoretical knowledge and skills to real life situations in the OR and
- How the concrete framework and competence card parameters helps to ensure a successful implementation and a positive culture of learning assessment in the OR

#### **Methods**

A conduction of two explorative semi-structured focus group interviews with 8 nurse managers, supervisors, and newly employed OR nurses primo March 2016 were designed and carried out.

#### **Results**

- The professional discussions are now part of the nurses' daily practices
- The implementation process has been differently performed in the OR departments in the region
- It varies from each department how the examination of the competence cards are carried out
- Management has great influence on the success of the implementation

#### **Conclusion**

The knowledge and skills achieved by the competence cards for inexperienced nurses do have an impact on the theatre nurses performance in the operating theatre to the benefit for patient safety.

The results of the focus group interviews show that the concept competency cards enhances systematic education which ensures that newly employed theatre nurses gain the essential competencies.



## Perspectives

The results will be very useful in facilitating smooth integration of new competency development programmes to follow.

Further development of the concept and focus at implementation programmes.

**Key words:** Competence cards for newly employed inexperienced nurses in the operation theatre

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**OP37**

## EDUCATIONAL PROCESS OF THE PERIOPERATIVE NURSES IN THE CZECH REPUBLIC

**Jedli Jaroslava**  
**Czech Republic**

*University Hospital Brno, Czech Republic*

**Jedličková J.<sup>1</sup>, Šilerová I.<sup>2</sup>, Mičudová E.<sup>3</sup>**

<sup>1,2</sup> Central operating theaters, University Hospital Brno, Czech Republic

<sup>3</sup> Management, University Hospital Brno, Czech Republic

**Keywords** Perioperative care, perioperative nurse, education, safety, quality

### Introduction

Properly trained perioperative nurses with a comprehensive understanding of the surgical environment are essential for the successful performance of the entire surgical team. The harmonization of the surgical theatre including the highest level of dedication is imperative to the best possible patient outcome. Recognizing this, the Czech Republic and healthcare management place a high priority on the continuing education of its perioperative nurses to assure safety of the surgical team and patients.

### Research group and methodology

This presentation describes comprehensive activities designed to motivate operating room workers to seek additional education and experience. We will describe the entire perioperative nurse education in the Czech Republic starting from the selection process to the operating room orientation. The main components of the educational process include: adaptation, supervision, continuing education, special-



ization studies and e-learning. Provided also in this program is the preparation of educational materials including videos.

## Results

The authors recognized the inherent hazards and safety issues associated with the increasingly technical surgical environment and counter this with a call for nursing care improvements. Thereby the authors were prompted to prepare a comprehensive educational program. The second goal was to test this educational program in the field and evaluate its effects. This new educational program was put into trial September 2015 to be evaluated after one year.

## Conclusion

Based on the results, the authors are expecting to develop conclusions and suggestions related to perioperative nursing education. The implementation of these principles are expected to improve the patient safety in the OR and post-operative recovery.

## Literature

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## OP38

### NEWLY GRADUATED PERIOPERATIVE NURSES

**Fagerdahl Ann-Mari**  
**Sweden**

#### **Background**

To provide students within the specialist programme of perioperative nursing with an academic learning environment in their clinical education, as required by the educational reform Bologna, has proved to be a challenge. Clinical supervision has been criticized of featuring too many characteristics of master-apprenticeship. Previous studies have pointed out deficits in the supervisors' competence.

#### **Purpose**

To investigate newly graduated perioperative nurses' perceptions of supervision in clinical education.

#### **Methodology**

A cross-sectional study with a quantitative approach based on questionnaires answered by 49 perioperative nurses in Sweden. The participants were between 26 and 53 years old and had been working between 0 and 15 years as a registered nurse before beginning the education. The majority of the participants were female (n=43, 88%). Data were analysed by descriptive statistics and Chi2-analysis.

#### **Results**

Clinical supervision in perioperative education is largely characterized by practical training in nursing and is still based on the master-apprentice model. The presence of adjunct clinical lecturers (AKA) in the clinical setting is high, but the participants perceive the collaboration between the clinical setting and the university as haltering. The perceived problem is that the quality of supervision varies greatly and that supervisors to a low extent use the assessment form to support planning and reflective discussions. Furthermore supervisors do not use reflection as a method in supervision to a great extent. In general however, the supervisors' ability to perform clinical supervision was summarized as very good or good.

#### **Implications**

In order to meet the challenges that exist for collaboration between the health care organizations and the universities, a deep and comprehensive understanding is required of both organizations as to demands, culture and underlying norms and values. The appointment of a role such as the AKA could be a valuable way to bridge and strengthen the cooperation.



## GLOBAL HEALTHCARE TRANSFORMATION, WHY IS PERIOPERATIVE SERVICES IN THE SPOTLIGHT?

**OP39**

***Voight Patrick***  
**USA**

**KEY WORDS:** Health Status Indicators, Healthcare Reform, Healthcare Transformation, Quality Life Indicators, Healthcare Cost, Surgical Performance Improvement, Cost Reduction

Although contexts differ, all countries around the world are struggling with balancing affordability, quality, and access in the health sector. The healthcare systems in America, Canada and throughout Europe and Asia are in trouble. In the United States there is a crisis that will fundamentally cripple the ability to provide care to those who need it most – the elderly, the uninsured and the underinsured.

This crisis is a direct result of rising healthcare costs that simply are not sustainable – not for businesses, not for government and certainly not for families. Countries throughout Europe, Asia and the Americas must learn from each other if healthcare is to continue as a fundamental right for the citizens of our countries.

The delivery of surgical and perioperative services is one area being the most closely scrutinized in our healthcare systems since these programs are the largest drivers of cost and inefficiency in our healthcare systems. As Perioperative professionals we must take a lead in transforming care, or have it done for us without our input.

### **Objectives:**

1. Compare and contrast core quality and cost statistics in healthcare across the US/Canada, Europe and Asia
2. Compare differences in healthcare delivery across Europe and the world
3. Discuss cost and quality drivers of healthcare related to Perioperative Services
4. Identify strategies to reduce costs and improve quality care in Perioperative Services

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## PARALLEL B4 SAFETY COMES FIRST IN OR

**OP40**

### NOISE – OBSTRUCTION TO PATIENT SAFETY

**Steiert Mary-Jo**

**USA**

**Presenter: Mary Jo Steiert, RN BSN**

Director of Nursing and Clinical Operations

Lowry Surgery Center, Denver, Colorado, USA

#### **Objectives:**

1. Discuss the appropriateness of music in the operating room
2. Consider noise as a detractor in providing patient care in the perioperative setting
3. Discuss methods of managing noise within the operating room
4. Consider the priority of the impact of noise on the patient

Noise is a necessity in our perioperative environment, but what is the effect of the different types of noise and the level of the sounds being heard? The various types of sounds being broadcast in the OR can be either pleasant and soothing or disturbing based on the perceptions of the sounds receiver.

Music, phones, alarms, sounds of machines, voices and conversations from the patient's perspective are intensified and frightening.

In 1972, Shapiro and Baland described noise as the "third pollution" in the operating room and found that the levels of noise equaled that of traffic noise on a freeway. Since that time types of noise and levels have multiplied with increased technology and advanced equipment.

It is important that we as perioperative practitioners consider the listening environment that we expose our patients and coworkers. Is it appropriate for us to create a different environment for our patients because they are anesthetized?



## SURGICAL CARE PRACTITIONER PRACTICE: ONE TEAM'S JOURNEY EXPLORED

**Jones Adrian**  
**England**

OP41

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NHS Foundation Trust, Norwich  
Vice President – Association for Perioperative Practice**

Surgical practice in the UK changed in 1993, when Suzanne Holmes and her cardiac surgical colleagues introduced the surgical care practitioner role (SCP). A role for advanced non medical practitioners within a consultant surgeon led extended surgical team: SCPs work alongside a variety of healthcare practitioners to provide safe patient care, meet service demands and educate the future surgical workforce.

A surgical care practitioner was finally defined as:

***'A non-medical practitioner, working in clinical practice as a member of the extended surgical team, who performs surgical intervention, pre-operative and post-operative care under the direction and supervision of a consultant surgeon.'***

This presentation reviews the history of this development over the last twenty years in the context of a busy orthopaedic department. It will discuss surgical assistant practice development, supervision and delegation. And describe one emerging consequence of SCP practice, the recognition of their ability to support senior surgical trainees, to enable their transition to independent operator with only proximal consultant supervision.

Oral Presentation will reflect and expand on the following published article:

Jones A, Arshad H, Nolan J 2012 Surgical Care Practitioner: One team's journey explored  
**Journal of Perioperative Practice** 22 (1) 19-23



OP42

## A DESCRIPTIVE STUDY OF PATIENT SAFETY IN THE OPERATING ROOM

**Bulbuloglu Semra**  
Turkey

**Fatma Eti Aslan, Semra Bülbüloğlu, İlknur Yayla**

**Key words:** Patient safety; operating room; patient safety in the operating room

**Background:** All patients of the surgical process should have exhaustive and special care to protect them. Patient safety is an essential part of perioperative care because some patients might be very young or very elderly therefore; they can be more vulnerable.

**Objectives:** Effective patient safety in the operating room is a multifaceted and a multidisciplinary process in which intraoperative nurses play an important role. The EORNA "Patient Safety Guideline for Developing Standards" was approved by the International Federation of Perioperative Nurses in April 2005. The caretaking plan for a surgical patient should include description and prevention of possible risks which may threaten the patient.

**Data Sources:** A multidisciplinary team comprised of nurses, health technicians and surgeons conducted descriptive observations of 14 general surgery, 12 orthopedic cases a total of 26 patients in education and research hospital. Recommended practices of EORNA about patient safety was reviewed and a questionnaire form was prepared and conducted by the researchers in an education and research hospital operating room. Observations were recorded in the field, and later coded and analyzed.

**Results:** In this study, scientific evidences were attained that aseptic and antiseptic techniques were effectively used during all procedures by the operative team and during the operation, body temperatures of the patients weren't measured. During the perioperative process no guideline was used for the surgical pathology material management by the hospital. The operative team neglected to identify the risk factors for pressure ulcer development in operating room.

**Conclusion:** The result of this study scientifically proved that nursing interventions for patient safety in the operating room are insufficient.

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**PARALLEL C4 LIFE LONG LEARNING IN OR****OP43****DELIVERY OF A NATIONAL PERIOPERATIVE WEBINAR EDUCATION PROGRAM IN AUSTRALIA****Foran Paula**  
**Australia***Education Officer, Australian College of Operating Room Nurses***Background**

In an initiative to provide education across a large country like Australia, which includes not only metropolitan but regional, rural and remote areas, saw the birth of the ACORN Education Webinar project. The Australian College of Perioperative Nurses (known as ACORN) is the national body that represents perioperative nurses from the seven state local associations. It has over 4000 members and is the largest specialty nursing college in Australia.

Webinars are a 'live' presentation platform that allow education delivery to the education consumers in the location of their choice. They can be at work in a conference room, or in their own home after work. The ability to ask live questions is available and all webinars from ACORN are recorded and placed on the member's website.

**Conception to reality**

An advertisement was sent out to all members looking for a Webinar Master to provide Education on each new or updated National Perioperative Nursing Standard as it was released. The popularity of the webinar presentation grew such that there are now two distinct streams of webinar delivery; one for standards education and one for general perioperative education.

**Advantages**

Members love the flexibility of watching at home, drinking a cup of tea. The ability to have the taped presentations allowing members to watch at their own convenience has also been unbelievably popular. Initially, 100 places were available for each webinar, however when the webinars were booked out within 1 hour of being advertised, that was increased.

**Disadvantages**

This is a very fragile medium and is at the mercy of electricity, good internet connections for the moderator, speaker and all attendees, thus making it prone to technical issues.

This presentation will discuss development, implementation and ongoing management of a national webinar system.



## OP44

### THE EFFECT OF OPERATING ROOM EXPERIENCE ON OPERATING ROOM PERCEPTIONS OF NURSING STUDENTS

**Erturk Melek**

**Turkey**

**Melek ERTURK, Research Assistant, MSc, RN<sup>a</sup>; Harun OZBEY, Yakup Kusan, Deniz DADAK, Kubra BASBOGA, Undergraduate<sup>b</sup>; Ayla GURSOY, Associate Professor, PhD, RN<sup>a</sup>**

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**Objective:** The purpose of the study was to determine the effect of operating room (OR) experience on OR perceptions of nursing students.

**Method:** A total of 220 nursing students (female:193, male:27) were included in this descriptive study, who were present in the OR as observers for two days at average. Two third were third-grade and one third were fourth-grade students.

**Results:** The term “operating room” reminded most of the students “green” color, and the rate was found to be 64.5% before the clinical applications whereas it increased to 75.9% after then. Approximately three fourth of the students experienced curiosity and excitement before the clinical applications. However 44.1% of the students experienced fear and this rate decreased in 70.1% and increased in 14,4% of the students following clinical applications. We determined that before clinical applications, what the term “operating room” mostly reminded the students were surgical procedures, cold environment and fear/anxiety, whereas after clinical applications these were surgical procedures, sterile environment and surgical smoke. Of the students, 80% stated that they were willing to go through an application in the operating room again; while 74.5% of them expressed that they would prefer surgical nursing after graduation.

**Conclusion:** As a result, we concluded that clinical applications in OR have an effect on students’ perception of operating room. Three quarters of the students experienced decrease in operating room-related fear while most of them stated that they were willing to become surgical nurses.

**The implications for perioperative nursing:** In the literature search, there was no study investigating the effect of OR experience on the OR perception of the nursing students. Although the study contributes to the literature on this subject, additional research is needed.

**Keywords:** clinical application, nursing student, operating room, operating room perception.

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Preferred type of presentation: Oral



## A TOOL OF SELF DIAGNOSIS TO MANAGE SKILLS OF OPERATING ROOM NURSES

**OP45**

**Ludwig Brigitte**  
**France**

In an operating room, the risk is permanent. It depends on the practices of all, particularly on skills of room nurses. For several years, surgical rooms are grouped in units which become more and more important and the teams of room nurses can count more than two hundred nurses with regular departures and arrivals. The versatility is at the heart of the evolution and of the management of the room nurses. How to pilot at best the risk and thus the practices of the room nurses in a surgical block with multicultural teams, and an important staff turnover?

It's to bring an answer to these questions that UNAIBODE (French national association of Room nurses) set up two years ago a workgroup. The aim: elaborate a tool to evaluate the level and the degree of versatility of a room nurse. The end: allows every room nurse, to have a precise view of its practices to be able to exercise her activity and decrease the risks. The finality: give to the person in charge of the surgical room a tool to pilot in a precise way and with full transparency the skills of the room nurses' team.

### 1. A tool of selfdiagnosis:

After 24 working months, tests with more 50 room nurses and validation by a dozen of managers of blocks, the tool was worked out in its definitive version and presented to the French national congress of the nurses where it received a warmly welcome. It consists of 11 questionnaires: one questionnaire for bases (circulating and scrub nurse) and ten questionnaires of surgical specialties, ophthalmologist, orthopedics, visceral, neurology, cardiology, robot, endoscopy, maxillofacial, stomatology, etc.

### 2. How to use it? :

He must be filled, entirely or partially, at different selected moments of the year by the room nurse in the presence of his mentor or manager. This one brings precisions or details when it is necessary. Thanks to this questionnaire the room nurse can know exactly the skills she masters and the practices which she has to acquire. 3. A lot of applications in the human resources domain

When a new room nurse arrives in a block, When a room nurse is affected in a new surgical specialty

#### a. Individual Training

Every nurse knows exactly the practices which she masters and the skills she has to learn

#### b. Operational Team building

To have permanently a clear vision of the versatility of the teams To create teams by knowing exactly the profiles of skills of every room nurse To facilitate the planning of interventions in complete safety

#### c. Collective training To establish the individual or collective training plans

#### d. Annual interviews

To have an objective reference table, common, shared by every member of the team to estimate the staff during the annual appraisal interviews

### 4. Perspectives:

All the questionnaires will be available in French and English from 2018. A Web application will allow every person in charge of surgical block to use these questionnaire. They will able to have an individual profile for all the members of their team and cartography of versatility by specialty and also by team.

(For the EORNA congress, the duration of the PPWT presentation will be about 20 minutes and will be illustrated by the questionnaire and cartographies of versatility in different establishment and teams)



## OP46

### THE POWER OF APPRECIATION IN THE LEARNING SITUATION

***Als Christina***  
***Denmark***

In Denmark the majority of surgical nurses are well-experienced in practical skills, but the theoretical foundation is not always at the desired level.

To ensure the well-experienced OR-nurse does not get lost in the development it is important to ensure that they constantly develop and acquire new skills.

Sometimes it is difficult for the well-experienced OR-nurse to be aware of her own blind spots and make them visible.

What is at stake when the well-experienced nurse is brought out of her comfort zone and how can the mentor help her visualizing the blind spots and support her ways of developing new skills?

To get more knowledge about how the well-experienced nurse reacts on a learning situation I made a semi-structured interview. According to that some of their greatest concerns were to lose face or the loss of prestige.

The discussion of the findings was based on analysis from Peter Jarvis learning theory and Axel Honneth's appreciation theory.

Peter Jarvis defines learning as followed:

"The combination of processes throughout a lifetime whereby the whole person – body (genetic, physical and biological) and the mind (knowledge, skills, attitudes, values, emotions, meaning, beliefs and senses) – experiences social situations, the content of which is then transformed cognitively, emotively or practically (or through any combination) and integrated into the individual person's biography resulting in a continually changing (or more experienced) person".

According to Peter Jarvis the person who faces a dis-juncture will enter one of the following possibilities for learning: reflective learning, non-reflective learning or non-learning. The outcome of the dis-juncture depends on how the person enter the process of learning known or unknown to the person.

The challenge is how the mentor can support the well-experienced OR-nurse in handling the dis-junction. Maybe reflection is a way to become more aware of the blind spots.



## WELL-EXPERIENCED OR-NURSES IN COPENHAGEN REACH A HIGHER LEVEL OF EDUCATION

**OP47**

***Dalsgaard Monica***  
***Denmark***

Clinical competence assessment have made it possible for our well-experienced OR-nurses to work focused with nurse related topics already determined in an innovative yet strategic way, which have expanded their knowledge and understanding of existing practice and perioperative nursing care.

The Nurse Education Council in the Capital Region of Denmark has developed an evidence-based structured educational program for OR-nurses with more than 2 years of experience to ensure a consistent high level of OR-nursing skills. The educational tool includes theoretical and practical skills on a level that demands professional reflection built on evidence based argumentation.

To get a good start on the implementation in our department of Anesthesia, Center of Head and Orthopedics in Copenhagen University Hospital Rigshospitalet (> 100 OR-nurses with +2 years experience), we planned a pilot study involving a small amount of well-experienced OR-nurses in order to test the organisation and structuring of interventions before the final implementation.

The participants involved were presented to Journal Club sessions, reflection fora, and coaching by special trained clinical mentors. They completed three questionnaires to evaluate the pilot study and bring us to the next level in our implementation strategy.

Results of the pilot study showed that the participants found it meaningful to study the theoretical parts by Journal Clubs supported by special trained clinical mentors. Through Journal Clubs they reflected and had valuable discussions and gained the necessary theoretical competences to argue for the nursing they mastered in clinical practice. Since January 2016 we have therefore decided to educate all our well-experienced OR-nurses to the next level of abstraction for the benefit of the patient and clinical practice.

Keywords: Clinical competence assessment, education tool, education improvement, education strategy, well-experienced OR-nurses, Journal Clubs, special trained mentors, reflection fora, evidence-based practice



**PARALLEL D1**  
**PATIENT EDUCATION AND COUNSELLING - A WAY TO EMPOWERMENT**

**OP49**

**DISCHARGE COUNSELLING OF MULTICULTURAL PATIENTS AND THEIR FAMILIES IN DAY SURGERY**

***Sinivuo Riikka***  
***Finland***

Continually increasing cultural diversity sets new requirements for nursing care. Previous research show the importance of acknowledging the individual needs of multicultural patients due to language difficulties, different cultural values, customs and beliefs and experiences which can easily lead to misunderstandings (1-3). In day surgery, it is especially important to ensure the comprehension of discharge instructions since the patient returns home just a few hours after the surgery (4).

The purpose is to describe discharge situation of multicultural patients and their families in day surgery. The aim is to develop family centered and culture sensitive care in day surgery. The data were collected by observing seven nurses discharging nine patients after day surgery. Observed situations were videotaped and analyzed using inductive content analysis. Nine nurses were also interviewed about their experiences of discharge counseling of multicultural patients. Interview method was qualitative and inductive content analysis was used in analysis. Second data collection part will include the interview of the patients and their family members as well.

Going home was seen as the goal of discharge, and all participants seek to ensure the home care instructions were understood. Nurses and patients/family members had varying roles in discharge, from patient centered counselling and active participation to counselling everyone the same way and patient being a passive recipient. Nurses regarded the counselling of multicultural patients as demanding and time consuming. Recognition of cultural differences was individual and the existence of cultural differences was rejected, criticized or approved. Some nurses pursued to take cultural background into account while the others insisted on counselling everyone similarly.

Nurses, patients and family members used several methods to ensure understanding of instructions. However, patients' individual needs of counselling were not taken into consideration systematically, which could impair understanding the instructions correctly, and thus successful home care.

**Keywords:** discharge, counselling, day surgery, multicultural nursing

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## CONNECTING WITH FAMILIES USING SMART TECHNOLOGY

# OP50

***Bagaoisan Cora  
Canada***

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Over the past years, we have seen practice changes related to caring for a surgical patient. Nursing schools and hospitals that once trained nurses in techniques to avoid giving out information, now encourage nurses to realize the importance of providing information, which enable, the family to be part of the patient's surgical experience. Heightened stress, anxiety and feelings of helplessness are emotions identified by families especially during the time that their loved ones are in surgery. These feelings appear to be more evident when families sit and wait for hours in the waiting room without any information from the perioperative team. The University Health Network takes pride in being patient and family centered and is constantly finding new ways to streamline communication and establish linkage with waiting families. In 2005, Toronto Western Hospital (TWH) Operating Room (OR) introduced intraoperative family visits for procedures that were two hours and longer. It was a great initiative and family satisfaction had improved briefly. Sadly, we continue to have challenges with missed visits due to staffing and complexity of cases and cases extending past the regular hours. Letters from family members expressing their frustrations continued to pour in. In 2008, the OR Clinical Educator introduced the family disc paging system with the goal of addressing some of these challenges. While it addressed feelings of confinement and sense of timeliness for families in waiting, the reduced staffing during off hours and weekends and the complexities of our cases remained our biggest hurdle. Nurses were hesitant to leave the OR and meet with family.

This presentation will highlight a new form of technology the we introduced at our facility last Fall as a quality improvement project designed to enhance communication and improve service delivery to our clients. The alpha numeric system of messaging delivers up to date information to waiting families when a face to face visit is not feasible. Some of the pre-text messages incorporated include, “Patient Asleep, Surgery Started; Procedure Done, Patient in Recovery; Taking Longer, All is well.” The intent is to of keep families informed throughout the intraoperative phase of the patient’s experience regardless of duration, staffing and case mix. Addressing the need for information had overall improved families and staff satisfaction.

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**Preferred Type of Presentation:** Oral

**Topic:** Clinical Improvements/Innovations

**Key Words:** Communication, Information, complexity, case mix, service delivery



OP51

## SATISFACTION LEVEL OF ORGAN TRANSPLANT PATIENTS IN TERMS OF SOCIAL SUPPORT AND NURSING CARE

**Dolgun Eda**

**Turkey**

**Tuğçe YEŞİLYAPRAK\*, İlknur PEKPAZAR\*, Eda DOLGUN\*,**

**Meryem YAVUZ van GIERBERGEN\***

*\*Ege University Faculty of Nursing*

**Background:** Social support and nursing care are important factors for adaptation of organ transplant patients to the changes in their lives.

**Purpose of Study:** It was planned to investigate the satisfaction levels of organ transplant patients in terms of social support and nursing care and also to determine the relation between these two items.

**Methodology:** This descriptive research was conducted with the patients having undergone organ transplantation in a university hospital between 31 March and 31 August 2016 and with those having undergone the procedure before and coming to clinical control as they accepted to answer the research questions (n=140). While collecting the data; question form consisting of 12 questions related to identifying information of the patient, Newcastle Satisfaction with Nursing Scales and Multidimensional Scale of Perceived Social Support Questionnaire were used. Necessary permits were obtained for the use of scale. After obtaining approval from Ege University Faculty of Nursing Ethics Committee for the research, the written permission from the institution where the research would be conducted was obtained. The data were evaluated by number, percentage, average and Pearson correlation analysis in SPSS 16.0 program.

**Results:** The mean age of the patients was 38.89±11.80. It was seen that 64.3% of patients were women, 65.0% were married, 36.4% primary school graduates, 73.6% liver transplants, 26.4% kidney transplants and 72.1% of them were organ transplant from living donors. Patients Multidimensional Perceived Social Support Scale score average was 69.25±7.21, also experiences about Nursing Care Scale mean score was 75.41±2.27 and Nursing Satisfaction score mean score was found to be 71.73±3.05. There is no statistically significant correlation between Social Support Scale Total Score and nursing care related experiences Scale total score (R=0.087, P=0.305) and Satisfaction Scale total score (r=0.012, p=0.891).

**Conclusions:** Satisfaction levels in terms of social support and nursing of organ transplantation patients were found to be at a good level.

**KeyWords:** Social support, Nursing Care, Satisfaction

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## VALIDITY AND RELIABILITY OF THE “GOOD PERIOPERATIVE NURSING CARE SCALE”

**OP52****Hertel-J Michala****Denmark**

**Background:** Quality in Healthcare has great importance and measuring the quality of care is considered essential for developing clinical practice. Patient satisfaction and the patient's perspective of care are indispensable elements of the overall concept of Quality, and should be included in the assessment of Quality in Healthcare (1, 2). Yet, there is no Danish tools for measuring the patient's perspective of the perioperative nursing care, but a Finnish tool 'Good Perioperative Nursing Care Scale (GPNCS)' developed and validated by Leinonen in 2001 (3) and translated into English and Turkish (4).

**Aim:** To translate and cultural adapt the 'Good Perioperative Nursing Care Scale' into a Danish context and then to test the validity and reliability of the Danish version.

**Method:** A systematic translation and cultural adaption of GPNCS was made by using an international recommended guideline by ISPOR (5), containing translation/back translation by independent translators, proofreading of the translation by the developer and a face validation by professionals and surgery patients. Minor changes of the GPNCSdk were made to meet the conceptual and semantic equivalence, as well as the cultural adaption. The validity and reliability of the electronic Danish version of GPNCS (GPNCSdk) was tested on 200-300 acute and elective orthopedic surgery patients at a Danish Hospital using an iPad.

**Results:** We started data collection the 1. April 2016. That leaves us with no present results yet, but we will be able to present results at the conference.

**Implications:** The GPNCSdk provides a validated tool to assess the Danish patients' perspective of the perioperative care. It is recommended to determine and develop the quality of perioperative nursing care in Denmark. Furthermore it provides the possibility of international comparison of the quality of perioperative care since the tool exists in an English, a Finnish and a Turkish version.

**Key words:** perioperative nursing, perioperative nursing care scale, quality, validity, reliability, Danish measurement tool, PREM, questionnaire

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Preferred type of presentation: Oral presentation.



## PARALLEL E1 ROBOTS IN OR - MEET NEW COLLEAGUES

**OP53**

### ROBOTIC EMERGENCIES: ARE YOU READY FOR A DISASTER ?

**Carlos Grace**  
**USA**

Memorial Sloan Kettering Cancer Center (MSKCC) performed over 2100 robotic surgeries in 2015, spanning over several surgical services. MSKCC currently maintains a total of 7 robots, six of which are the most current Xi model, and one Si model

The surgical robot is a tool that surgeons use to perform minimally-invasive procedures. Nursing staff plays a vital role in ensuring patient safety with use of robot during surgery. Proficiency in the use of the robot requires extensive and continuous training for the entire surgical team. Because of the complexity of the technology, successful robotic programs must implement initiatives for the prevention and management of robotic emergencies. It can happen anytime, and the staff must be fully aware of the emergency protocols.

This presentation will focus on how to develop a successful robotic program that includes procedures for the prevention and management of emergencies in the Operating Room (OR). It will discuss these processes developed by a multidisciplinary Robotic Executive Committee:

- Emergent Conversion to Open Procedure checklist, which defines each surgical team member's task during an emergency. Incorporation of this checklist during the surgical timeout before each case.
- Robotic Emergency tray that is readily available to convert to an open procedure.
- Sterile robotic wrench to release a robotic instrument in an emergency.
- Stand-by cart containing a set of instruments that is service specific; readily available if there is a need to convert to an open procedure.
- Education and training of nursing and surgical staff on management of robotic emergencies.

Frontline nursing staff will gain knowledge on what to do during robotic emergency. It will assist educators in developing training materials and creating simulation for robotic emergent conversion. Through ongoing simulation, staff will develop and maintain skill and confidence during critical events.



## NURSES' ADAPTATION PROCESS TO ROBOTIC SURGERY: A QUALITATIVE STUDY

**OP54****Uslu Yasemin****Turkey****Yasemin USLU\*, Yasemin ALTINBAŞ\*\*, Tuğba ÖZERCAN\*\*\*,  
Meryem Yavuz van GIERBERGEN\*\*\*\****\* Acıbadem University Faculty of Health Sciences, Nursing Department, Istanbul,**\*\* Adiyaman University School of Health, Nursing Department, Adiyaman,**\*\*\* Acıbadem Healthcare Group Maslak Hospital, Robotic Surgery Nurse, Istanbul,**\*\*\*\* Ege University Faculty of Nursing, Izmir*

**Introduction and Aim:** Robotic surgery is a method to perform surgery through using a robot. For robotic surgery operations, in which teamwork has an important role on success, nurses are responsible for building the system and maintaining continuity (1-3). In the literature, studies focus on nurses' experience on using robotic surgery technology or their adaptation to this technology are rare. The main aim of this study is to reveal nurses' experiences related to robotic surgery process.

**Methodology:** This is a qualitative study, which is based on focus group interviews. The sample of the study involves robotic surgery nurses working in an operating room of a private healthcare group located in Istanbul-Turkey. In order to be included in the sample, nurses were required to be working as nurses at least six-months, and declared voluntary participation. Focus group interviews were done by using "semi-structured interview form", and all the interviews were type-recorded. In order to analyze the data collected from the interviews, content analysis method was used.

**Findings and Discussion:** Interview themes include the dynamics related to (1) interest in surgery nursing, (2) deciding to robotic surgery nursing and technological adaptation (3) adaptation to the changing roles in robotic surgery nursing, and (4) features and future of robotic surgery nursing. In general, participants noted that they want to move away from human relations, so they choose to work in operating room, which is based on technical skills. Majority of the participants noted that they have learnt robotic surgery nursing through master-apprentice relationship, however they also emphasized the necessity of training as well. Participants also noted that inclination to technology is not so important in terms of learning robotic surgery nursing. Moreover, it was also noted that technical knowledge inadequacy or technical problems derived from the device may cause anxiety for nurses, which then leads to fear of hurting the patient. In robotic surgery, nurses' responsibility is increased and nurses are required to have technical knowledge. In addition, participants emphasized that individuals having necessary skills for surgery nursing are more likely to become robotic surgery nurses as well.

**Discussion and recommendations:** In robotic surgery operations, patients' need have been changed, and thus, nurses are required to adjust to this new technology. Moreover, it is argued that adaptation to robotic surgery process may lead to positive psychological results for nurses, which then leads to increase both individual career success and organization's performance. Furthermore, better patient care might also be noted as a positive outcome of the adaptation process.

**Keywords:** Robotic Surgery Nursing, Technological Adaptation, Focus Group Interview

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**OP55**

**POSTOPERATIVE POSITION RELATED EXTREMITY SYMPTOMS AFTER  
ROBOT ASSISTED LAPAROSCOPIC CYSTECTOMY**

**Johansson Veronica**  
**Sweden**

**Author: Veronica Ramirez Johansson, RN, CNOR, MSc,**  
**Co-author: Ann-Christin von Vogelsang, RN, CNOR, PhD**

**Background:** The perioperative nurse has an important role to plan for, and ensure the patient safety in the operating room, including positioning the patient for specific procedures. Robot-assisted surgery has been an increasing surgical method in urologic surgery, and requires steep Trendelenburg positioning of the patient. This position is challenging for the perioperative team due to the hemodynamic and respiratory impact, as well as the risk for pressure related injuries and compartment syndrome. Available medical record based studies indicate a low frequency of position related peripheral nerve injuries due to steep Trendelenburg position. However, patient reported position related extremity symptoms are vaguely described in the literature.

**Aim:** To identify frequency and variations of position related extremity symptoms after robot assisted laparoscopic cystectomy (RALC).

**Method:** In a prospective cohort design, 95 consecutive patients undergoing RALC (72% of eligible), were followed-up one month postoperatively with validated questionnaires; Disabilities in the arm, shoulder and hand (Quick DASH) and Lower extremity functional scale (LEFS), and a set of study specific questions. Patients with residual extremity symptoms were followed-up monthly by telephone up to six months after surgery. Data was collected 2015-2016 at a Swedish university hospital.

**Results:** The data collection has ended and the data analysis is in progress to be finished in end of 2016 for presenting the result at the EORNA congress in May 2017. So far, the results show that 26 patients (27%) reported pain and/or other symptoms one month after surgery that could be related to the position during surgery.

**Clinical relevance:** There is a risk for underestimating the importance of proper patient positioning why it needs to be emphasized. Complications after surgery that are not related to the surgical site need to be illuminated for maintaining patient safety.

**Keywords:** robot assisted laparoscopic cystectomy, steep Trendelenburg, surgical positioning, pressure injuries, postoperative extremity symptoms, telephone-based follow-up

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## A FRIEND NOT LIKE THE OTHERS IN THE FIELD OF SURGERY: THE DA VINCI ROBOT

**OP56**

**Godefroid Deborah**  
**Belgium**

**Nassogne Ludivine ( ENT nurse in CHR Citadelle Liège)**  
**Godefroid Déborah (urology nurse in CHR Citadelle Liège)**

**Keywords :** Roboscopy, Nurse's role, ENT, Urology

### **Background:**

The constant evolution of medicine, especially the surgical procedures, leads inevitably to a development of our skills

Roboscopy is one of those technological developments in the field of surgery.

This new approach brings many postoperative benefits for the patient, for example less pain following surgery and reduced hospitalization time.

The surgeon also benefits from this new friend because he has a better visibility as well as an improved accuracy of execution, compared to the traditional surgical procedures using laparoscopy or endoscopy.

### **Focus of interest:**

This evolution lead us, operating room nurses, to reconsider our job as a circulating or instrumentalist nurse.

We are facing procedures that are sometimes quite complex, often unknown and frightening for some of us.

These developments of the nurses' role will essentially focus on ENT surgery and urology.

In this presentation, we will tackle the setting up of the robot and its different components.

The consideration for the patient's features during his installation will be an important item of our presentation, since it is a critical part of our job as circulating nurse.

The last issue that will be tackled is our training for the instrumentation of this surgery technique which is not known to all yet. Our training proved particularly helpful when we faced more complex cases. Our knowledge sometimes allowed us to overcome some technical issues.

### **Conclusions:**

We would appreciate to share some of our new knowledge with you.

We hope that this abstract aroused your interest for this new friend "Da Vinci", and that you are willing to know more about him.

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Oral présentation with PowerPoint



## PARALLEL F1 PERIOPERATIVE FIELD IN THE FOCUS

**OP57**

### COMPARATIVE STUDY OF PAIN, STRESS, ACTH AND CORTISOL LEVELS BETWEEN FAST TRACK PROTOCOL AND CONVENTIONAL PERIOPERATIVE RECOVERY PROGRAM IN ONCOLOGICAL PATIENTS UNDERGOING HEPATECTOMY OR PANCREATECTOMY

**Kapritsou Maria**

**Greece**

**Maria Kapritsou<sup>(1)</sup>, Margarita Giannakopoulou<sup>(2)</sup>, Elizabeth E.D. Papathanasoglou<sup>(3)</sup>, Korkolis P. Dimitris<sup>(1)</sup>, Evangelos Bozas<sup>(2)</sup>, Ioannis Kaklamanos<sup>(2)</sup>, Tasoula Siskou<sup>(1)</sup>, Evangelos A. Konstantinou<sup>(2)</sup>**

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**Key-words:** Pain, Stress, ACTH & Cortisol levels, Hepatectomy, Pancreatectomy, Fast-track Recovery Program

#### **Background**

Fast-track (FT) surgery has shown to improve patient outcomes with a more rapid resumption of normal activities after both major and minor surgical procedures(1,2). FT protocol reduces complications and the length of postoperative stay(3) after major abdominal surgery, such as hepatectomy or pancreatectomy(4).

#### **Purpose of the study/Goals**

The comparative study of Cortisol and ACTH levels between fast-track and conventional protocol, as a possible stress and pain markers.

#### **Methodology**

A prospective randomized clinical study was conducted from May 2012 to February 2015 with a sample of 173 patients who undergone hepatectomy or pancreatectomy, randomized into 2 groups. In group A (n=90) was applied FT protocol and in group B (n=83) CON protocol. Demographic and clinical data were collected and patients were assessed by VAS and Puntillo pain scales and 3 self report questions about stress status. ACTH and Cortisol plasma levels were measured at 3 different time points: a)day of admission, b)operation day, c)prior to discharge. Statistical analysis was carried out by SPSS 22, at a nominal significance level  $\alpha=0.05$ .

#### **Results**

The two groups of patients were matched for age, gender, body mass index and kind of surgery ( $p>0.05$ ). There was no significant difference in serum ACTH and cortisol levels between the two groups ( $p>0.05$ ). The risk of developing complications was 2.05 times greater in CON group than FT group ( $\chi^2=9.86, df=1, p=0.002$ ). In FT group ACTH-a levels were associated with pain levels (VAS scale) the 1<sup>st</sup> and 2<sup>nd</sup> postoperative days ( $\rho=-0.287, p=0.006$ ,  $\rho=-0.25, p=0.015$ , respectively), while in CON group cortisol-a levels were correlated with the day of resumption normal diet ( $\rho=0.23, p=0.031$ ).

#### **Conclusion**

The present study suggests that FT protocols could accelerate postoperative recovery of patients safely and efficiently without increasing stress levels of patients

#### **Implications for perioperative nursing**

FT protocol improves patients' recovery with great participation of nurses in planning and caring of patients.

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## INTRODUCTION PROGRAM AT AN OPERATING ROOM DEPARTMENT - OPERATING ROOM NURSES AND NURSE ASSISTANTS

**Sandelin Annica**

**Sweden**

### Background

Patients, with severe and multiple illnesses, who needs advanced surgical procedures are cared for at the operating [OR] department at Karolinska University Hospital, Huddinge Sweden. Operating room nurses [ORN] who are newly graduated need to achieve competence in perioperative nursing care in relation to these high technology surgical procedures (1, 2). Traditionally, the new employed nurses have one preceptor during the introduction, 3 months. The learning and guidance is traditionally "by hand" in the clinical setting (3) without a deeper knowledge of the unique patient or the surgery beforehand. We have now formed the introduction program by the approach of constructivism; building knowledge from earlier understandings (4, 5, 6) and self-directed learning (7).

**The purpose** is to create an effective introduction program for operating room nurses and nurse assistants to be better prepared for perioperative nursing care in relation to advanced surgery and to evaluate the program.

### Method

The introduction program is based on both theoretical and clinical practice learning activities during working-time.

### Results

The program contains perioperative nursing care in relation to the specific surgical treatment for each advanced surgical procedure. The program includes lectures, literature studies, films of nursing actions and surgical procedures, practicing skills in relation to these theoretical activities and regularly dialogues with surgeons and reflections between colleagues. We have received positive feedback from colleagues. Communication within the group of ORNs have been improved.

**Key words:** operating room nurse, learning, introduction, constructivism

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OP58



**OP59A**

## THE INVESTIGATION OF EARLY MOBILISATION TIMES AT FIRST 24 HOURS OF ADULT PATIENTS AFTER THE SURGERY

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**Introduction** Being an important stage of ERAS / Enhanced Recovery Protocols, early mobilization is very significant in preventing many complications after the surgery. **Aim of Study** This study was planned as a descriptive study with the aim of investigation of early mobilisation times at first 24 hours of adult patients which had surgery operation. **Material and Methodology** Our study has been descriptively conducted at Gazi Yasargil Educational Research Hospital between 3rd June 2016 - 10th July 2016. The scope of the study consists of the patients aged 18 and above who are staying in the general surgery clinic and had a surgery within last 24 hours (n=50). In order to determine the number of the patients, quota sampling method has been employed. An approval had been obtained from the Ethics Committee of Dicle University Medical Faculty. From the patients who had accepted to volunteer for the study, patient consent forms have been acquired. The data of the research has been collected with data collection form developed has been used as by reviewing literature and consulting to expert opinion, and by interviewing the patients' relatives face to face. The data has been analyzed via SPSS 15 statistical package software and Mann Whitney-U test non-parametric test. **Results** Of the patients participating in the study, 50% were female, 74% were married and 72% had children. It was also found that 70% had previous experience of surgical intervention, 38% had emergency services, 22% had laparoscopic surgery and 78% had open surgery. When postoperative early mobilization times were examined, 24% of the patients; The first 2 ± 1. Hour, 30%; The first 5 ± 1. Hour, 24% of the first 8 ± 1,5. Hour, the first 10 ± 1% of 8%. Hour, 4%; 8% at the 15th hour is the first 22 ± 2. And 2% of patients with poor haemodynamic parameters had been removed to the 26th hour. The first pain score during mobilisation; who were given general anesthesia(visual comparison Scale) according to VAS; 7, according to VAS who were given spinal anesthesia; 5 were significantly lower(p<0.05). **Conclusion** It has been determined that most of the patients had been mobilized within the first 6 hours.

**Key Words:** Postoperative; First 24 Hours; Early Mobilization; Adult Patient

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## PREOPERATIVE NUTRITIONAL EVALUATION OF OLDER PATIENTS

**OP59B**

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**INTRODUCTION:** Malnutrition can develop in older people due to social factors, chronic diseases and psychological or physiological changes. It can cause serious problems for patients who undergo scheduled surgery since surgical stress and trauma increase metabolic needs.

**OBJECTIVE:** To evaluate the preoperative nutritional status of older patients scheduled for surgery and determine if they suffer from malnutrition.

**MATERIALS and METHODS:** This descriptive study was conducted in a university hospital's surgery clinics. It used improbable sampling with 100 participants at least 65 years old staying in surgery clinics for the first time between September and December 2016. The researchers measured BMI, and arm and calf circumferences. Data were collected using data entry forms and the Mini Nutritional Assessment (MNA). Institutional and ethics committee permissions were received.

**FINDINGS:** The patients' average age was  $72.20 \pm 6.04$ . Their BMI, arm and calf circumference averages were  $27.99 \pm 5.66$ ,  $28.85 \pm 4.95$ ,  $45.08 \pm 6.15$ , respectively. Males constituted 76% of the sample. Of the patients, 81% were married, and 59% lived with their spouses. Of them, 36% were in the urology clinic, and 32% were in the cardiovascular surgery clinic. Of them, 27% had observed changes in nutrition, 42% had lost weight, and 7% intentionally lost weight. Their average weight loss was  $6.78 \pm 4.83$  kilograms, and 12% indicated loss of appetite as the cause of their nutritional changes. Their mean score on the MNA was  $24 \pm 3.7$ . The mean screening score was  $11 \pm 2.6$ , and the mean evaluation score was  $13.5 \pm 1.8$ . According to malnutrition indicators, 45% were at risk of malnutrition, and 5% suffered from malnutrition. Of their BMIs, 14% were below  $23 \text{ kg/m}^2$ , and 30% were above  $30 \text{ kg/m}^2$ .

**CONCLUSION AND RECOMMENDATIONS:** Nutritional status is significant for postoperative clinical evaluations, and there is a strong relationship between malnutrition and deterioration. Preoperative identification of malnutrition by nurses, indication of nutritional problems and preventing malnutrition-based postoperative complications can all be recommended.



## OP60

### THE ROLE OF EMOTIONAL INTELLIGENCE AND OCCUPATIONAL STRESS IN EMPLOYEES' JOB PERFORMANCE IN HEALTH CARE AND MEDICAL ENVIRONMENT

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The purpose of this study was to examine the relationship between occupational stress and emotional intelligence in the working health-care and medical environment as well as the effect of those two variables on job performance. Up till now, a plethora of studies have demonstrated the strong relationship between emotional intelligence and occupational stress in correlation with job performance / performance management (1, 2, 3). However, not many studies have been conducted yet referring to the above relationships in health-care and medical domain. A qualitative study was conducted in which self-reported questionnaires measuring occupational stress (4) and emotional intelligence (5) were administered on health-care and medical employees in 401 General Army Hospital of Athens. Specifically, the results indicated a strong statistical significant negative correlation between occupational stress and emotional intelligence. Likewise, in this study it was deduced that there is not only no significant difference among men and women both in the level of emotional intelligence in the working environment and in the way the two gender experience occupational stress. In addition, in this study was made an effort to find out, which of the variables being examined are predicting performance sufficiently. What is more the workload was indicated to affect significantly the experience of occupational stress. Both the aspects of occupational stress and emotional intelligence should be taken into account in order to improve performance. Accordingly, the level of emotional intelligence and the occupational stress should be studied in the health-care and medical domain (private and public hospitals, and in every separate department), so that the hospital managers will develop the appropriate working conditions for the employees occupied in their organizations.

**Key Words:** Emotional Intelligence, Occupational Stress, Performance, Health-Care and Medical Domain

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**PARALLEL D2 NURSING CHALLENGES****PROFESSIONAL IDENTITY OF PERIOPERATIVE NURSES INSIDE INTERDISCIPLINARY TEAM****OP61**

**Willems Christine**  
**Belgium**

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- Lecturer and coordinator of the specialisation in perioperative nursing.  
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- EORNA board member
- Chair of Educational Committee (EORNA)

**Background:**

The perioperative nurses must be convinced of the importance of the professionalisation of their job and of their positioning in the interdisciplinary team in the operating room (OR).

The absolute power of the surgeons is questioned more and more because they are no more nuns at their service. The OR nurses have developed their education, their clinical judgment, their reflexion,... But, do they dare to really take their place inside the OR team?

**Focus on interest:**

There is a lot of questions about this subject :

- Does this professional identity exist?
- What kind of image the perioperative nurses have about themselves?
- The other professionnals in the OR, do they know the roles of the perioperative nurses?
- Is the perioperative nurse's job a interdisciplinary or a pluridisciplinary job?
- Is it a job in collaboration or in cooperation with the other professionals?
- The results of a survey conducted among OR nurses in the French part of Belgium, and some examples taken in the French literature will possibly give an answer to those questions in order to specify the positionning of the Belgian OR nurse in the team.

**Conclusions and implication for perioperative nursing:**

Today, we constantly have to face many changes and challenges in the operating theater. Perioperative nursing is one of the very fast evolving specialities. The advances in surgery and the allied specialities has been enormous in the last decade. In this context, the perioperative nurses must take their place in the OR team and work like real partners in the care.

**KEY WORDS**

- ✓ PERIOPERATIVE NURSE IN BELGIUM
- ✓ PROFESSIONNAL IDENTITY
- ✓ INTERDISCIPLINARY TEAM



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## WORKING POSTURE AND ITS PREDICTORS IN HOSPITAL OPERATING ROOM NURSES

**OP63**

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**Background:** This study was conducted to evaluate working posture of operating room nurses and its relationship with demographic and job details of this group.

**Methods:** This cross-sectional study was conducted among 100 operating room nurses in Turkey in Dr. Sadi Konuk Education and Research Hospital using a questionnaire and the Rapid Entire Body Assessment (REBA) checklist. The data were analyzed with SPSS.15 using t test, Pearson correlation coefficient and analysis of variance (ANOVA) tests for univariate analysis and the linear regression test for multivariate analysis.

### **Results:**

The mean (SD) of REBA score was 7.7 (1.9), which means a high risk level and highlights an urgent need to change the working postures of the studied nurses. There was significant relationship between working posture and age ( $P = 0.01$ ), gender ( $P = 0.03$ ), regular daily exercise ( $P = 0.001$ ), work experience ( $P = 0.000$ ), number of shifts per month ( $P = 0.04$ ) and type of operating rooms ( $P < 0.001$ ) in univariate analyses. Gender and type of operating room were the predictors of working posture of nurses in multivariate analysis.

**Conclusion:** The findings highlight the need for ergonomic interventions and educational programs to improve working posture of this study population, which can consequently lead to promotion of health and well-being of this group.



**Keywords:** REBA, Postural, Operating Nursing, Healthcare, Turkey.

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### **Data analysis**

Statistical analysis of the data was performed with SPSS software version 15 (SPSS Inc., Chicago, IL, USA). Demographic data and job characteristics of the study population were tabulated. Binary and ordinal logistic regression analyses were applied to assess the relationships between prevalence rate and severity of musculoskeletal symptoms and study variables, respectively. Multiple logistic regression analysis was also carried out using backward stepwise procedure to estimate the association between independent variables and reported musculoskeletal symptoms for each body region in the multivariate context, so that nine different regression models were developed covering the nine different body parts. The odds ratios (ORs) and 95% confidence intervals (CIs) were calculated from multiple logistic regression models, and the fit of the models was confirmed by the Hosmer–Lemeshow goodness-of-fit test. For all statistical tests,  $p$ -values  $< 0.05$  were considered statistically significant.

### **Data collection and procedure**

Data were collected using questionnaires and direct observation of the participants during their work. The questionnaire recorded demographic details including age, gender, marital status and study major, as well as daily exercise habits of the participants. The questionnaire also covered items regarding the job including work experience, type of operating room, shift working, having a second job/responsibility, job satisfaction, and perceived pressure due to work.

Working postures of nurses at their workstations were evaluated using the Rapid Entire Body Assessment (REBA) method, which is a reliable and validated observational method. This tool gives a specific scoring method for recording posture of each body part (e.g. neck-trunk-legs and shoulders-elbow-wrist), which is based on various static or dynamic movements, movements with rapid changes and unstable positions. The overall REBA score ranges from 1 to 15, with higher scores showing the more problematic postures. An overall REBA score relates to one of the five action levels: Action level 0 (score of 1) which means that the risk could be overlooked and there is no need to change the current status; Action level 1 (scores of 2-3) that means low risk in which change in position might be needed; Action level 2 (scores of 4-7) which means moderate risk that necessarily requires a change in position; Action level 3 (scores of 8-10) which means high risk with quick necessity to apply changes in position; and Action level 4 (scores of 11-15) which means great risk that requires urgent position change. The present study examined the working postures of oper-



ating nurses while doing three main activities in their job including retracting, transferring sets and setting up the table. The observations and recordings of working postures were carried out by two investigators, using a separate REBA assessment sheet for each operator for recording the REBA scores. The inter-rater reliability of the REBA scores was evaluated using Kappa coefficients and the results showed good reliability. This rate was 87.1 % for retracting, 89.1% for transferring the sets and 89.8% for setting up the table.

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## OP64

### THE EVALUATION OF NEEDLESTICK, SHARP INJURIES AND BLOOD AND BODY FLUID EXPOSURES AMONG OPERATING ROOM NURSES

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**Aim:** The aim of this study is to evaluation of needlestick injuries, sharps injuries, and blood and body fluid exposures among operating room nurses in Zonguldak and Karabük provinces during one year.

**Methods:** This study was designed as a descriptive study. The sample consisted of 103 operating room nurses working in Zonguldak and Karabük provinces, Turkey. This study was carried out between May and July 2016. Data were collected by questionnaire consisted 22 questions in accordance with the relevant literature. Data were evaluated by using descriptive statistical methods.

**Results:** 75.7% of the surveyed nurses were female, mean age  $34.09 \pm 6.71$  years of age, 56.3% a graduate degree. The average total working years in the operating room is  $9.18 \pm 8.36$  years; the average weekly working time of  $39.76 \pm 7.47$  hours. 83.5% of nurses were trained on protection from needlestick injuries, sharps injuries, and blood and body fluid exposures. 18.9% of nurses needlestick injuries, sharps injuries, 27.0% exposure to blood and body fluids, 54.1% while both needlestick injuries, sharps injuries and body fluid exposure experience was determined. The incidence of needlestick injuries sharps injuries 53.6 % twice the rate of exposure to blood and body fluids of 50.0% to be twice the rate were found in the last year. 89.7% of the nurses were injured pretends clean up the area after exposure. 69.2% of the nurses get post-exposure did not submit a report. 60.5% of the nurses were experienced anxiety, and 31.6% of them experienced stress after injury/exposure. 42.1% of the nurses after exposure received health services. Initial application to the health service 62.5% at a rate of has been an infection control nurse.

**Conclusions:** Operating room nurses in needlestick injuries, sharps injuries, exposure to blood and body fluids were determined to be high. In-depth interviews through the investigation of the causes of injury and exposure are important.



## ARE WE THE REAL COLOSSUS OR IS IT JUST WISHFUL THINKING

**OP65**

***Driessen Geert***  
***The Netherlands***

What a wonderful congress theme, “The colossus of perioperative nursing” !

In this presentation I would like to dig a little bit deeper into several questions regarding this theme.

If we as OR nurses claim to be the colossus of the perioperative care processes would that have consequences for the way we work (and our role in) the surgical team? After all, working in a team implicates that every single team member is equally important.

What does it mean to be the colossus of the perioperative care processes in normal clinical practice of an OR nurse ? The single most important objective of healthcare in general but also of the perioperative processes is all about securing the best possible patient outcome.

Do OR nurses measure the contribution of their interventions (work) to secure that patient outcome or are they aware of the results if others measure that? If we do not measure or if we are not aware of the measuring results, can we then be or be held responsible for our part in the patient outcome or even more important are we really the colossus if we don’t measure?

How important are nurses in providing the most secure perioperative care (patient outcome) and do we really need OR nurses with MSc or even PhD qualifications to make us the real colossus ?

The modern world is characterized by an ongoing Europeanization or even globalization, Does that have implications and consequences for the daily practice of OR nurses ?

These and a few other questions I would like to answer in my presentation.

While most presenters wouldn’t like the audience to bring and/or use mobile telephones during presentations, I would ask the audience to bring their telephones and to install a (free) app (Poll everywhere). This app enables to measure the opinion of the audience “on the fly” during the presentation. It also ensures an optimal interaction of the presenter with the audience



## PARALLEL E2 SURGICAL DEVICE MANAGEMENT IN OR

**OP66**

### USE OF FMEA TOOL TO IMPROVE LOANER SURGICAL INSTRUMENTATION MANAGEMENT IN THE PERIOPERATIVE ENVIRONMENT

**Willieme Olivier**  
**Belgium**

#### Keywords

Loaner instrumentation, failure, medical device, improvement, FMEA

#### Background

Failure Modes, Effects and Criticality Analysis (FMEA) is a safety and quality management tool developed by the US military in the 1940s. This method quantifies the criticality of failures.

In the OR, we work every day in respect of dozens of processes, procedures and instructions, all to improve quality of care, patient safety, staff security and sound health economy.

Only someone who knows the risk can prevent it <sup>(1)</sup>. As perioperative nurse, we were trained to work in this high risk environment because it is complicated with a high level of activity, many caregivers co-exist, equipment used are complex and varied and human issues are our top priority <sup>(2)</sup>.

#### Focus of interest

By taking for example the use of short term ancillary equipment and loaner instrumentation, the speaker will show how to map the complete process and critical point of interest, from its need for a particular type of surgery until his return from the supplier, through its proper use (including implantable medical devices concerned), aspects related to the surgical technique (training, handling and implantation), CSSD role, hygiene, pharmacy store management, economic and regulations,...

#### Theoretical framework

Many studies <sup>(3)(4)(5)</sup> report the use of this approach for prioritizing improvement actions to drive on a process, a product, a system, working in decreasing order of criticality. This kind of analyzes can be adapted to any question in any field. They can be the basis, among other things, for analyzes reliability, maintainability, availability, quality and testability. It is a priori approach to prevent the occurrence of incidents, but it can be used when reviewing a process completely.

#### Conclusions and implications for perioperative nursing

This improvement methodology brings quality and safety for surgical patients and can be used by OR nurses, OR nurse managers and hospital authorities in a wide range of topics.

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## THE NEW EUROPEAN REQUIREMENTS FOR SINGLE-USE DEVICE REPROCESSING

**OP67**

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**USA**

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<sup>1</sup>Association of Medical Device Reprocessors

**Background:** Europe has now adopted a comprehensive Medical Device Regulation (MDR) (note, passage is expected by June, 2016 with implementation beginning this fall – thus, by the time of the conference, we will know the final regulation). The MDR now regulates the reuse of “single-use” devices (SUD) as a manufacturing activity and thus such reuse, whether it takes place in hospitals or commercial entities, is subject to EU manufacturer requirements, including CE marking requirements.

**Research:** This session will provide an overview of the peer-reviewed literature supporting the safety of regulated SUD reuse, but will also briefly address a 2016 study addressing device failure rates (new versus reprocessed).

**Key words:** Single-Use Device, Reprocessing, Regulations, Requirements

**Short Abstract:** This session will

- Provide an overview of new European regulations regarding SUD reuse
- Address the differences between hospital reprocessing and commercial reprocessing meeting medical device manufacturer requirements
- Provide insight into the implications of the new requirements for hospitals
- This session will also provide an overview of the economic and environmental implications for healthcare markets where SUD reprocessing has been regulated, evaluating safety, cost-saving and environmental factors

The regulation of SUD reuse is an important first step toward stopping unregulated SUD reuse in hospitals. However, regulation will provide an overt, legal and safe pathway for hospitals to acquire lower-cost and environmentally preferable reprocessed devices. The result will be increased patient safety, more competition, lower costs and reduced medical waste for hospitals.

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**OP68**

## **VIDEO: DECONTAMINATION, STERILISATION, INSPECTION AND MAINTENANCE OF SURGICAL INSTRUMENT**

**Eide Petrin**

**Norway**

<https://www.youtube.com/watch?v=LQX1brULfIA>

### **PARALLEL F2 FOLLOWING THE GUIDELINES - PREVENTING ERRORS**

**OP69**

## **PERIOPERATIVE NURSES OPINIONS AND RESPONSES ON INTRAOPERATIVE NURSING ERRORS**

**Tomaini Marina**

**Greece**

**Key words:** perioperative nursing, intraoperative nursing errors, coping strategies

The security of surgical patients' is the main priority of Operating Room Nurses (ORN). However, errors, that cause mild to severe effect on patients' integrity, is a quite common phenomenon in surgical settings.

### **Purpose/ Goals of the study**

To explore the types of errors made by ORN; to identify the causes of these errors and determine the most constructive way to cope with them.

### **Research problems**

Which are the most common Intraoperative Nursing Errors (INE)? What causal attributions do the ORN make about an error committed? What coping strategies do they adopt? What are the changes in practice as a result of an INE? How do these variables correlate?

### **Methodology**

This is a descriptive - correlational study conducted in February 2014 in four Greek Hospitals. A questionnaire was handed out to 176 ORN, from whom 105 responded (60%).

### **Theoretical framework**

The cognitive theory of Folkman and colleagues<sup>(1)</sup> about psychological stress and coping and the theory of Buss<sup>(2)</sup> about errors and their causal attributions.

### **Results**

The most common INE documented was 'break in sterile technique' (25.8%) and 'inaccurate, incomplete, or absent surgical count' (21%). The above were mostly detected during laparotomy (36.4%), general (23.6%) and orthopedic surgery (14.6%). Most errors committed were attributed to external causes by ORN (70.8%). Intense emotional distress was reported as a result of the error (median=24.0, value range=8-32).



The majority of the respondents accepted responsibility of the error (80%), which was positively correlated with constructive changes in practice ( $p$ -value=0.000). A strong correlation was reported between judgmental managerial response and defensive changes in practice ( $p$ -value=0.003,  $\rho$ =0.503).

### Implications for perioperative nursing

Accepting responsibility of an error appears to be the key for INE reduction. That provides a safer operating room environment and improves perioperative nursing care.

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## HERE TO TREAT, NOT FACEBOOK OR TWEET!

OP70

**Given Margaret**  
**Ireland**

Social media is the use of platforms of electronic communication to create online communities such as Facebook (1). Nursing guidelines appreciate that the boundary between personal and professional persona can be distorted online and emphasise professional responsibility (2). Joan Rivers's death highlighted the direct conflict between social media and patient safety (3).

Using smartphones to access social media has a negative consequence on cognitive performance; decreasing reaction time and reducing attention (4). This is concerning where mental concentration and rapid decision-making are at the crux of care. Distraction compromises communication, which is the root of adverse events (5). Habitually checking social media for non-work purposes is 'distracted doctoring' and negligent practice (6).

Social media can compromise privacy and confidentiality, which is enshrined in the nurse's code of conduct (7). Lack of privacy is literally and virtually having control over who can see, hear and touch you, hence the ease of breaching privacy by photographing or videoing patients (8). In social media world, privacy is an illusion (9).

High levels of microbial contamination on smartphones is an infection control concern with cross-contamination likely from bacteria laden devices (10).

Defamation is a risk if defamatory statements are uploaded onto social media platforms, venting frustrations about colleagues. Barriers between work and private matters can be distorted, with unintentional, inappropriate sharing of information, resulting in disciplinary procedures and undermined careers (12). Social media facilitates learning and improves communication. Networking is commonplace and access to medical information instant. Interactive blogs encourage comment on practice, opinion and information dissemination.

Social media affords opportunity for professional development. Patient safety is paramount and distraction should be eliminated. Policies with reference to cross infection, smartphone free zones and consent for photos need to guide practice. Legal, professional and ethical nursing obligations underpin social media policy peri-operatively.



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**OP72**

## STRONG AGAINST SURGICAL SMOKE

**Watson Donna**

**USA**

Perioperative professionals and patients are routinely exposed to surgical smoke, plume, and aerosols produced by instruments used to dissect tissue, provide hemostasis, and drill or saw bones. Examples of smoke producing devices include, but are not limited to lasers, electrosurgical units, ultrasonic units, cautery units, high speed drills, and burrs. Anything that produces heat can produce smoke or aerosols. Smoke and aerosol-generating procedures can pose health risks. Each year, an estimated 500,000 workers, including surgeons, nurses, anesthesiologists, and surgical technologists, are exposed to laser or electrosurgical smoke.<sup>1</sup> Although the long-term effects for healthcare workers exposed to surgical smoke remains unknown, there is a need to be proactive and prevent any potential harm. Engineering controls and personal protective equipment should be used to protect all staff and patients from exposure to smoke byproducts.

A critical step in minimizing exposure is for patients and the perioperative team to increase awareness of the environmental hazards related to surgical smoke and aerosols produced during operative and invasive procedures. This session will describe essentials for developing, implementing, and auditing a smoke evacuation program. Setting up a smoke evacuation program requires dedication from key stakeholders to implement team strategies that work toward reducing and eliminating surgical smoke to create a sustainable program.

1. United States Department of Labor. Laser/Electrosurgery Plume. Available from: <http://www.osha.gov/SLTC/laserelectrosurgeryplume/index.html>.

**Key words:** Surgical smoke, surgical plume, smoke evacuation



## PARALLEL D3 DISTRACTIONS IN OR

## FROM BRUSSELS TO GOMA, DEMOCRATIC REPUBLIC OF CONGO

OP73

**Delsa Fran****Belgium**

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**Key words :** OR management, educational program, improvement of quality of care

The Free University of Brussels, through its Academic Hospital and supported by the European Community, has set up an ambitious training project in Goma, in the north Kivu province of the Democratic Republic of Congo. This project intends to improve the quality of the health coverage by strengthening the health workforce in reference centers of the area of Goma. In this context, as O.R. nurse manager, accompanied by the manager of the anesthesiology department, we were mandated to assess the basic needs of these hospitals through a first observing mission of five days. This assessment was conducted in close collaboration with resource persons designated within the Congolese healthcare teams. During a session of presentation of our observations, we defined with the teams on the spot the main lines of the trainings to be set up. The targets we set were to better organize the operating room and sterilization unit, to manage an operating program according to the available resources, to secure the working environment, to ensure patient safety by introducing quality approaches such as the use of the checklist or reporting adverse events, to improve anesthetic techniques as well as nursing techniques through practical training adapted to the field reality for better overall care of the patients.

Other specific needs were identified such as the completion of therapeutic guidelines, the management of bleeding emergencies or updating knowledge in resuscitation of adult and newborn. Those demands were integrated in a tailor-made program of theoretical and practical courses given during a second mission on site. The following presentation details the observations and the actions taken to achieve these stated objectives.

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OP74

## A REVIEW OF POSTOPERATIVE PAIN ASSESSMENT RECORDS OF NURSES

**Sevilay ERDEN**

*(RN, PhD, Assist. Prof.), Sevban ARSLAN (RN, PhD, Assoc. Prof.), Sevgi DENİZ (RN, MSN, Res. Assist), Derya GEZER (RN, MSN), Pınar KAYA (RN, MSN)*

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### ABSTRACT

**Background:** Inadequate postoperative pain documentation is an international problem which needs to be solved. Although there are many recommendations and guidelines for adequate pain assessment, the quality of postoperative pain documentation does not meet the acceptable standards.

**Aim:** The aim of the study is to review the pain assessment and analgesic records of nurses within the first 48 hours in the postoperative period.

**Methods:** This retrospective and descriptive study was conducted in Çukurova University, Faculty of Medicine, Balçalı Hospital, Department of General Surgery. The records of a total of 421 patients older than 18 years of age who underwent surgery under general anesthesia and were followed within the first 48 hours of postoperative period between January 2014 and January 2015 were analyzed. The clinical and pain assessment data of the patients were obtained using the patient files.

**Results:** No pain assessment scale was used, and none of the pain records of the patients included intensity, location, duration and quality of the pain. The analgesic records indicated that the highest percentage (70.8%) of analgesic use was within the first postoperative two hours. Diclofenac sodium was the most commonly administered and recorded analgesic, while dolantine was the least used one. More than half of the all analgesic injections (63.9%) were administered by intramuscular route. No non-pharmacological intervention including massage, hot-cold application, or positioning was reported in the nursing records.

**Conclusion:** The postoperative pain was not assessed properly as recommended in the acute pain guidelines, also pain assessment and analgesic records were insufficient. Therefore, nurses should increase the awareness on the pivotal role of pain assessment records in effective postoperative pain management. In addition, the administration of the hospital should support the use of standard pain assessment and recording via electronic patient record system, continue online education courses and give feedback on the records of nurses regarding pain management.

**Keywords:** Postoperative Pain, Pain assessment, Pain Records, Nursing.

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## TOO MUCH NOISE IN THE OPERATING ROOM. ARE YOU INVOLVED?

**OP75**

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### **Keywords**

Noise level, patient safety, sound level, working condition

### **Background**

Noise is a natural phenomenon and is omnipresent in our personal and professional lives. Very few studies have been carried out on noise disturbance in the operating theatre. Nevertheless, excess noise has direct (hearing) and indirect impact in the OR theatre.

### **Focus of interest**

During the perioperative period, patient and caregivers are subject to a multitude of background noises linked to factors such as environment, human behavior (non-professional conversations), use of material (motors) and equipment (alarms), nursing, anesthetic and surgical procedures.

### **Theoretical framework**

Liu E. and Tan S. showed, in a study on patients' perceptions of the noise level in the OR, respectively 32% and 33% of patients were affected by too noisy induction and recovery stages. (1).

### **Conclusions and implications for perioperative nursing**

Some calm and silence are recommended to ensure a clear atmosphere around patient's care. Sympathetic ear, choice of words and proper intensity of voice seems beneficial to all staff and patients. Staff awareness about practices in terms of knowledge, skills and expertise is enable to play a preventive role against bad noise in the operating room.

OR theatre authorities may implement information and awareness sessions, making the choice of appropriate equipment, building specific procedures or visual warning means overtaking excessive sound level. Caregiver needs to realize that noise, above a certain sound level, creates risks in their daily practice. According of the subjective perception and unknown effects of noise, a multidisciplinary team consensus will be required to control it and his bad effect.

To end the presentation, speakers will prove, short video sequence in support, that our daily work is polluted by noise and it is easily possible to act in the interest of all.

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## OP76

### IMPACT OF NOISE POLLUTION IN THE OPERATING ROOM

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**Background:** Noise is one of the greatest threats to the health and quality of life of people in the developed countries of the Western world. The noise is one of the stressors which have big impact in patient who goes for an operation procedure and should be avoided in the environment of the operating room. CDC recommends the permitted limits for noise intensity is 35 dB during the night and 40 dB during the day. The noise level exceeding the boundaries have a negative impact both psychological and patient safety due to errors which may occur on the part of health professionals.

According to studies, there are two main noise sources were:

- Noise from machines (monitor, alarms, respirator system etc)
- Noise from Staff

**Purpose:** The aim of this paper is to investigate the level of noise in the operating room during the induction of anesthesia and how it affects the patient psychologically and in safety. In addition to the extent that it affects communication in the anesthetic team.

**Methodology:** we have two teams of 50 patients each. One was the control team (team A) where went in OR without any control of sound and noises and another one (team B) who went in OR in a quiet environment as a result of staff cooperation. In both teams we record the decibel level with a sensitive decibel meter.

At the begging of research we record the noise of staff and the noise of the machines.

After the procedure we visited all the patients in their rooms and asked Closed Format Questions about the experience of the anesthesia and if they remember something at the time of anesthetic induction.

**Results:** The main level of noise was 71 dB, it means 50% above the limit of CDC. This cause several problems in procedure with most important the misunderstandings and errors in staff communications. 50% of the patients of team A, remembered the noise and make some complains about this.

**Conclusions:** The noise levels in operating rooms are above the limits established by federal regulatory agencies, in many cases by as much 50 dB. These noise levels have been associated with adverse consequences on the health and performance of staff and on patient safety. Much of this noise is generated by operating room personnel and equipment and it is avoidable.

**Key Words:** Noise, operating room, Db, staff communications.



## HIGH PERFORMING TEAMS; SKILLS REQUIRED FOR SUCCESS IN A CHAOTIC PERIOPERATIVE ENVIRONMENT

**OP77**

***Voight Patrick***  
**USA**

**KEY WORDS:** High Performing Teams, Leadership, Effective Communication, Teamwork, Collaboration

Perioperative Departments can be one of the most unpredictable work environments in the hospital. Perioperative personnel must be prepared and ready for any type of patient or situation to occur without advanced notice. Working in today's Perioperative environment takes skill, motivation, teamwork, collaboration and leadership. Coupled with the lack of predictability, the work environment is further challenged with poor communication between providers, lack of teamwork and poor operational patient throughput. Due to the constant changing environment, Perioperative staff must learn to transform unproductive confusion and disorder into controllable challenges - with less stress and greater clarity. A high-performance Perioperative team is a group of staff with specific roles and complementary talents and skills; aligned with and committed to a common purpose; who consistently show high levels of collaboration and innovation; that produce superior results. The high-performance team is regarded as tight-knit, focused on their goal and nothing else. Team members are so devoted to their purpose that they will surmount any barrier to achieve the team's goals, high quality and timely patient care.

### **Objectives:**

5. Participants will complete a self- assessment on how they are viewed by others as a leader or team player
6. Participants will identify skills required to lead in highly complex environments
7. Participants will discuss core characteristics of high performing teams in critical environments and techniques to develop skills to further enhance team work
8. Participants will learn how to apply the appropriate techniques to alleviate, clarify and eliminate chaos within your control.

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## PARALLEL E3 THE HAZARDS OF SURGICAL PLUME

**OP78**

### TO EXAMINE DIATHERMY SMOKE EVACUATION PRACTICES, ATTITUDES AND AWARENESS OF THIS HEALTH RISK AMONG PERIOPERATIVE NURSES AND SURGEONS

***O'Byrne -O'Reilly Rachel***  
***Ireland***

#### **Background**

Surgical smoke presents a potentially serious occupational health hazard, shown to be as mutagenic as cigarette smoke (Barret & Garber 2004). Ablation of one gram of tissue produces a smoke plume with an equivalent mutagenicity of six unfiltered cigarettes (Hill et al. 2012). Although the long-term effects for healthcare professionals exposed to surgical smoke is unproven, there is a need to be proactive and prevent any potential harm (Association of Perioperative Practice (AfPP) 2009).

#### **Method**

The study was conducted in the theatre department of five hospitals (three public and two private hospitals) using a quantitative descriptive approach. A twenty-three item questionnaire adapted using two previously established questionnaires (Spearman et al. 2007, Ball 2010) was the chosen instrument used. The questionnaire was distributed to a total of 280 perioperative nurses and surgeons with a response rate of 41.8%. Data analysis using SPSS (Statistical Package for the Social Sciences) provided descriptive and inferential statistics.

#### **Results**

Perioperative nurses and surgeons' compliance with smoke evacuation recommendations was not consistent. The private hospital respondents (89%) reported more frequent use of smoke evacuators than the public hospital respondents (53%). However, the recommendations of always using a smoke evacuator for every surgical procedure using diathermy were not adhered to significantly across both hospital sectors. The majority of participants (95%) believed that diathermy smoke was harmful but unless the healthcare professional had experienced health problems from the smoke they reported not being very concerned that diathermy smoke was a risk to their health. Findings indicated that there was a deficit in knowledge, education and training on the importance of diathermy smoke evacuation, the available devices and the effective methods to remove diathermy smoke from the surgical environment. Few participants (13%) reported the existence of diathermy smoke policies and of those that had policies they did not always follow them. Staff complacency or lack of education (46%) was the greatest reported barrier to best practice of evacuating diathermy smoke.

#### **Conclusions and Implications**

It is necessary that a mandatory diathermy smoke education programme incorporating policy development is formulated to include areas of poor compliance and knowledge identified in this study. Perioperative nurses' assertiveness in overcoming the barriers to drive change in clinical practice will increase as a result. Auditing of the implementation of this programme is recommended. Prioritising the health and safety of employees in the surgical environment is advocated through the provision of routine risk assessments, airborne levels monitoring and occupational health checks in relation to diathermy smoke exposure. Replication of this study is suggested to assess the implementation of diathermy smoke evacuators in all surgical settings.



## CLEARING THE AIR FOR SAFETY

OP79

**Scroggins Robert**  
**USA**

**Key Words:** Surgical Smoke, Patient Safety, Health Risks

The operating room is often considered a safe place. However, there are also many hazardous conditions, one of which is surgical smoke. Surgical smoke contains many hazards including physical, chemical and biological. These hazards are known by most operating room nurses to be dangerous for them, however many do not realize the hazard to the patient.

By utilizing practices and products to remove surgical smoke, we can protect ourselves and our patients from the hazards associated with exposure to the contents of surgical smoke. These hazards come in three forms, Particulate, Chemical, and Biological.

These properties each present different hazards and biological responses to exposure. We will look at the biokinetics of particulate exposure and the movement of nanoparticles from the respiratory system to all organs in the body (1,2), biological responses to chemical exposure (3,5,6) and disease processes related to biohazard exposure in smoke (4,5,7).

By understanding the hazards and effects, we can formulate a plan to safely remove this hazard from the operating room. This plan should include education, policy development and implementation, and selection of proper equipment.

Utilizing the theoretical framework of Patricia Benner's "Novice to Expert" and Kurt Lewin's "Change theory" we can put together a successful program to eliminate the hazard and facilitate necessary behavioral changes that will, in the end, make the operating room safer for staff and patients.

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## OP80

### SURGICAL PLUME RELATED NURSING RESEARCH RESULTS IN TURKEY

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Surgical plume inhalation is an occupational hazard in the operating room departments. Surgical team and patients are routinely exposed to the surgical smoke plume generated through thermal tissue destruction. In 2017 the theme of European operating room nurses day is going to be about surgical plume. Every member country of EORNA will arrange meetings and programmes related with theme.

The aim of this study is to provide a critical review through screening of the literature regarding nursing researches about surgical smoke conducted in. Science Direct, Google academic, ULAKBIM, Pubmed, EBSCO, Medline and Cochrane Library databases were screened using the key words “surgical plume”, “surgical smoke”, “diathermy smoke”, “operating room nurse”, “Turkey” and “Turkish”. Five studies were included.

This review showed that surgical plume inhalation cause symptoms and potential risks like headache, nausea/vomiting, cough, lacrimation, temper, respiratory changes, hypoxia/dizziness, sneezing, throat irritation and hair smell. This review identified some deficiencies in the usage of preventive measures against surgical plume. The Turkish surgical plume researches indicate a lower frequency of smoke evacuator use during the procedures producing surgical smoke. The other important finding of this review is that almost all of the Turkish healthcare institutions haven’t got protocols against surgical plume.

These results suggest that Turkish operating room nurses are not adequately protected from exposure to surgical plume and effective engineering controls for surgical plume in the operating rooms are inadequate. Therefore operating room nurses report symptoms associated with exposure to surgical plume. These results provide an interesting snapshot of surgical smoke management in Turkey, they also indicate that much work remains to be done.

**Key words:** Surgical plume, operating room nurses

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## IMPLEMENTATION OF THE AORN GO CLEAR SURGICAL SMOKE ELIMINATION PROGRAM

OP81

**Walker Nathalie**  
**USA**

<b>Presenters</b>	Brenda C. Ulmer, RN, MN, CNOR
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AORN has a long history of developing and promoting standards for perioperative professionals. The hallmark of the organization is setting evidence-based practice standards to protect all perioperative patients and team members. AORN's mission is to promote safety and optimal outcomes for patients undergoing operative and other invasive procedures. Its success is demonstrated by the number of health-care facilities in the US and around the world who use AORN's Guidelines to establish practice standards of care. The Guidelines often form the backbone of patient care for all perioperative team members whenever and wherever operative and invasive procedures are performed.

In the spirit of taking the next step to assure the best possible perioperative environment, AORN established the Go Clear Smoke Free Hospital Recognition Program 2016. This program will explore the components of the smoke elimination program and detail its implementation in the perioperative care setting.

Objectives	Content (topics)	Timeframe	Presenter	Teaching Strategies
<i>Educational objectives</i>	<i>Outline of content for each objective</i>	<i>Timeframe in minutes</i>	<i>Presenter name/subject matter expert</i>	<i>Teaching strategies to be used</i>
1. Relate dangers of surgical smoke and overview of presentation	I. Effects of breathing hazardous chemicals II. Introduction of presenters and contents of presentation		Brenda Ulmer	Lecture, PowerPoint
2. Identify components of AORN's Go Clear Smoke Free Hospital Recognition Program	I. Formation of the Go Clear program II. Implications on practice and patient and staff safety		Brenda Ulmer	Lecture, PowerPoint
3. Discuss success of implementing the Go Clear program	I. Choosing a system II. Educating staff and physicians III. Using appropriate work practices IV. Monitoring compliance		Brenda Ulmer	Lecture, PowerPoint



## PARALLEL F3 ROLES, PRACTICE AND KNOWLEDGE IN OR

**OP82**

### BABY BOOMERS, GENERATION X, GENERATION Y. WHICH VISION ON THE OPERATING THEATER?

**Dubois Audrey**  
**Belgium**

**Key words:** OR Management, generation y, multigenerational management, nursing teamwork

#### Background

Problematic of intergenerational conflicts is present in our operating theaters. It is due to different socio-educational characteristics of each generation. The lengthening of working life requires coexistence of at least three generations. Operating theater's managers must consider that to ensure retention of staff and, therefore, efficiency and quality of care in the management of operating theaters.

#### Focus of interest

Generations Baby boomers (1946-1964), X (1965-1980) and Y (1981-1995) have a different perception towards work, as well as different constraints and management. For instance, the first will perform supplementary hours by conviction, the second if constrained and the latter does not want to do it. Generation Y is confident, ambitious, connected to latest digital technologies, and does not dissociate work from pleasure. The aged personal want reducing her workloads, her physical stress,... The hardness of the work must be in proportion with their human resources. The manager of operating theater has his own perception of this situation and staff's capacities or competences.

#### Method

During the EORNA Congress in Rome in 2015, I presented a research concerning the nurse manager of the operating room in connection with Generation Y and intergenerational conflicts. Following this study, I have continued my research by questioning nurses from different generations. They were present in two symposia in French speaking Belgium. The survey has included open questions and multiple choice questions to improve the turnout. The goal of my research is to study the personal positioning of operating room nurses about their qualities, shortcomings, working conditions, continuing education. The results of the study were correlated with those of the first study on the perception of the head nurse and literature.

#### Conclusions

This allowed the author to correlate the differences in perception between nursing leaders and teams.

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## SURGICAL NURSES OPINIONS AND PRACTICES RELATED TO PATIENTS DISCHARGE INFORMATION: AN EXAMPLE FROM TURKEY

**OP83**

**Candas Bahar**  
**Turkey**

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**Goal:** The study was undertaken to determine the opinions and practices of surgical nurses related to discharge of patients after surgery.

**Method:** This descriptive study included 192 surgical nurses. Data were obtained with a questionnaire designed by researchers.

**Results:** Ninety-five percent of nurses stated that patient discharge informations are given by nurses. However, 87.5% of the nurses said that this responsibility belongs to the physician. This study found that nearly half of the nurses give general discharge instructions to patients and 71.9% of them provide specialized discharge instructions. Moreover while most nurses plan the discharge instructions after determining the discharge time, just 28.1% of them do so when the patient is actually hospitalized. Discharge instructions are usually given verbally (70.6%), in the patient's room (66.9%), in a quiet area (76.9%), and are based on individual needs (70.0%). Since wound care is very important (57.5%), at least one family member is usually included at this meeting (84.4%) during which nurses monitor the patient's stress levels (66.4%). Notably, half of the nurses indicated that the patient discharge information given by them is quite adequate.

**Conclusion:** Our results show that discharge information is usually given by nurses, although they believe this is the physician's responsibility. Furthermore, discharge information planning should occur during the patient's hospitalization and not as they are about to be discharged.

The implications for perioperative nursing: Discharge informations are vital to improving patients' outcomes at home. Although our study encompassed surgical nurses' opinions and practices on this topic, additional research is needed.. This study focuses on some of the issues which need to be addressed.

**Key words:** discharge information, surgery, surgical nursing.

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## OP84

### DO SATISFIED NURSES ALWAYS SHOW EXTRA ROLE BEHAVIOURS? THE MODERATING ROLE OF EMPOWERMENT

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**Background:** Job Satisfaction, which is defined as a positive emotional reaction to a particular job (1) is an important determinant of many work-related behaviors, including organizational citizenship behaviors (OCB) (2,3). OCB is defined as; extra-role behaviors that fall outside the rubric of task performance (4). It constitutes altruistic, voluntarily actions that are taken with no expectation for recognition or compensation. Based on the definition of OCB, it is obvious that it is highly important in health care settings, where the output is human health. Although researchers show evidence that OCB is positively affected by job satisfaction, other variables which may influence the strength of this relationship is under-studied. However, it is known that satisfaction may have very weak influence on nurses' behaviors due to the negative impact of other factors.

**Purpose:** Based on the gap in the literature, we aim to propose and test a model, which tries to examine the moderating effects of psychological empowerment on job satisfaction and OCB relation among perioperative nurses who have the key positions to determine the health quality of surgical units.

**Method:** Data was collected from 222 perioperative nurses through an online survey. Scales used are the Psychological Empowerment Scale, the Minnesota Satisfaction Questionnaire (MSQ), and the OCB Scale (5-7). Data analyzed through multiple regression analysis via SPSS-21.

**Results:** Results show that two dimensions of psychological empowerment moderates the relationship between job satisfaction and OCB. More specifically, when perioperative nurses perceive that their work is meaningful and they have sufficient competency to practice their profession, their satisfaction leads them to show more extra role behaviors and contribute to the functioning of organizations more.

**Conclusion:** The results of this study can help perioperative nurses in developing strategies aimed at promoting their OCB via psychological empowerment.

**Keywords:** psychological empowerment, job satisfaction, organizational citizenship behavior.

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## PROMOTING A SCIENTIFIC CULTURE AMONGST NEWLY GRADUATED OPERATING ROOM NURSES IN FRANCE

**OP85****Debout Christophe****France**

**Authors:** Brigitte Ludwig, RN, CNOR –UNAIBODE President, Maryse Boilon RN, CNOR, Dany Gaudelet RN, CNOR –SOFERIBO President, May Karam RN, CNOR-EORNA President- Christophe Debout RN-PhD-CRNA

### Background

There has been in France for several years a desire to increase nursing research capacity and promote knowledge transfer. This development is facilitated by the recent introduction of nursing education in Higher Education and by the provision of public funding to support nursing research.

In this context, French operating room nurse organizations (practice-UNAIBODE and education-AEEIBO) have worked together to promote research and evidence based practice in this field of nursing. A society of scholars (SOFERIBO) was created for this purpose.

Pending a reform of operating room nurses (ORN) education on a master's format, ORN leaders wished to promote scientific culture among future ORN and more broadly in this nursing specialty.

### Aims

- award an annual prize to the best research project carried out by a newly graduated ORN.
- promote the dissemination of knowledge in perioperative nursing.

### Project

Each year during the annual conference organized by the association of ORN (UNAIBODE), a prize will be awarded to a research project conducted by a newly graduated ORN.

Criteria and indicators were developed to assess the quality of the studies spontaneously submitted by newly graduated ORN. A peer review committee was set up to implement the evaluation process.

The award is given during the conference, and the winner is invited to present her research in plenary session. The award recipient is also supervised to write an article to be published in the national ORN professional journal (Inter bloc-Elsevier).

A communication campaign was launched by ORN organizations to publicize the existence of that prize to ORN educators and students.

### Results

The project was implemented since 2013. 4 ORN graduates submitted their study and 2 prizes were awarded. Since this time 8 to 9 studies are submitted each year. This project seems to bring positive outcomes and is instrumental in the change of ORN's representations about research and evidence based nursing.

### Discussion

Several lessons have been drawn since the implementation of this project. Disparities in methodological approaches used by ORN students were identified.

ORN students' competencies in literature search and critical analysis of scientific articles seem to be weak. In addition, the skills and competencies required to disseminate adequately research findings need to be improved as well.

These findings have led ORN educators to introduce changes in the existing curriculum and to shape the future masters degree programme in preparation.

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## PARALLEL D4 CHILDREN IN OR

**OP86**

### IMPROVING KNOWLEDGE ABOUT ANESTHESIA AND SURGICAL PROCEDURES AMONG CHILDREN AND PARENTS IN THE PRE-ANESTHESIA CLINIC

**Gelber Pazit Shahar**  
**Israel**

**Background:** The child before surgery may experience uncertainty, fear, therefore stress and anxiety and express those feelings with behavioral and physical manifestations, in the peri-operative period(1). Parents may also experience: anxiety, discomfort, helplessness and confusion that may have an adverse effect on the child(1,2). Children and parents who get appropriate preparation showed a significant increase in knowledge and reduced level of anxiety before the operation (3).

**Rationale:** developing a common “preparing for a surgery” tool, for parent and child that will providing uniform information, help them to understand what is expected, strengthen their sense of security and reduce the anxiety and the fear of the unknown.

**Study objective:** improving the knowledge of child and parent about the preparation for surgery, anesthesia and post-operative period, increasing the child’s involvement in the preparation process Within 3 months of implementation of the proposed preparation intervention in the clinic

**Intervention tool:** was a video film describing the peri-operative process, to be watched by parents and children in the pre-anesthesia clinic.

**Methods:** control questionnaire (identifying the learning needs of parents and the children),preparation the tool (video film). Intervention: The nurse explanations was supplemented by a video film watched by parents and children. Post intervention: questionnaire filling by parents, data analysis, lessons learned, using the film.

#### Results:

- Level of knowledge improved by 25.6% after the preparation with video film, compared to no video.
- 100% of the children and parents watched the video film and prepared together.
- As parent’s understanding of the peri-operative process increased, their sense of Confidence also increased

#### Conclusions:

- The intervention: increased the child and parent’s knowledge regarding the peri-operative process and increased the involvement of children in the preparation process.
- The increased knowledge helped increase parent’s and children’s confidence and reduced their anxiety.
- The video can be implemented in other pediatric departments.
- By uploading the video film to the network and youtube parents and children may watch it at home, in a familiar and pleasant atmosphere.
- The video must be filmed in Other relevant languages.

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Type of presentation: oral

**Key words:** Children, Anxiety, Distress, Preoperative preparation, Parental education.

## EFFECTS OF PEDIATRIC SURGERY NURSES' PERIPHERAL INTRAVENOUS CATHETERIZATION SUCCESS ON CATHETER RELATED COMPLICATIONS

OP87

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**Background:** Peripheral intravenous catheterization (PIC) is the most commonly encountered intravenous attempt by nurses. Nurses have a key role on catheterization to success and ensure the continuity<sup>1</sup>. Pediatric surgical nurses are able to PIC with children who have difficult intravenous access<sup>2</sup>.

**Method:** This descriptive study was planned for examining the effect of Pediatric Surgery Nurses' PIC success on catheter-related complication. The study seeks to answer the following question; is PIC success affect the complication? This study enrolled pediatric surgery patients who under 18 years and applied peripheral catheter between April and July of 2016. Patient was evaluated with difficult intravenous access tool (DIVA) before cannulation<sup>3</sup>.

**Results:** The age average of patients is  $5.5 \pm 5.6$  and 68% was male. The number of IV access was  $1.9 \pm 2.0$  since hospitalization of patients. Eighty one percent of IV cannulation was executed by one nurse and 82% helped by other staff. The average of DIVA score was  $3.2 \pm 3.4$ ; %50 had received 3 or more scores. Rate of first attempt success was 49%. There isn't difference between children who had difficult intravenous access and who hadn't according to first PIC attempt. The number of attempts made to cannulation  $3.0 \pm 3.8$  and the passing time for cannulation was  $12.2 \pm 14.7$  minutes. Seven percent of patient wasn't applied PIC. Complications of PICs included IV blockage (14%), infiltration (6%), and extravasation (12%).



According to success of first attempt, there is no differences was detected according to infiltration/extravasation, but there is statistically different to IV blockage ( $p<0.05$ ). There is no differences between complications according to DIVA score ( $p>0.05$ ).

**Conclusions:** Half of pediatric surgical patient has difficult intravenous access. They also in high risk group in terms of complication. Half of pediatric surgical nurses was successful in first PIC attempt. Success of first PIC related to blockage in catheter. Difficult intravenous access wasn't affect complication.

**Implications:** It is suggest that patient with difficult intravenous access can be determined by using DIVA and experienced pediatric surgical nurses obtain intravenous access. Pediatric surgical nurses' awareness should be increased about complications.

**Keywords:** pediatric surgery, periferal intravenous cathater, complication

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## BARIATRIC SURGERY IN ISRAELI ADOLESCENT'S

**OP88****Karin Leah****Israel****Background:**

Childhood and Adolescent obesity has been identified as one of the important public health concerns. The prevalence of childhood obesity has reached epidemic proportions in the USA and in other nations around the world, including both developing and developed countries. Adolescent obesity has been identified as one of the important public health concerns. Conservative weight management programs have shown only mild / modest weight loss results. There has been increasing world- wide enthusiasm for bariatric surgery for selected adolescent morbid obese patients.

**Methods:**

Retrospectively collected data from all patients undergoing bariatric surgery at our institution since the inception of multidisciplinary adolescent weight loss program in 2011. Baseline data collected included age, gender, body mass index, comorbid conditions and patient/family compliance. Postoperative data collected included the length of stay, operative morbidity and percent excess weight loss - body mass index at 3-month intervals.

**Results:**

Thirtyeight have undergone laparoscopic sleeve gastrectomy at our institution since May 2011. Of these, 20 were female and 18 were male. The mean age was  $15.7 \pm 2.3$  years of age. The mean preoperative weight was  $139 \pm 21$  kg with a body mass index of  $46 \pm 9$  kg/m. There were no intra-operative complications, and single postoperative complications included re-laparoscopy in one patient for bleeding at stapler line. The mean length of stay was  $2.2 \pm 1.1$  days. The mean follow-up was  $14.9 \pm 1.4$  months. The percent excess weight loss at 3 / 6 / 12 months, postoperatively was 32%, 38%, and 42%, respectively, in those who had reached these time points. Significant leak of the compliance ( 25%), was the major issue in the post operative follow up.

**Conclusion:**

Laparoscopic sleeve gastrectomy is a safe operation and represents an effective part in the treatment strategy with approximately 40% excess weight loss at 6 months of follow-up. Multidisciplinary approach is standard of care and local national surgical guidelines for adolescent patients should be reconsidered and standardized worldwide.



## OP89

### REDUCTION IN PARENTAL ANXIETY DURING THE CHILD'S OPERATION IN GENERAL ANESTHESIA

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#### **Background**

Parents to children undergoing anesthesia and operation are experiencing fear and anxiety. Anxiety in children is correlated with the parent's level of anxiety. It is therefore appropriate to decrease parental anxiety.

#### **Purpose**

To determine the impact on parental anxiety during anesthesia induction and operation when using: a video showing a pediatric anesthesia induction, parents experiencing increased care during anesthesia induction and parents receiving an intraoperative progress report by telephone.

#### **Methods**

Parents to children who went through surgery in general anesthesia were included consecutively in a period of 2 months. Control group the first month ( $n = 19$ ) Intervention group the second month ( $n = 15$ ). Parents in the intervention group viewed a video showing a pediatric anesthesia induction, they experienced increased care during anesthesia induction and the parents received an intraoperative progress report by telephone.

Parental anxiety was measured with the Spielberger State-Trait Anxiety Inventory [STAI] at two time points: during the operation [T1]; and post-operatively [T2].

#### **Results**

The intervention group reported significant lower state anxiety scores in both T1 ( $P = 0,000$ ) and T2 ( $P = 0,041$ ). The number of very anxious parents (state  $\geq 46$ ) were reduced in T1 (control group  $n = 11$ ; intervention group  $n = 1$ ).

#### **Implications for Practice**

It has been decided to implement the intervention to increase the information level and decrease anxiety in the perioperative setting. A new and improved video is under construction for our website, and parents to children undergoing surgery for more than 1 hour, will be offered an intraoperative progress report.

**Keywords:** parents, anxiety, intervention, anesthesia, operation, video, telephone call.



## GUIDED GROWTH.: THE USE OF EIGHT-PLATE TECHNIQUE FOR TEMPORARY EPIPHYSIODESIS, AIMING TO THE CORRECTION OR ANGULAR DEFORMITIES AND/OR LEG LENGTH DISCREPANCY (LLD) IN CHILDREN: PRESENTATION OF OUR EXPERIENCE IN THE GENERAL HOSPITAL OF CHANIA CRETE GREECE

OP90

**Orfanioti Vassiliki**  
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1. Head nurse in orthopedic operation department

2. Operation Room Registered nurse

**Background:** Angular deformities or leg length discrepancy, vary from idiopathic, congenital or acquired causes. they are not uncommon in pediatric population. Traditional surgical treatment comprised of lengthy major operations such as osteotomies or application of frames. Eight-plates is a recent and innovative technique aims in guiding growth towards the desired effect. It is revolutionary, since it is minimally invasive, "nature assisted" and even reversible.

**Aim:** To show our experience in the use of eight-plates in correcting angular deformities or leg length discrepancy (LLD), present the technique and our clinical results, discuss the efficacy of the technique and the beneficial impact to our patients

**Material and methods:** This method has been used in 13 patients, 8 of them for angular deformities and 5 of them for leg length discrepancy. They were operated on between the period December 2012 to May 2016. 8 were girls and 5 were boys and the range of age was 4 to 14 years old.

**Results:** This technique shows the optimum results after a certain length of time, depending on the remaining growth of the child. therefore our results can be lasted as mid term results.

3 of the children have completed treatment and plates have been removed. 1 had a revision/ re application of plate 11 months after the first surgery and the rest are still being followed up with very satisfactory. All surgeries were under general anesthesia. Zero infections were reported and all patients were discharged the day after the operation, allowed to fully weight best, and return to fully activities.

**Conclusion:** Results indicate that Eight-plate is an effective and safe method for the correction of LLD or angular deformities in children. It appears to be economically efficient, less painful and traumatic for the Paediatric patient and with less complications in comparison to other traditional techniques.

**Keywords:** eight-plate, hemiepiphysiodesis, angular deformities, leg length discrepancy.



**PARALLEL E4 RESEARCH WORK IN FUNCTION OF PATIENT CARE**

**OP91**

**ETHICAL PROBLEMS IN PERIOPERATIVE CARE AND THEIR IMPACT ON PATIENT SAFETY**

**Wichsova Jana**

**Czech Republic**

*University of Pardubice, Faculty of Health Studies*

**Background**

Perioperative teams are focused on professional and safe patient care. Despite of facts that they use a number of tools: construction arrangement of operating rooms, modern equipment and instruments, new materials, drugs and sophisticated diagnostic methods and practices based on scientific evidence, the most important tool throughout the perioperative process is just health care worker, and quality of his/ her care. Research demonstrates that poor quality care is also unethical.

**Purpose**

This study was conducted to describe practices that affect patient safety:

- identify breaches of security and hygienic procedure of perioperative care
- identify persons who commit these breaches
- articulate the reasons for which the breaches occur
- staff behaviour in relation to ethics

**Methods**

The methodology utilised for this study is an ethnographic research. The research has been undertaken as an observation of perioperative team in Teaching Hospital Motol in Prague and Karolinska University Hospital in Stockholm. The results were also compared with recommendation and standards of WHO, CDC and other institutions related to perioperative care and with ethical codes of nurses and physicians.

**Results**

The most frequent breaches of hygiene have been observed shortening the time of hand hygiene, the unnecessary opening the operating room doors, the problems with wearing surgical caps, masks and jewelry. The missing of WHO Surgical Checklist during the surgery was the most common violation of patient safety.

**Conclusion**

The health care professionals have an adequate knowledge about safe and hygienic patient care in operating room. If they break safety and hygienic policy, they also break the ethics of health care workers.

**Key words**

Perioperative care, safety, security, patient safety, medical ethics, nursing ethic

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**OP92**

## GLYCEMIC CONTROL OF SURGERY PATIENTS AND EFFECT OF PATIENT OUTCOMES

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**Purpose:** Surgical treatment of patients before and after attempts to determine blood sugar levels and treatment protocol is to assess the impact on the outcomes of the patient.

**Methodology:** Research is a descriptive and retrospective study. The research population between March 2015 and March 2016 date in the Buca Seyfi Demirsoy State Hospital General Surgery constitutes 921 patients who met the clinical surgery in which patients participate in research by 3767. The whole population is included in the sample. Data were collected retrospectively from hospital database with patient identification form is created using literature. The statistical analysis of the data frequency, percentage, mean, standard deviation, Wilcoxon, Mann Whitney U and Kruskal Wallis tests are used.

**Results:** Patients who attended the study were 38.9% middle-aged (45-59 years), 54.6% female, 17.8% previously diagnosed with diabetes, 11.6% with chronic diseases other than diabetes, 32.1% which previously operated, 27.1% has also developed postoperative complications. 49.4% of patients with diabetes found to be blood glucose values moderately high (110-150 mg/dl) before surgery, 48.8% of patients with diabetes founded too high (151-200 mg/dl) blood sugar levels after surgery. Preoperative mean blood sugar in patients with diabetes 146.16±40.80, without diabetes are mean 103.41±22.59 and there is a significant difference between the statistics to the analysis (p<0.005). Patients with diabetes postoperative mean blood sugar are 168.02±47.66, non-diabetic patients are 112.70±26.38 and there is a significant difference between the statistics to the analysis (p<0.005). Postoperative duration of stay in hospital for at least 2 days to 21 days, mean 2.86±1.74 days. Postoperative duration of hospital stay in patients with diabetes are mean 3.31±2.33, patients without diabetes are mean 2.77±1.58 and there is a significant difference between the statistics to the analysis (p<0.005). In the case of complications after surgery in patients with diabetes are 40.2%, patients without diabetes are 24.3% and there is a significant difference between the statistics to the analysis (p<0.005).

**Conclusion:** Surgical treatment of the patients preoperative and postoperative blood glucose levels differ significantly and it has been determined that the effect on the results of the patient. In this respect the planned surgical treatment will provide effective glycemic control for patients follow-up, treatment and care, it is thought that the development of the protocol as necessary.

**Keywords:** Glycemic control, Surgery patients control, Blood sugar.

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For feasibility of the study written permissions of ethical committee (2016/ 06 /29 - No:1) and hospital (2016/ 04/ - NO: 65516083.900.99)



## THE EFFECT OF DIFFERENT MUSIC TYPES ON TURKISH PATIENTS' ANXIETY IN PREOPERATIVE PERIOD: A RANDOMIZED CONTROLLED TRIAL

**OP93****Altun Ugras Gulay****Turkey****Gülay Altun Uğraş\*, Güven Yıldırım, Serpil Yüksel, Yusuf Öztürkçü, Mustafa Kuzdere, Seher Deniz Öztekin**

**Background:** It is known that listening music is an effective way to reduce patients' anxiety in preoperative period(1,2,3). One of problems that studies conducted to determine the effect of music frequently encountered is music selection(4).

**Aim:** The purpose of this study was to determine effect of three different types of music on Turkish patients' anxiety in preoperative period.

**Methodology:** The sample of this randomized controlled trial included 180 patients, who had undergone nose and throat surgery in a public hospital, in İstanbul. By randomization, patients were divided into four groups including 45 patients in each. While routine care was provided to control group, natural sounds, Classical Turkish Music and Classical Western Music were listened for 30 minutes to the first, second and third groups, respectively. To assess pre-and post-music anxiety, the Spielberger State Anxiety Inventory (SSAI) was used and to assess physiological response to music, systolic blood pressure(SBP), diastolic blood pressure(DBP), heart rate(HR), peripheral oxygen saturation(SpO<sub>2</sub>) and serum cortisol level were checked. This study analyzed data by using descriptive statistics, t-test, one-way-ANOVA and advanced analysis tests.

**Results:** This study determined that post-music SSAI scores of all groups showed decrease comparing to scores before music, however difference wasnot significant( $p>0.05$ ). This study compared SSAI scores of patients who listened natural sounds with control group and determined that scores of those who listened natural sounds was significantly lower( $p<0.05$ ). This study found that in intervention groups, SBP and cortisol levels significantly reduced after music in comparison with before music.

**Conclusion:** The findings of this study showed that natural sounds, Classical Turkish Music and Classical Western Music have effect on reducing patients' anxiety in preoperative period and listening to natural sounds is the most effective one.

**Implications of perioperative nursing:** In preoperative period, having patients to listen natural sounds and music specific to their own culture in operating waiting room canbe beneficial.

**Key Words:** Music, preoperative anxiety, serum cortisol level.

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**OP94**

## **INADVERTENT PERIOPERATIVE HYPOTHERMIA**

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**Background:** Unplanned intraoperative hypothermia is widely accepted as the cause of numerous adverse events, such as acute coronary incidents, clotting disturbances, wound infection, and pharmacokinetics effects with a negative impact on the occupancy rates of the operation room(OR) or the Postanesthesia Care Unit (PACU).<sup>(1-6)</sup>

**Purpose:** To describe the body temperature evolution of patients undergoing arthroscopic shoulder surgery during the perioperative period, to estimate intraoperative hypothermia incidence, to describe possible variables related to temperature loss, to know what interventions are made for the handling of hypothermia in PACU, and finally, to assess thermal discomfort perception.

**Method/Design:** A prospective study was performed in 164 patients undergoing shoulder arthroscopy. Sociodemographic and baseline characteristics data as well as variables related to body temperature were collected.

**Results:** Body temperature showed a significant decrease during the transfers from ward to OR and at the end of the surgery, from the OR to PACU ( $F= 84.0$ ;  $p=0,0001$ ).

53 patients (34,4%) presented hypothermia before leaving ward, reaching up to 90 patients (58.5%) during the transfer from ward to OR. Rates of hypothermic patients were 85.4% (140) before surgery started, 77.4% (127) at the end of surgery, 95.7% (154) at the arrival to PACU and 92.5% (148) at the end of perioperative period (PACU discharge).

The whole variables were analysed and no relationship was found between them and hypothermia, although there were different distribution of body temperature loss in each group.

In PACU, shivering occurred in 9 patients (5,6%) and forced air warming was used in 14 patients (8,75%). Thermal discomfort was reported by 46 patients (28%).

**Conclusions:** Transfers have been identified as critical events. Noteworthy, we detected that more than 30% of patients were hypothermic before leaving ward. Large preoperative fasting, not appropriate clothing, and lack of knowledge about body temperature loss implications, might explain our finding.

**Key words:** Hypothermia, thermoregulation, unplanned, perioperative, arthroscopy, handling, temperature, and outcomes.

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## PARALLEL F4 PROFESSIONALISM IN THE PERIOPERATIVE ENVIRONMENT - PREVENTING COMPLICATIONS

### THE PRESSURE SORES INCEDENCE IN SURGICAL PATIENTS AND EFFECTS OF SELECTED RISK FACTORS FOR INTRAOPERATIVELY ACQUIRED PRESSURE SORES

OP95

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**Background:** Pressure Sores associated with high mortality, morbidity and health care costs. Patients undergoing surgery are at high risk of developing intraoperatively acquired pressure sores. Despite years of research pressure sores are still one of the most common complications experienced by patients in operating room.

**Objective:** This study was carried out to determine the pressure sores incidence and examine the selected risk factors predicting intraoperatively acquired pressure sores.

**Method:** This descriptive, cross sectional, comparative study was performed on 151 patients staying in general surgery, neurosurgery and cardiovascular and thoracic surgery units, having an operation time of two hours or longer, hospitalized for at least 24 hours before surgery and discharged at least 24 hours after surgery. Data were collected through face to face interviews by using Sociodemographic and Clinical Characteristics Form, Intraoperative Pressure Sores Risk Factor Form, Braden Risk Assessment Scale and Pressure Sores Staging Form. Descriptive statistics, t-test, Chi-square test and logistic regression analysis were used for data analyses.

**Results and Conclusion:** The incidence of pressure sores was found to be 40.40%. Of all the sores, 57 (93.4%) were in stage I and 4 (6.6%) were in stage II. Risk factors predictive of intraoperative pressure sores development included intraoperative vasopressor use, poor skin condition and intraoperative diastolic blood pressure  $\leq 60$  mmHg. However, age, gender, body mass index, albumin/hemoglobin/hematocrit levels, type of surgery, length of surgery, position, systolic blood pressure, diabetes mellitus, cardio-vascular diseases, comorbidities and use of warming blankets were not associated with intraop-



erative pressure sores development. Besides, the use of the Braden scale for determining pressure sores risk for intraoperative patients was ineffective.

**Key Words:** Pressure sore, operating room, nursing

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**OP96**

## OUR EXPERIENCES OF PREVENTING THE PRESSURE ULCERS IN OPERATING ROOM

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**Background:** Pressure ulcer is a localized cutaneous and/or subcutaneous tissue damage which caused by only pressure itself or laceration with pressure at the same time and generally occurs on the bone prominent (1, 2). The special patient groups, who are in the operating room, are under the risk of pressure ulcer (2, 3).

Extended operation time and more body parts exposed to pressure, increase the risk of pressure ulcers (2, 4). Additionally, decrease of the nutrition of tissues caused by hypotension, the low body temperature, the immobility of patients during the operation and generally first day after operation, insufficient



or wrong protection and support during positioning are the risk factors that can cause pressure. On the other hand, all are avoidable risk factors (1, 2). Providing redistribution of pressure with the using of support surface (3) giving right position to patient can prevent patients from pressure ulcers. All of these attempts are supported by B and C evidence levels (2, 3).

**Methods:** We reviewed all adverse event reports and the clinical quality indicators results that monthly reported to the OR administrators in order to detect patients who had pressure ulcers in our operating rooms between 2014 and May-2016.

**Results:** During the period of 2014 and May-2016, 193.902 patients had surgical operation in our institution. We encountered 18 pressure ulcer cases. Six cases were occurred in patients of neurosurgery, five in plastic surgeries, four in urological surgeries, two in general surgery and one in cardiovascular surgery. The general rate of pressure ulcer was 0,009 %.

**Conclusion:** Pressure ulcer is a common patient safety issue in operating rooms and surgical team's attempts to prevent patients from developing pressure ulcer should be evidence based.

Keywords: pressure ulcer, operating room, surgery

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OP97

## FACTORS ASSOCIATED WITH THE DEVELOPMENT OF PRESSURE INJURIES IN SURGICAL PATIENTS. A RETROSPECTIVE STUDY

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**Team members: Dr Patricia Nicholson<sup>1,2</sup>, Ms Christine Hunter<sup>2</sup>, Professor Nick Santamaria<sup>3</sup> and Ms Tara Handke<sup>2</sup>**

*School of Nursing and Midwifery, Deakin University<sup>1</sup>; Peter MacCallum Cancer Centre<sup>2</sup>, School of Health Sciences, The University of Melbourne<sup>3</sup>*

### Key Words

Pressure injuries; intraoperative; incidence; risk assessment.

### Purpose of the study

The purpose of the study was to identify intrinsic and extrinsic variables that were predictive of pressure injury (PI) formation in surgical patients.

### Background

The incidence of PIs is reportedly between 0.4% and 38% in the acute setting (Chen et al., 2012) with a high incidence reported in surgical patients (Connor, et al., 2010; Lindgren et al., 2005; Primiano et al., 2011; Stewart et al., 2007). While it has been accepted that PIs are caused by various forces other contributing factors include immobility, use of anaesthetic agents and repositioning the patient on the operating table (Lumley et al., 2014; Chen et al., 2012), resulting in PIs that exhibit different epidemiological characteristics when compared to non-surgical patients (Chen et al., 2012).

### Methodology

This project involved a retrospective, exploratory review of medical records at a major cancer hospital, and one major tertiary hospital, in Melbourne to identify variables predictive of PI development postoperatively in patients undergoing a surgical procedure.

### Results

Forty three per cent of patients developed a Stage II pressure injury with older patients found to be more susceptible. Fifty eight per cent of the patients were classed as pre obese, or obese, with a Braden score for the majority of patients rated as moderate to severe. The most common intraoperative positioning included supine and lithotomy. Mean time to development of the PI was 42 hours with the sacrum and heels the most common site (47% and 17% respectively). These findings were similar to the Victorian Pressure Ulcer Point Prevalence Survey (PUPPS) report (2006).

### Implications for perioperative nursing

With evidence to support the development of PIs in patients who are immobile and unable to change their position, patients undergoing surgery are at a higher risk than non-surgical patients (Lumley et al., 2014; Schoonhoven, et al., 2002). This study identified patients risk factors associated with the development of PIs informing practice in the operating theatre. It is important for perioperative nurse to identify factors that may place the patient at a higher risk for developing PIs as they are in a key position to address them in order to prevent them in surgical patients.



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## PROFESSIONALISM IN THE PERIOPERATIVE ENVIRONMENT - AN ISSUE FOR BOTH STAFF AND PATIENT SAFETY

OP98

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*Education Officer – Australian College of Operating Room Nurses*

### Background

Teamwork is an integral part of perioperative nurses, however several factors can impede this process having negative effects of patient safety whilst in the OR.

The aim of this presentation is to openly discuss the difficult issues that can prevent the smooth running of an operating suite, disrupt communication and promote poor staff health and morale.

The presentation will provide a definition of professionalism, discuss language, confidentiality (phone, internet and social media), bitching, white anting, and setting people up to fail. Each issue will be followed by an appropriate solution to the problem

### Implications for perioperative nursing

The presentation will then move to an evidenced base discussion on teamwork and safety; linking poor staff behaviours with an increase in surgical patient adverse events. Recent studies indicate that the main cause (70%) of adverse events can be attributed to the lack team members' non-technical skills, such as, poor communication, poor teamwork, poor leadership, poor decision-making and poor situational awareness (1). All of these vital skills are diminished with poor behaviours. Discussion will continue on how to better care for students, each other, ourselves and our patients and provide a safer workplace.

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## PARALLEL G1 QUALITY AND ASSESSMENT TOOLS

**OP99**

### ENHANCING OPERATING ROOM EFFICIENCY AND PERIOPERATIVE SAFETY THROUGH VISUAL MANAGEMENT BOARDS

***Mananquil Ronda***

**USA**

As technology advances rapidly, and healthcare industry become highly competitive, Operating Room (OR) and Perioperative Nursing develop into an intricate system. Nowadays, perioperative patient care refers to more than one kind of task. It embodies managing the OR suite, OR team and other factors that promote patient safety and optimal patient outcome. There is critical and burgeoning need to increase patient safety by improving quality of care and efficiency while managing costs and keeping expenditures at a minimum.

The goals of OR management can be summarized as follows: (1) ensure patient safety and optimum patient outcome, (2) enhance productivity and efficiency without compromising quality patient care, (3) maximize cost-containment and cost-efficiency while maintaining quality patient care, and (4) improve satisfaction among patients and OR team members.

Visual Management Board (VMB) provides tools in which both problems and progress can be viewed by personnel. Visibility enables people and organizations to handle jobs and manage problems more easily because it makes information easier to understand and remember. It, therefore, allows staff to manage their work in a safer, much organized and sustained atmosphere. It nurtures open communication, high degree of work ownership, pride in the workplace and continuous improvement. Visualization could facilitate problem solving, improve productivity and leave people satisfied.

At South San Francisco Kaiser Permanente – OR, VMB was implemented because top executives recognize the benefits it could bring to the hospital, its every department, personnel and ultimately its members.

By acknowledging problems and concerns in the OR, making them visible on boards that can be seen by all personnel, deciding on the deadline with which tasks should be taken care of, and identifying person/s who will be responsible to complete tasks, VMB provide more control over issues and workflow, resulting to more problems and issues resolved and increased OR team morale.



## ALL INFORMATION IN ONE CLICK (DATA MANAGEMENT IN THE OPERATING ROOM)

**Kokaly Victor-Muatasseb Haidra**  
**Israel**

OP100

**Lerman Yulia, RN, MPH**  
**Hadassah Medical Center, Jerusalem, Israel**

### **Introduction**

Perioperative nursing care requires a broad knowledge base in various fields of surgery. In addition, professional nursing practice demands knowledge of advanced and complex surgical equipment, guidelines and protocols. There are many and varied databases that contain all required information.

### **Aim**

To create an accessible database with all the required information that is available to all operating room nurses.

### **Intervention**

Three years ago the management team of the Operating Room at Hadassah Medical Center made a decision to update and transfer all written material to computerized electronic form.

Today each operating room nurse has access to the unique computerized portal, which includes a wide variety of information, such as different types of surgical procedures, Ministry of Health guidelines, hospital guidelines, summaries of staff meetings etc. All this information comes at a “click of a button”.

To learn to use the new portal, the operating room team invested in group and individual tutorials.

Today the portal is constantly updated and nurses receive an update when new materials are added by e-mail or WhatsApp message.

The portal allows the possibility to present a lot of information in an accessible and systematic form that is also user friendly.

### **Conclusion**

Easy access to computerized electronic material increases the compliance of staff to read the relevant information online, in real time. As a result, it raises the standards of the perioperative nursing care for the benefit of both the patient and nurse.

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## OP101

### THE DEVELOPMENT OF A VALIDATED TOOL FOR ASSESSMENT OF THE NON-TECHNICAL SKILLS OF OPERATING ROOM NURSES

**Abbott Hannah**

**UK**

Analysis of errors occurring within the perioperative environment has shown the underlying causes to be multifactorial and related to a number of non-technical skills, for example communication failure, time pressures and poor professional behavior (1). To improve patient safety therefore, it is necessary to be able to assess and develop these non-technical skills within the operating room nursing workforce. The majority of current assessment tools however are observational in nature and consequently limited to the observational context, which does not provide a consistent measure of an individual. Alternatively the existing questionnaire-based tools relate primarily to organisational factors and job satisfaction rather than individuals' skills.

This study aimed to design and validate a new non-technical skills assessment tool for operating room nurses. The tool was developed using the principles defined by Alden (2) where a large pool of questions is refined by using an expert group of judges. In this case the experts were all university academics specialist in perioperative practice who contributed to both content validity testing, and reliability testing, using a test-retest approach to ensure stability of the tool over time. Analysis of this testing process showed good reliability and validity of the questions and over 70% of the original question pool were suitable for inclusion in the final tool.

This study has produced a new, validated tool for the assessment of operating room nurses' non-technical skills which will be used for further research to explore non-technical skills in the workforce and will also be adapted for use with operating theatre support workers for the purposes of further research. In addition to use for research, the tool could be utilised by either individual nurses or clinical departments to identify development needs as part of a continuing professional development programme.

**Keywords:** Non-technical skills; patient safety.

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## IMPROVING OR EFFICIENCY THROUGH SURGEON SCORECARD USE

**Kusler Jensen Jane**

**USA**

OP102

Purpose of presentation: Surgery departments drive the revenue for hospitals. “Right sizing” the OR for efficient use of resources (number of rooms, number of staff, and capital equipment) is critical for long term viability of hospitals.

The OR Business Manager is charged to provide the data analysis and support for the Perioperative Directors and OR Governing committees to utilize to make key operational decisions. This session will provide the Business Manager with an example of a surgeon scorecard which may be used to “right size” the number of ORs running and to assist with the creation or revision of block schedules.

Content: This presentation will include a review of key operational performance metrics, an understanding and calculation of the numbers of operating rooms to run an efficient department and the utilization of the surgeon scorecard to determine the amount of time to plan for surgeon block time to insure good utilization.

Learning objectives:

1. Discuss key performance metrics utilized in the creation of a surgeon scorecard
2. Discuss the means to determine the number of operating room to run to insure good utilization of this resource
3. Discuss how a surgeon scorecard can be utilized to establish good OR utilization

### PARALLEL G2 PATIENT FIRST

## ATTITUDES OF OPERATING ROOM PROFESSIONALS TOWARDS PATIENT SAFETY AND THE FACORS AFFECTING THESES ATTITUDES

**Ongun Pinar**

**Turkey**

OP103

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**Background:** The most significant developments related to patient safety began to take shape following the publication of the “To Err is Human” report by the Institute of Medicine (2000) and the dramatic details results on the state of patient safety have been obtained. One of these results is that medical errors are the fifth leading cause of deaths (1) Damages related to surgical safety resulting death or disability have been the most common adverse events. The mortality rate of patients after major surgery is between 0.5-5% as a result of unsafe surgical care. Postoperative complications occur in more than



25% of patients. More than half of the adverse events in industrialized countries has been associated with surgical care (2). About one in every 94,000 people in 2015 according to a report of adverse events in Minnesota is exposed to the wrong side surgery. Moreover, forgotten strange object was reported among 272 patients between 2009-2015 (3). In a literature review conducted by Manser (2009) on the analysis of accidents and unwanted events between 1950 and 2007, deficiencies in communication and teamwork were found to be the most frequent contributing factors (4). The presence of good communication among institution employees and the establishment of successful communication serve to help employees decrease their stress levels (5).

**Aim:** The aim of this study is to determine the attitudes that operating room professionals have towards patient safety and the factors affecting these attitudes.

**Methods:** A descriptive, cross-sectional and correlation research design is used in this study, which was conducted between March 2014 and June 2015 at all university training and research hospitals in the city of Izmir in Turkey. The sample consists of 477 individuals, including nurses, anesthesia technicians and those working in the operating room units of these hospitals as academic members and assistants of the surgery department. Data were collected using the Sociodemographic and Working Characteristics Form and the Safety Attitudes Questionnaire (operating room version). Descriptive statistics, Pearson correlation and multiple regression were used for data analysis.

**Results:** Results indicated that the attitudes of operating room professionals towards patient safety were at the moderate level. The analysis of the factors affecting the attitudes of operating room professionals towards patient safety shows that team cooperation obtained the highest score while stress recognition obtained the lowest score. In the regression analysis, age, being male and receiving patient safety training explains 15.4% of the safety attitudes of professionals, with the most significant variable being receiving patient safety education.

**Implications for perioperative nursing:** The results of this study helped team members raise the awareness of operating room personnel on patient safety and create a culture of patient safety. It is therefore recommended to operating room supervisors and administrators that there should be more education programs related to patient safety and that customized orientation programs should be instituted to ensure proper operating room procedures and conduct.

**Keywords:** patient safety culture, attitude, operating room

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## NURSE'S KNOW-HOW IN ASEPTIC REALIZATION AT DAY SURGERY OPERATING ROOM

**Ruokamo Heli**

**Finland**

OP104

**Heli Ruokamo, RN: JAMK University of Applied Sciences (Master of Health Care)**

### Background and purpose

This presentation is based on the bachelor's thesis of nurse's aseptic know-how in the ambulatory surgery at the operating room.

As nosocomial infections are relatively common, the researcher's interest was to investigate the nurses' expertise in aseptic operations and situations. (1)

However, the Hospital-acquired infections are the sum of many factors, but particularly emphasized the importance of hand hygiene microbial transfer from place to place. By cutting this route of infection it is possible to at least reduce the microbial infections. (2)

Also, training and orientation for aseptic activities play a key role, as the internalization of correct working methods to promote the early career aseptic commitment and become a part of our daily routine. (3)

The theoretical framework in this study were used previous studies aseptic expertise of nurses and operating room work skills requirements. (4, 5), including Five Moments for Hand Hygiene by WHO (6)

The purpose of this study is to identify factors which may be taken into account to try to reduce hospital-acquired infections, which are expensive to take care of the national economy, as well as producing great human suffering to patients. (3)

### Methods

The data were collected by participant observation, where the observer was involved herself in daily tasks. Observation of a structured observation form, with eight main points, and each of a number of more specific sub was used. The study population size was 120 shares.

### Results

1 Hand Hygiene Implementation 68 %, 2 Proper work clothing 100%, 3 Perioperative general cleanliness 50%, 4 Using of gloves 87%, 5 Using of nose-mouth protector 94%, 6 Aseptic Rules of Procedure 70%, 7 Implementation of sterility 95%, 8 Surgical Traffic 578 times open the door during operation

### Keywords

Sterile techniques, surgical asepsis, hand hygiene, aseptic expertise of nurse, SSI

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## OP105

### STUDENT LEARNING AND ENGAGEMENT IN THE PERIOPERATIVE ENVIRONMENT

*Peirce-Jones Julie*

UK

**KEY WORDS:** coaching, learning, engagement.

In our fast pace lives Coaching allows us time to stop and consider. It puts me in mind of a poem;

[1] 'What is this life if full of care we have no time to stand and stare'.

Coaching can support and develop the student in learning new skills or how they engage with the academic process.

Coaching is an approach which allows the student been coached to gain awareness and insight rather than them been told what to do or what not to do.

[2] Identifies that coaching adds value and that it also provides staff with a solution focused tool to utilise to support the learning activities of students.

Coaching can provide a student with clear direction, goals and benefit the individual student by increasing motivation, problem solving and providing a sense of empowerment.

Coaching is a holistic approach to learning. It is demonstrated through a professional conversation, it requires an honest and open relationship between the staff [coach] and student [coachee].

[3] To support my coaching activity, I have utilised the GROW Model [Goal, Reality, Options, Way Forward].

The Coaching activity approach takes the student on their own individual journey which has a positive impact on their learning, engagement and contribution to their role in the perioperative environment.

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**PREFERRED TYPE OF PRESENTATION:** free paper.

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## UNIFYING DOCUMENTATION FOR THE OPERATING NURSES

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OP106

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**Key words:** documentation, operating nurses, patient's security, preoperational care.

**Purpose of this paper:** With this paper we would like to demonstrate a process for a formation and preparation of a unified documentation of the operating nurses. Furthermore we would like to point out the nurse's influence on security in surgery.

The paper will demonstrate the unique process of the formation how to document operating nurses through existing analytics documentation to creating documents which are meant to be for all operating rooms, independently of the operational specification.

The documentation of operating nurses is a necessary tool for the daily work. It is a mandatory part for the documentation of the patients.

The goal of a simple documentation is primarily to collect the evidences of all processes and activities which operating nurses are facing in their job. Furthermore this allows a tracking and evaluation of the work steps. Except from the patient's data, planning and worktime notes the advantage is to prevent data duplicates. At the same time the patient's security level in operating rooms can be raised during preoperational care.

The unique documentation of the operating nurses is based on processes that are the same on all operating rooms on a national level. This allows a comparable view between the hospitals and a measure of quality and patients treatment.

With this unique documentation for the operating nurses, a unique document has been created that allows saving and access to information which is approved by the further health institutions that is applicable in practice.

The accurate and complete documentation provides the right protection, the documentation of exchanging work processes between operating nurses, the right evidence of the used materials and machines.

If all the points of the document are considered than this process would allow a unique way of data storage which could be used as a guidance of work in the nursing field. Especially for the preparation of surgeries but also for the process right after a surgery and the transfer steps of the patient.

Maintaining the documentation of the operating nurses, where the applied single steps are documented as evidence, is important for the following reasons:

- It is according to law and the professional responsibility.
- For securing evidence of the nurses knowledge.
- For the nurses professional responsibility of acknowledging standards in all steps of the patients treatment.
- The documentation provides a good clinical and work responsibility as well as security and efficiency.

These are important points for maintaining a high quality care for the patients. Moreover the documentation, which is provided by the operating nurses, is also a platform for exchanging and sharing the professional knowledge and experience. All in all the documentation provides a professional platform for a successful collaboration and a further enhancement of the proficiency itself.



## PARALLEL G3 BEST PRACTISES AND KNOWLEDGE IN OR

OP107

### THE OPERATING ROOM NURSE AND HER KNOWLEDGE

*Di Florio Laure*

*France*

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During 18 months of training in the Operating Room Certified Nurses ( with a State diploma) I learned a lot from contributors and the training periods we had. I also took advantage of these opportunities to acquire more experience and more skills. I looked for means to remember every single thing and apply every single one of them to my work. The school allows us to stop working for a while and to take the time to analyse the way we are working.

After several years of working, of routine, in our operating theatre suites running after profitability to stay financially viable, what has become of our knowledge? How do some teams manage to remain in a learning dynamic? I made some research on legislation, on the role of the manager Operating room Nurse, on motivation at work, on the abilities and the dynamic of a team. I conducted surveys in hospitals to confirm some hypothesis. All these researches helped me to try and find means to remain in a learning and open dynamic within the operating team.

According to me the problem of reactualising knowledge Inside the Operating Room is due to many factors. Motivation in this reactualising (in some departments) is not only the business of the Operating room Nurse. The Operating room Nurse cannot act alone without ending exhausted. But she is the first step towards change. However Operating room Nurses cannot act on their own. They should be able to rely on their hierarchy and colleagues in order to make everybody walk in the same direction. The Operating Room should not be self-centered but opened to other approaches.

OP108

### PROMOTING BEST PRACTICE IN THE OPERATING THEATRE SETTING

*Guckian Fisher Mona*

*UK*

One of the most challenging and dangerous areas of healthcare delivery is the operating theatre.

In the UK we have spent millions of pounds investigating the causes of inadvertent harms to patients in our care after the events have happened. We spend additional millions in litigation and this is increasing, as indeed are the incidents reported to the UK national data base.

There appears to be a lack of emphasis and ownership around the standards and recommendations which inform and support best practice in the operating theatre and other interventional areas. It is difficult to understand how this can be the case given that invariably when things go wrong it can more often than not be attributed to a failure to follow procedure or indeed a lack of awareness on what the standard of care should be.

#### **Session Objectives:**

This session will aim to explore how:

1. The utilisation of the AfPP Standards and Recommendations for Safe Perioperative Practice inform the optimal way to manage patients and provide a robust strategy to effect safe outcomes for perioperative patients.
2. Explore the myth that national standards often referred to as 'only guidelines' can therefore be interpreted as a form of suggestion for practice and the potential implications of this!



## EDUCATION GIVEN BY A NURSE TO PREVENT DEEP VEIN THROMBOSIS INCREASES THE KNOWLEDGE LEVEL AND SELF-CARE APPLICATIONS OF PATIENTS

**OP109****Gonul Ayse****Turkey****Research Assistant Ayse GONUL, MSc, RN<sup>a</sup>****Associate Professor Ayla GURSOY, PhD, RN<sup>a</sup>**<sup>a</sup> *Surgical Nursing Department, Karadeniz Technical University Health Sciences Faculty, Trabzon, Turkey*

The research has been conducted to evaluate the effect of training provided by the nurse on patients' realisation of self-care applications aiming to prevent deep vein thrombosis (DVT) and on their knowledge about DVT. The trial group was composed by 40 patients taking treatment at a university hospital's general surgery, urology and at thoracic surgery clinics. As data collection tools; Autar DVT Risk Identification Scale, questionnaire for getting to know patient characteristics, DVT information defining form, self-care applications specification form relating to DVT information and satisfaction form for DVT education have been used. Each patient was given a training before getting in surgery by using the illustrated booklet prepared by the researcher. The level of information patients had about DVT was determined before and after the training. In addition, the situation of patients as to their applying what are necessary for preventing the formation of DVT was determined after the surgery. It was determined that 5.0% of patients knew about DVT before getting training and 95.0% knew about it after getting training. It was found out that the DVT average information score of patients increased. There was a meaningful statistical difference between DVT average information scores of patients before and after getting training ( $p=0.00$ ). Self-care application scoring averages of patients was found to be  $8.8 \pm 2.3$  from out of 13. All of the patients showed the nurse as the source of information obtained about DVT and they recommended that the trainings should also be given to other patients. Most of them were very satisfied from training. This research has revealed positive results of patient attendance of their own care that they educated with an effective method. Additionally, this study has introduced a new facility prepared by nurse to scientific information.

**Key Words:** Deep vein thrombosis, patient education, surgery, perioperative care, nursing care

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Preferred type of presentation: Oral



**OP110**

**AN EXAMINATION OF THE KNOWLEDGE AND PRACTICE OF DOCTORS AND NURSES OF THE PRESERVATION AND STORAGE OF EVIDENCE IN FORENSIC CASES IN THE OPERATING THEATRE**

**OKGÜN ALCAN Aliye**

**Turkey**

**Esma ÖZŞAKER\*, Ahsen KAYA\*\*, Aliye OKGÜN ALCAN\*, Meryem YAVUZ van GIERBERGEN\*, Ekin Özgür AKTAŞ\*\***

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Forensic cases are an important part of the work of health institutions, and are frequently met with in the operating theatre. It is important that the surgical team should know the procedures which must be followed in these cases, and they must have a certain basic knowledge of forensic medicine in order to follow the forensic case procedure correctly and to preserve the chain of evidence. This study had the purpose of examining the knowledge and practice of doctors and nurses in the operating theatre with regard to preserving and storing evidence in forensic cases.

The descriptive study was conducted with 139 doctors and 59 nurses who agreed to participate, who were working in the operating theatres of Ege University Medical Faculty Hospital. Collection of data was achieved between 1 and 31 December 2015 using a 33-question form prepared by the researchers in line with relevant literature.

It was established that the mean number of years of work in the operating theatre of the doctors and nurses participating in the study was  $10.95 \pm 9.97$  (min: 1 year, max: 43 years), 70.7% had encountered forensic cases, 65.2% had reported forensic cases, 55.1% had had no training relating to forensic cases, 55.6% regarded their own approach to forensic cases as partially adequate while 36.9% regarded it as inadequate, 80.3% wished to receive training on forensic cases, and 55.1% of participants did not know whether the institution where they worked had rules and procedures regarding the preservation and storage of evidence in forensic cases.

The conclusion of the study was that most of the doctors and nurses working in the operating theatre felt that their knowledge and practice regarding the preservation and storage of evidence in forensic cases was inadequate, and that they wished to receive training on this topic.

Key words: Forensic cases, evidence, operating theatre

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## RALLEL G4 CREATING COMPETENCES

PROFESSIONAL COMPETENCE IN PERIOPERATIVE NURSING CARE –  
OPERATING THEATRE NURSES' PERSPECTIVE

**Blomberg Ann-Catrin**  
**Sweden**

OP111

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**Co-Authors:**

**Birgitta Bisholt, RN, PhD, Associated professor**

**Ingrid Rystedt, MD**

**Lillemor Lindwall, RN, PhD, Professor**

**Introduction:** Operating theatre nurse' have professional responsibility for the care of the patient, but what this means is unclear in perioperative nursing. Responsibility includes that the care should be planned in consultation with the patient and be based on nursing science and proven experience to ensure quality care for the patient. Operating theater nurses' practice are different other practice and includes providing health care but there is little time to meet the patient in a dialogue.

**The aim** was to identify professional operating theatre nurses' competence and factors that influence competence in perioperativ nursing.

**Method:** A quantitative design was used and carried out in Sweden during the first half of 2016. Data was collected from operating theatre nurses' by means of a questionnaire. This study will also a mixed method be used, where quantitative data is complemented with a qualitative open- ended question.

**Results:** The data analysis is ongoing and the preliminary result shows that new challenges were identified due the model of professional competence in order to meet the patients' problem and needs in perioperative nursing.

**Conclusions:** The study may contribute with factors that influence the professional development of the operating theatre nurse's in perioperative nursing to ensure the care of the patient. These factors may be important for future professional development and for developing the perioperative nursing care of the patient.



# OP112

## OPERATING ROOM NURSES' PERSPECTIVE ON PRECONDITIONS FOR SAFE INTRAOPERATIVE NURSING CARE AND SAFE SURGERY

**Sandelin Annika**

**Sweden**

### Background

One area of main interest from the operating room nurses (ORNs) perspectives and patient safety is the importance of correct planning for nursing care and for safe surgery (1, 2, 3). In hospitals, departments are mostly structured in silos and organized from this "silo-thinking" which leads to fragmented goals and objectives for the patient care (4) and with different goals and priorities for the professionals (5). The planning and scheduling are foremost delivered by computerized systems (6), which ease the planning, but the systems are not enough developed, why it is difficult to plan for the operations (7) and thereby intraoperative nursing care. Organizational structure, good leadership and interdisciplinary collaboration are key factors (8, 9). Leaders, as first line managers, have a great impact on the organization, management and the attractiveness of the workplace for nursing personnel (3). Preoperative dialogues between the surgical team-members and familiarity of the procedure are of importance for patient safety (10, 11, 12).

The aim of the study was to describe operating room nurses' experience of preconditions for safe intraoperative nursing care and safe surgery.

A qualitative design was chosen for increased understanding of ORN's experiences of preconditions for safe intraoperative nursing care. Data collection was conducted with narrative interviews with 16 ORNs (13) and data analysis used content analysis (14).

The findings show that safe intraoperative nursing care from ORNs perspective occurs when knowledge about the patients' health status and desires was fulfilled. Shared information between surgical team-members about the patient and the surgical intervention was of crucial importance for ORNs to achieve safe care. Computerized information systems were incomplete, regularly preoperative dialogues within the surgical teams were nonexistent, and a risk of fragmented care was evident. ORNs professional skills should be mandatory resources in planning for the patients' surgery.

**Key words:** operating room nurse, information, electronical, leadership, teamwork.

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## CUSTOMIZATION OF A TOOL TO ASSESS NON-TECHNICAL SKILLS OF SCRUB PRACTITIONERS IN DENMARK

**Mundt Anna**  
**Denmark**

OP113

**Anna Sofie Mundt, Lene Spanager, Helle Teglgard Lyk-Jensen, Doris Oestergaard**

**Background:** To enhance patient safety and minimize surgical errors in the operating room it is important to train non-technical skill (NTS) as well as technical and medical skills. The Scottish developed Scrub Practitioners List of Intraoperative Non-Technical Skills (SPLINTS) is used to assess and provide structured feedback on scrub practitioners' NTS (1). Due to differences in culture between Scotland and Denmark an adaptation of SPLINTS was needed (2). The aim of this study was to adapt SPLINTS for use in Denmark as SPLINTSdk.

**Methods:** Four mono-disciplinary group interviews with scrub practitioners, surgeons and anaesthesia staff (n=21) were conducted at two university hospitals in the Capital Region of Denmark. Data were transcribed and analysed in the research group and, where needed, behavioural markers were reformulated or new ones written.

**Theoretical framework:** Literature suggests that it is not enough to literally translate a questionnaire or tool developed in another culture to ensure validity. It is important to customize tools for assessing behaviour to ensure that the tools fit the context in which they are to be used (3).

**Results:** The order of elements was changed and one new element called "supporting others" was added. Main changes related to the scrub practitioners' focus on the team, involvement of the patient in information gathering, and speaking up in a timely manner in times of uncertainty.

**Conclusion:** A behavioural marker system for scrub practitioners and circulating staff in Denmark, SPLINTSdk, was adapted from SPLINTS developed for scrub practitioners in Scotland.

Implications for perioperative nursing: SPLINTSdk can be used to assess and provide structured feedback on NTS for scrub practitioners and circulating staff in a simulated environment or in clinical practice. This can be the first step towards integrating NTS in training programmes for scrub practitioners and circulating staff in Denmark.

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## A SURVEY TO DETERMINE NURSES KNOWLEDGE AND ATTITUDES



## OP114

### TOWARDS ACUTE POST-OPERATIVE PAIN MANAGEMENT IN A PERIOPERATIVE SETTING IN IRELAND

**Pushpan Puja**  
**Ireland**

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**Background/Purpose:** Despite hospitals having Acute Pain Management Services (APS), post-operative pain management in a perioperative setting continues to be a major challenge for perioperative nurses. Acute pain after surgery is often undertreated. Though many studies have been conducted at an international level examining nurses' knowledge and attitudes towards pain management, a limited number of studies have been conducted in the perioperative setting. The present study was an attempt to address this gap in research.

**Theoretical Framework:** By surveying perioperative nurses' current knowledge and attitudes towards post-operative pain and its management the factors that determine nurses' knowledge and attitude towards pain management in a perioperative setting can be identified.

**Method:** The consecutive sampling method was used to select respondents from 120 perioperative nurses working in the Operating Theatre in a large Dublin teaching hospital. A modified version of Knowledge and Attitudes Survey Regarding Pain (KASRP) by Ferrell & McCaffery (2012) was used. Descriptive statistics were used to determine total score and ratings of individual items.

**Result:** Merely 4% of the nurses obtained a passing score of 80% or more. Out of the total score of 31, the overall mean score respondents obtained for the KASRP tool was only 18.55 (59.6%). Perioperative nurses' erroneous beliefs and knowledge deficits were evident in the area of theoretical knowledge of pain, pain assessment, and pharmacokinetics of opioids. Discrepancies between nursing practice and attitudes were evident in the present study.

**Conclusions and Implications:** Continuing education regarding pain management for patients after surgery remains important for nurses. Adoption of evidence-based practice requires ongoing education programs. Data from this study are being used to design and implement an evidence-based curriculum involving content about pain and pain management in patients after surgery. A multidisciplinary team approach to manage postoperative pain is viable.

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FREE Papers





PARALLEL A5 PERIOPERATIVE/CLINICAL PRACTICE

FP01

**SURGICAL NURSES' PREOPERATIVE PATIENT EDUCATION PRACTICES**

**KURŞUN Şerife**  
Turkey

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**Background:** Patient education is the combination of learning experiences that protects patients' health and helps to change their behavior. Its purpose is to help enhance patients' abilities to make decisions about health and health care by correcting their behaviors and enabling them to cope with diseases (1).

**Aim:** This study was conducted to evaluate the current preoperative patient education practices of nurses in surgery clinics and to determine these nurses' views about and suggestions for patient education.

**Method:** This descriptive study was carried out with 94 nurses in the surgery clinics of a medical faculty hospital in Konya. The data were collected using a survey form evaluating the nurses' demographics and patient education practices. The data were summarized as numbers, percentages, averages and standard deviations.

**Findings:** Of the participants, 56.4% were high school graduates, and the duration of their employment was 59.02±41.05 months on average. Of the surgical nurses, 93.6% provided preoperative patient education, and 94.3% of those nurses also included the patients' relatives in this education. It was determined that among the preoperative education subjects, the information that was provided most was about denture, prosthesis and makeup removal, or preoperative routines (100%), and the information provided least was about premedication (63.6%) and the attendants of the surgical operation (63.6%). It was also found that 33.0% of the nurses used education materials, and all of those nurses utilized brochures and manuals.

**Conclusion:** The study determined that most of the nurses provided preoperative patient education and the ratio of including the patients' relatives in this education was high.

**Implications of perioperative nursing:** The preoperative education carried out before surgical intervention makes significant contributions to patients' knowledge about what will happen in each phase of the surgical intervention, their physical and mental well-being and positive surgery results

**Keywords:** preoperative care, patient education, surgical nursing

**Reference:**

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## NURSES THINKING OUT OF THE BOX ONTO THE SCREEN- COMMUNICATION BETWEEN POST-DELIVERY MOTHER IN PACU AND NEWBORN

**FP02**

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**Israel**

**Essuied Judith, RN BSN**

**Hadassah Ein Karem Medical Center, Jerusalem, Israel**

**Introduction:** One of the well known methods for long distance communication is the use of televised video conference (VC) or telemedicine. Using VC as a support in cases of early discharge after childbirth can facilitate a meeting that makes it possible for new parents to be guided by the midwife in their transition into parenthood.

Currently, post caesarian section mothers in Hadassah University Hospital are transferred from OR into PACU and spend hours before being able to see their newborn. OR, PACU, Maternity and Newborn nurses searched for a solution to facilitate earlier connection between post C-section mothers and their newborn.

**Aim:** To design and validate a project to improve post partum mothers' coping process with the separation from her newborn.

**Method-** Mix quantitative and qualitative investigating mothers' immediate post partum needs for communication with their newborns. Questionnaire analysis reveled the primary need is connection and communication. Nursing team developed VC system between PACU and newborn unit including nurse-mother instruction. Mothers were queried regarding their VC experience.

**Results-** 29 mothers completed need questionnaire prioritizing their needs from most important to least important. Almost 50% of the participants prioritized the need to see their newborn was the top most important priority.

10 mothers were interviewed after videoconference with their newborn. Eight themes were found: revelation, calming effect, closer look at the baby, video better than picture, excitement, short timing sufficient, provided strength and confidence.

**Conclusion-** The nursing team successfully coordinated high tech up to date technology to the hospital setting for the goal of filling mothers' needs. After evaluation of mothers' impressions it was found that this technology is adaptable to hospital setting and post delivery environment. Most importantly, this method contributes to post partum mothers improved well being.

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## FP03

### EVALUATION OF SLEEPING QUALITY OF PATIENTS IN SURGERY CLINIC

**Özbayir Turkan**  
Turkey

This study carried out to evaluate the sleeping quality of patients who are in the Surgery Clinic. The study made between 02.03.2015-29.06.2015 in Ege University Medical Faculty Surgery Clinic with 160 patients who are accepted to participate. While gathering the data Pittsburg Sleep Quality Index (PAQI) for validity and for reliability used by Buysse et al. (1989) and in our country Agargün et al. (1996). Pittsburg Sleep Quality Index' s 18 clause has been grouped as 7 components points. Sum of 7 components points if equal to 5 or above then the sleeping quality stated as bad. In estimation of the data frequency, percentage, mean, standard variation, Wilcoxon, Mann Whitney U and Kruskal Wallis tests are used. For feasibility of the study written permissions of ethical committee (2015/22) and hospital acknowledged and also verbal permission of patients acknowledged.

Patients who attended the study were 50.6% female and 49.4% male. 67.5% of the patients said they had no sleeping problems before hospitalisation, 56.2% of the patients said they had sleeping problems after hospitalisation. Patients (PSQI) mean after hospitalisation is (8.04±4.51), before hospitalisation PSQI mean was more then (4.64±4.71). In 115 patients (PSQI) mean increased after hospitalisation. After hospitalisation high (PSQI) mean showed sleeping quality reduction. Reduction of sleeping quality in patients caused by hospital factors (noise, temperature, light) and worry, fear. Therefore these factors must be controlled.

**Key Words:** Sleep; Nursing; General Surgery; Sleep Quality

## FP04

### OBJECTIVES AND TASKS OF GENERAL STANDARDS OF CLINICAL NURSING CARE IN OPERATIVE NURSING AREA

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Poland

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Operating theater is a place where quality of care is of particular importance. Compliance with standards ensures an adequate level of care.

General standards of nursing clinical care in operative nursing area is a Resolution No. 277 / VI / 2014 of the General Council of Nurses and Midwives in Poland. These documents described the activities of OR nurses / midwives, describing the characteristics of their work. They were developed by members of the Committee of Operative Nursing at the District Chamber of Nurses and Midwives in Lublin.

**The aim** of work is present the role of the general standards of nursing clinical practice in operative nursing area.

They show the following areas of work nurses operating



- area connected with the work as a nurse / midwife operating instrumentuļācej (related to nursing-assisted treatment)
  - area connected with the work as a nurse / midwife operating helping (the nurse assistive instrumentuļācej)
  - area to ensure the broad sense of safety to the patient and the surgical team,
  - area of the employee's duties do not require contact with the patient, or other members of the surgical team concerning the employment duties performed during the hours of the afternoon and night
- Conclusions: The paper described the objectives of the standards: adaptive, informative and easy to quality and human resources management

**Keywords:** standards, OR nurse, operating theatre

## ADVANCED PRACTICE NURSING IN THE OR: THREAT OR OPPORTUNITY?

**Schellekens Wivine**  
**Belgium**

FP05

Advanced Practice Nursing (APN) has generated considerable commentary, some professionals look upon APN with a sceptical eye. Nevertheless, APN « reflects a more vertical movement encompassing graduate education within nursing » (Hamric 2014, p.1)<sup>1</sup>. APN can be defined as: « The patient-focused application of an expanded range of competencies to improve health outcomes for patients and populations in a specialized clinical area of the larger discipline of nursing. » (Hamric 2014, p.71)<sup>2</sup>.

APN encompass Clinical Nurse Specialists and Nurse Practitioners. The terminology may vary depending on the country or the context. A quick overview of the differences in terminology, training and recognition will be made.

Through an example of patient's care undergoing a Deep Brain Stimulation in neurosurgery, the role and core competencies of the OR Clinical Nurse Specialist (CNS) will be illustrated. In Belgium, the areas of OR CNS practice lay in: management of complex care in the OR, educate and support interdisciplinary staff and facilitate change and innovation within the perioperative nursing care system.

In Belgium, as in the other European countries, nurse's landscape is changing. New opportunities but also new threats emerge. Nurses, through their professional associations, must remain vigilant so that future nursing care could fit their vision/ideals.

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## FP06

### TO ERR IS HUMAN

**Bagaoisan Cora**  
**Canada**

*Building a Safer Health System for the Surgical Patient Population*

**Rose Puopolo, RN, MN, CPN(C), Cora Bagaoisan, RN, MSN**

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As humans we all make errors. Just as errors can happen anywhere, anytime, errors can also be prevented. The problem in healthcare is that errors may lead to negative impacts on our patients. Building a safer system means designing processes and developing standards of care to ensure a patient's journey is safe from accidental injury. It should be of pivotal focus in healthcare as financial reimbursement may be soon all be based on successful patient outcomes.

Mandated by the Chief Executive Officer, the initiative of building high reliability organizations (HRO) has shifted the approach at UHN from the traditional hierarchical boundaries and the culture of blame, to a systems approach where a cause analysis is used when examining issues. It has leveled the playing field. Most importantly, leaders now need to focus their safety designs on systematic processes of care with the end goal of achieving 'never events.'

At University Health Network Operating Rooms, a group of nursing leaders gathered to examine surgical count practices in the 45 operating rooms. The incidence of retention of foreign bodies (RFB), lost sutures and general incorrect counts have risen in the past few years. The complexities of our cases, the expected fast paced turnovers and the lack of respect for surgical counts from all members of the surgical team may be the contributing factors. Focus groups and a written needs assessment conducted by the Patient Care Manager and the Advanced Practice Nurse Educator among the perioperative nursing staff at Toronto Western Hospital (TWH), raised issues pertaining to inconsistencies in documentation, variation in practices and great interpretation of the Operating Room standards.

This presentation will briefly highlight the processes undertaken in addressing our issues identified by perioperative nursing team pertaining to the count leading to the development of our first Standard Operating Procedure for surgical counts.

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Preferred Type of Presentation: Oral

Topic: Patient Safety/Perioperative/Clinical Practice

**Key words:** High Reliability, Never Events, Retention, Hierarchy, Culture, Standards

### GETTING A HANDLE ON LOAN INSTRUMENTATION

**Nicholson Patricia****Australia****FP07***School of Nursing and Midwifery, Deakin University*

*Management of Instrument Loan Sets and Reusable Medical Devices Standard Development Team  
Led by Dr Patricia Nicholson including team members Louise Grant, Tracy Kerle, Scott Landall  
and Angela Hand*

**Key Words** Reusable medical devices; loan sets; consignment sets; loan set management

**Background**

The use of loan equipment has become common practice for healthcare service organisations (HSOs) as a result of improved surgical technology and sophistication of procedures with rapid changes in instrumentation and implantable components (Haas, 2011; Huter-Kunish, 2009; Queensland Health, 2013; Seavey, 2013, 2010). There are many reasons for HSOs borrowing equipment including inadequate storage space, infrequently performed procedures and the high cost of purchasing surgical instrumentation, resulting in an increased reliance on loan equipment (Haas, 2011; Queensland Health, 2013; Seavey, 2011, 2010).

The increased use of loan equipment creates a number of challenges for HSOs, including loan equipment arriving too late for correct processing prior to use or contamination of loan equipment with foreign material on arrival at the HSO (Duro, 2011; Huter-Kunish, 2009; Queensland Health, 2013; Seavey, 2011, 2010), resulting in cancellations, delays or prolonged surgical procedures. There are also a number of financial risks associated with the use of loan equipment. Therefore, a well-defined loan equipment management program and a multidisciplinary policy on the management of loan equipment, with particular emphasis on packaging, transporting and handling, is required to minimize patient and personnel risks and ensure quality patient outcomes (Duro, 2011; Haas, 2011; Festa & Young, 2011; Huter-Kunish, 2009; Queensland Health, 2013; Seavey, 2011, 2010).

**Focus of interest**

A team of perioperative nurses were involved in the redevelopment of the Australian College of Operating Room Nurses Standard 'Management of Loan Equipment', which was guided by contemporary evidence-based literature. This presentation will include an overview of the standard that has been developed to assist HSOs formulate and implement a loan instrument program, taking into consideration patient safety issues and ethical responsibilities regarding handling and sterilization of loan sets and reusable medical devices. A videoclip of a program that has been successfully implemented in a major organisation will be included in the presentation.

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Preferred presentation: Oral



## FP08

### Turkey

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Organ transplantation is the operation of transferring a person's organ to another who is in need for treatment purposes. The purpose of the organ transplantation in the clinical practice is to increase the life quality of the patients with end stage organ failure, extend their life span, treat the disease, and decrease their mortality and morbidity rates.

Having brought a new treatment method for those who have lost the functionality of their organs and tissues due to several reasons, organ transplantation becomes a ray of hope for those individuals to regain their health. Being the only way out in the treatment of some diseases, organ transplantation is assessed as a special issue that requires to be discussed ethically as the source of these organs is humans.

Actions that emphasize the morality of the humankind constitute the subject of ethics and its primary goal is to determine the most correct moral values as well as the actions shaped by those. From this perspective also, the ethical four principles are very important for organ transplantation because while the purpose of organ transplantation is defined as the principle of providing a benefit especially for the transplant patient according to these ethics and ethical principles, another principle aim is non-maleficence in the implementation of a complication-free transplantation on both the living donor and the transplant patient. The subject of the principle of respect to the patient autonomy is to receive the necessary consents of the patients to be transplanted, living donors and the relatives of cadaveric donors, whereas the fourth principle of ethics, justice is about implementation of transplantation without any profit motive for the patient that is really in need of transplantation and transplantation of the donated organs to the most suitable recipient by the national coordination system according to medically emergency states and tissue compatibility.

Consequently, organ and tissue transplantation is a medical treatment method that aims to rescue human life. Accordingly, the limits acceptable to the ethical understanding in providing the organ without neglecting the purposes of the organ transplantation should be drawn in favor of the patient.



## PARALLEL C5 SCIENTIFIC RESEARCH

## INJURY STATUS AND INFLUENCING FACTORS IN THE OPERATING ROOM STAFF

FP09

**Aydin Sayilan Aylin**  
**Turkey**

**Ebru DERELİ<sup>1</sup>, Aylin AYDIN SAYILAN<sup>2</sup>**

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This study did in private hospital operating room in the health care workers employed in the incidence of injuries, surgical instruments, the factors that cause injuries and health workers in the prevention of injury and the knowledge of the application after the injury, is scheduled descriptive research to identify the skills and practices.

The research did between 1 April and June 1, 2016, according to a questionnaire prepared by the researchers examined the source has been applied to, 20 doctors 16 nurses and 11 cleaning staff is working in the operating room. means and frequency analysis in analyzing the resulting data, the Chi-square test was used to compare the groups. Meaning level is determined as  $\alpha = 0.05$ . According to the data obtained from the study evaluation; during the professional life of 47% of the operating room staff where injury at least once; General Surgery department in the event of injury, most (56%) experiencing this chapter and Orthopedics (35.4%) and Neurosurgery (35%) showed the sections.

Most piercing-penetrative injuries with 63% experiencing a tool in the study; 35% of doctors that suture needle when disposing of immersing himself injured; 54.7% of the nurses needles or instruments or when they are injured, while the results do not rush; cleaning staff said they wounded while collecting the most waste.

Participants are a very small part (3%) were reported for injuries; 67.8% of those who reported that nurses; 26.4% of nurses and the cleaning staff taking hepatitis B vaccine; and operating is during exceed 3 hours of surgery, while requiring urgency; late at night or being done in the morning, more than the number of people in the operating room; insomnia, fatigue, breakfast failure, injury was found to increase the level of stress in operation. In addition, adequate rest, surgery was shown to reduce the injuries and the motivation is properly ventilated.



## FP10

### EFFECT OF A BRIEF TEAM TRAINING PROGRAM ON SURGICAL TEAMS' NON-TECHNICAL SKILLS: AN INTERRUPTED TIME-SERIES STUDY

**Gillespie Brigid**  
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#### Authors

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#### Background

Up to 60% of adverse events in surgery are the result of poor communication and teamwork. Non-technical skills (NTS) are critical to the success of surgery and patient safety.

#### Objectives

The study aim was to evaluate the effect of a brief team training intervention on surgical teams' observed NTS.

#### Method

Pretest-posttest interrupted time series design with statistical process control analysis was used to detect longitudinal changes in surgical teams' NTS. We evaluated NTS using the revised NOTECHS weekly over 20-25 weeks before and after implementation of a team training program.

#### Results

We observed 179 surgical procedures with cardiac, vascular, upper gastro-intestinal, and hepatobiliary teams. Mean posttest NOTECHS scores increased across all teams, showing special cause variation. There were also significant improvements in the use of the Surgical Safety Checklist.

#### Conclusions

Our results suggest an association between the team training intervention and improvements in surgical teams' NTS.

#### EMPIRICAL RESEARCH

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## EDUCATION GIVEN BY A NURSE TO PREVENT DEEP VEIN THROMBOSIS INCREASES THE KNOWLEDGE LEVEL AND SELF-CARE APPLICATIONS OF PATIENTS

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The research has been conducted to evaluate the effect of training provided by the nurse on patients' realisation of self-care applications aiming to prevent deep vein thrombosis (DVT) and on their knowledge about DVT. The trial group was composed by 40 patients taking treatment at a university hospital's general surgery, urology and at thoracic surgery clinics. As data collection tools; Autar DVT Risk Identification Scale, questionnaire for getting to know patient characteristics, DVT information defining form, self-care applications specification form relating to DVT information and satisfaction form for DVT education have been used. Each patient was given a training before getting in surgery by using the illustrated booklet prepared by the researcher. The level of information patients had about DVT was determined before and after the training. In addition, the situation of patients as to their applying what are necessary for preventing the formation of DVT was determined after the surgery. It was determined that 5.0% of patients knew about DVT before getting training and 95.0% knew about it after getting training. It was found out that the DVT average information score of patients increased. There was a meaningful statistical difference between DVT average information scores of patients before and after getting training ( $p=0.00$ ). Self-care application scoring averages of patients was found to be  $8.8 \pm 2.3$  from out of 13. All of the patients showed the nurse as the source of information obtained about DVT and they recommended that the trainings should also be given to other patients. Most of them were very satisfied from training. This research has revealed positive results of patient attendance of their own care that they educated with an effective method. Additionally, this study has introduced a new facility prepared by nurse to scientific information.

**Key Words:** Deep vein thrombosis, patient education, surgery, perioperative care, nursing care

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## FP12

### A MEASUREMENT TOOL IN ORDER TO DETERMINE DISTRESS: DISTRESS THERMOMETER SCALE

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Preoperative distress affects individuals psychologically as well as physiologically and sociologically. The study was conducted that patients will have surgery to determine distress of evaluate the usability of the Distress Thermometer Scale. The study was conducted with 200 patients who were admitted to surgery services for operation. The data were gathered using questionnaire, Distress Thermometer, Hospital Anxiety and Depression Scale (HADS), SF12 Short Health Scale and list of reasons of distress one day before the surgery. The average distress score of the patients was  $4.7 \pm 2.5$ , and it was determined that the distress levels about half of them were above this average. When HADS-A was taken as a measure according to the ROC curve 69.2% sensitivity and 58.3% specificity and a cutoff point of five or more on the DT was determined and when HADS-D was taken as a measure taken according to the ROC analysis 70.5% sensitivity and 59.3% specificity and a cutoff point of five or more on the DT was determined. It was determined that 88.5% of patients stated between 0 and 10 causes of distress while 11.5% of them mentioned 11 and above causes of distress. Some of the reasons expressed most often as causing distress for patients were getting an infection after surgery, feeling cold after surgery, and the inability to move freely. The Distress Thermometer can be used in patients who will have surgery to determine distress levels; but cut point should be determine again for each sample. The list of causes of distress which developed in this study can be used to identify factors that cause distress in patients. HADS was used as a criterion for DT in this study; the device can be retested by using different distress scales together.

**Key Words:** Surgery, distress, pre-operative, nursing care.

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## THE EFFECT OF COLD APPLICATION APPLIED ON MEDIAN STERNOTOMY BEFORE DEEP BREATHING AND COUGHING EXERCISE ON THE STERNOTOMY PAIN

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It was aimed to determine the effect of cold application applied on median sternotomy before deep breathing and coughing exercise (DBCE) on the sternotomy pain.

The study was carried out quasi-experimentally with patients who have median sternotomy. The study data were collected through data collection forms, numerical rating scale, pulse oximetry, blood pressure monitor and tape recorder. Having been carried out at 4 stages, on the first and third stages of this study, cold gel package was not applied on sternotomy incision before DBCE; however, on the second and fourth stages of the study, cold gel package was applied on sternotomy incision for 15 minutes. The patients were asked about the severity of their pain before and after DBCE. During the process of cold application, the patients were asked about the sensation of coldness. The data were analyzed via descriptive statistics, Mann Whitney U, Wilcoxon and Fried tests.

Any statistically significant difference was not found between the surgery type and before and after DBCE pain scores belonging to all stages. A statistically significant difference was determined between the post-DBCE pain scores belonging to first and second stages. Post-DBCE pain score belonging to second stage was found to be lower than the post-DBCE pain score belonging to first stage. A statistically significant difference was found between the post-DBCE pain scores belonging to third and fourth stages. Post-DBCE pain score belonging to fourth stage was found to be lower than the post-DBCE pain score belonging to third stage. It was determined that 90% of the patients felt relaxed after cold application, 85% of them preferred cold application before DBCE and they wanted to try it again, 95% of them suggested the cold application to other patients.

It was found that cold gel package application is effective for the sternotomy pain associated with DBCE.

**Key Words:** Sternotomy, pain, deep breathing and coughing exercise, cold application



## FP14

### NURSES' AWARENESS AS A RESULT OF SHORT TERM STOMA BAG LIFE EXPERIENCE

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This is a quasi-experimental study conducted for raising awareness about being a patient with stoma in nurses working in surgical services where intestinal stoma is opened in Balcalı Hospital, Çukurova University. The stoma bag was inserted after applying "Introduction and Evaluation Form" which involved 11 questions was developed by the researcher via face-to-face interview technique with the nurses participating in the study and administering "Pre-test Form" consisting of 4 questions After studying with stoma bag, whose 1/3 was filled with water, for 6 hours.

After the bag is removed and "Post-Test Form" were applied. "Post-Test Form" involving 4 questions in the pre-test and 6 question about the first feelings and causes after application of stoma bag, the most intense feelings, experienced difficulties and coping methods during the process having the bag,. "Post-Test Form" consists of 10 questions in total.

In nurses' evaluation of first three feelings that the patients were experiencing before and after the life experience of using stoma bag for a short time; the difference between the exclusion feeling scores was found to be highly significant ( $z=-3.411$ ;  $p=0.001$ ). In the evaluation of the nurses for the question "will you share the information that you have stoma with your friend if you were a person with a stoma" before and after the stoma bag life experiment, the difference was determined to be statistically significant ( $z=-2.000$ ;  $p=0.001$ ). The difference between the evaluation scores for the patients to cope with their stomas before and after the application was observed to be highly significant ( $z=-4.724$ ;  $p=0.000$ ).

**Keywords:** Intestinal stoma, Awareness, Nursing, Experiences, Challenges

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## SURGICAL PATHOLOGY MATERIAL MANAGEMENT IN OPERATING ROOM: A POINT PREVALANCE SURVEY

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# FP15

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**Key words:** Surgical material management; material management, surgical pathology

**Background:** The surgical pathology material management is an essential part of patient safety in operating-room because the specimens of the pathologic findings in tissues or organs removed from patients are used for diagnosing the disease. Despite the importance of the surgical pathology material, effective management was still not realized.

**Objectives:** Identifying patient and material information in an electronic format, providing the right and rapid transportation in the appropriate size of container with enough protector solutions, also ensuring information security and similar practices should be included in the surgical pathology material management systems. The aim of this study is to observe the practice of surgical pathology material management in an education and research hospital.

**Data Sources:** Recommended practices of Association of Perioperative Registered Nurses (AORN) about surgical pathology material management was reviewed and a questionnaire form was prepared and conducted by the researchers in an education and research hospital operating room. One-day survey of surgical pathology materials are comprised of 4 excisions, 10 resections a total of 14 specimens in the point prevalence survey.

**Results:** No process is used for surgical pathology material management by the hospital. Identification of patient and material information is done in an electronic format. Even if the right placement to the appropriate size of container with protector solutions is provided, its not transported rapidly. Also specimens have been held in a shelving unit at room temperature for about 20 to 23 centigrade degrees in the operating room.

**Conclusions:** The result of this study scientifically proved that necessary practices for effective surgical pathology material management in the operating room are insufficient.

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## FP16

### DOES COMPASSION LEVEL OF SURGERY NURSES DIFFER?

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**Keywords:** Nursing, care, compassion, demographic properties.

#### **Background**

Nurses are working in the workplace having many individuals need to care and compassion. For this reason, it is required to measure compassion levels in order to define and to manage factors affecting compassion of surgery nurses.

#### **Purpose**

In the research, it was aimed to examine change of compassion levels of surgery nurses and their differences based on demographic properties, and evaluate in which demographic properties compassion levels are higher.

#### **Methodology**

The research is a methodological research, and performed during April-May 2016 time period. In the research, Compassion Scale developed by Pommieer (2011) and validated to Turkish language on university students by Akdeniz and Deniz (2016) was applied to 236 nurses working at different hospitals in the West Side of Istanbul City. Scale has 24 items and six subscales (self-kindness, negligence, share awareness, isolation, mindfulness and disengagement) with five likert type structure.

#### **Results**

Most of participants of the research were female, under 30 age, high school and university graduated, and single nurses (69,5%). According to gender, self-kindness, share awareness, mindfulness, disengagement and total compassion levels were higher in male participants, whereas negligence and isolation were higher in female participants. According to gender, only self-kindness level differences of participants were statistically significant ( $p<0,05$ ). According to marital status, negligence levels were higher in married participants, and all other factors were higher in single participants. All factors have no statistical significant differences based on marital status ( $p>0,05$ ). For age, self-kindness, share awareness and mindfulness levels were higher in the 41-50 aged group; isolation was higher in the 50 and over aged group. Self-kindness, share awareness and mindfulness share level differences were statistically significant ( $p<0,05$ ). Based on education, self-kindness was higher in high school graduates; mindfulness was higher in doctorate graduates and other factors were higher in the university graduates. Only share awareness factor difference was significant based on education levels ( $p<0,05$ ).

#### **Conclusion**

According to results of the study, compassion levels of nurses differ based on age, and do not change based on other demographic parameters of the research.

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## THE BENEFITS OF INTERNATIONAL COOPERATION FOR HIP FRACTURE PATIENTS CARE IMPROVEMENTS

**FP17**

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**Introduction.** Hip fracture is a growing problem all over the world (1,2) and a number of research projects including register studies have been performed on those patients group aiming to improve outcome (3,4,5,6). International cooperation between Lund University Hospital (Sweden), having ample experience in hip fracture patients care, and Kaunas university Hospital (Lithuania), which was less experienced in the field, resulted in changes of historical hip fracture patients care in Kaunas and subsequent analysis of the achievements (7,8,9). Based on this cooperation Fast track protocol (FTP) was introduced and scientifically evaluated in Kaunas.

**Materials and methods.** We investigated 138 hip fracture patients, treated according FTP and compared with 97 hip fracture patients treated in institution before FTP introduction. Information about the following procedures after patients' arrival was collected: pain and use of analgesics, infusion therapy, oxygen therapy, blood test sampling, electrocardiography registration and fractured hip immobilization. All patients after the FTP introduction were aimed to be operated within 24 hours after admission. Information about the mean time period from admission to surgery, length of stay in the hospital was collected.

**Results.** After the intervention the significant changes in use of immobilization ( $p < 0.001$ ), blood sampling ( $< 0.001$ ), infusion therapy ( $< 0.001$ ), electrocardiography registration ( $< 0.001$ ) were registered. However, changes in patients' pain reliever were not significant. Before the intervention the mean time from admission to surgery was 64 hours (range 2-355), as compared to 39 (range 1-385) hours, after the intervention ( $p < 0.001$ ). The mean length of stay in the hospital before the intervention was 11.5 (SD 6), compared to 10 (SD 4) days after the FTP introduction ( $p = 0.02$ ).

**Conclusion.** International cooperation led to hip fracture patients care improvement. Also the significant reduction of time period before the surgery and length of stay was achieved.

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**Key words:** hip fracture, fast track, patients care, international cooperation.

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## PARALLEL DS LEADERSHIP/MANAGEMENT & PATIENT SAFETY

**FP18**

### THE CLINICAL AND ECONOMIC EFFECTS OF POST-OPERATIVE DELIRIUM IN THE ELDERLY PATIENT AND INTERVENTIONS TO REDUCE THE OCCURRENCE OF DELIRIUM

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**Key Words:** elderly patients, pain management, postoperative delirium, delirium prevention.

Elderly patients requiring surgical intervention frequently have multiple comorbidities which complicate their perioperative care and these comorbidities increase the patient's risk for postoperative delirium.<sup>1</sup> Delirium is caused by any disruption of communication between the neurotransmitters and nerve cells.<sup>2</sup> Surgical team members should consider post-surgical problems of elderly patients' when developing the perioperative care plan, specifically including a multimodal approach to pain control and risk reduction strategies for delirium prevention.<sup>3</sup>

The United States (US) Census Bureau and the European Commission (EU) have published reports describing the 2030<sup>4</sup> and the 2060<sup>5</sup> population projections, specifically noting an increase of people over 65 years of age which is expected to increase the health care and long term care costs in the US and Europe.<sup>4 5</sup> Currently in the US, one-third of all surgery patients are over 65. According to the American Geriatrics Society Expert Panel on Postoperative Delirium in Older Adults, the estimated annual cost in the US from patients who have had adverse effects from delirium is estimated at \$150 billion annually, and they further note that clinical interventions could have been used to prevent delirium in 40% of patients who experienced delirium during their hospitalization after surgery.<sup>6</sup>

Besides the economic implications from patients who experience delirium during their hospitalization, delirium is also associated increased mortality or poor long term outcomes to the patients.<sup>6</sup> Delirium is



the most common complication for those 65 and older and for patients having certain surgeries can affect up to 60% of patients.<sup>2</sup> Research has shown when following post hip replacement or cardiac surgery patients who develop delirium during their hospitalization were twice as likely to experience a decline in activities of daily living and at high risk for long term care,<sup>7</sup> compared to patients who had the same surgery without an episode of delirium.<sup>6</sup>

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## FP19

### FROM TUTORS' FEED-BACK TO SELF-REGULATED FEED-FORWARD: EFFECTS OF VIDEO-ANNOTATED FEEDBACKS IN PERIOPERATIVE NURSE TRAINING

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#### Abstract

Video-based analysis of practices is a powerful means to provide effective feedbacks. In particular, video annotation enables evidence-based and focused reflections thus reinforcing such an effectiveness (1-3) and fulfilling their conditions of usefulness (4-5).

In the domain of the training for perioperative nurses in Switzerland, a pilot study explored the affordances and the effects of video-based and video-annotated feedbacks on tutee's reflectivity skills and tutors' quality of feedbacks.

One perioperative nurse student (tutee) and two couples of tutors have been involved in four debriefing sessions subsequent to four video-recorded surgical operations. The first couple of tutors worked in a video-based condition, the second couple further included video-annotations. The tutee progressed on a continuum from not watching the video, watching it without annotation and finally annotating it with her own analysis. Content analysis of the debriefing sessions based on a grid developed on Hattie & Timperley's framework (6) were conducted to assess the quality and the type of feedbacks. Interviews with the participants investigated their acceptance and perceived usefulness. Results show that firstly the use of video and moreover the use of video-annotation changed tutors' a) feedback contents and b) communicative style. Respectively, tutors shifted from a mostly nonspecific and corrective feedbacks to more valuable and evidence-based supportive ones; they moved from assertive tutor-centered debriefing session to a student-driven self-evaluation. As a result, the tutee acceptance and integration of feedbacks augmented, as did the self-analysis of her own practice and the capacity of proactively proposing self-regulated reflections. This contributed to shifting from reflection on action to reflection for future action, proposing feed forward (4) issues to improve next practices. Video-based and video-annotated feedbacks results therefore to be beneficial for reflective competence development and for the quality of feedbacks in perioperative nurse training.

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## THE VALUE OF GUIDED OPERATING ROOM EXPERIENCE FOR UNDER-GRADUATE NURSES

**FP20**

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### **Purpose of the research**

Since the removal of perioperative nursing from the core undergraduate curriculum questions have been raised regarding the acquisition of surgical knowledge to support best patient care outcomes. This national research project investigated this issue.

### **Method**

Methodology for this doctoral research was a fixed mixed methods paradigm incorporating a triangulated/convergent parallel design. Qualitative data was collected from across Australia investigating undergraduate nursing students' comment about their time in the operating suite or lack thereof; transferable skills learned in the OR that may assist them in surgical nursing, and their attitudes towards possible future employment in the operating suite. Quantitative data was collected concurrently from students who participated in differing models of OR education. Knowledge testing was undertaken on areas surrounding pre and post-operative surgical ward nursing. Participants' results were compared to the model of OR education students' had participated in to determine if there was a correlation between their OR education and students' knowledge of surgical ward nursing.

### **Findings**

Findings revealed undergraduates nurses receiving guided operating theatre experience had a 76% pass rate compared to 56% with non-guided or no experience ( $p < 0.001$ )(1). Graduate nurses were re-tested after their first year of nursing to see if their undergraduate deficits had been rectified. Graduate nurses with guided operating theatre experience as undergraduates or graduate nurses achieved a 100% pass rate compared to 53% with non-guided or no experience ( $p < 0.001$ )(1). The research informs us that undergraduate nurses achieve greater learning about surgical ward nursing via guided operating room experience as opposed to surgical ward nursing experience alone.

### **Implications**

These results support the belief that OR experience supports greater knowledge of surgical nursing care. Transferable skills learned via OR experience included pain management, patient education, pre and post-operative care and asepsis. Recruitment of nurses can be fostered during guided experience and retention of current staff increased.

1. Foran P. Undergraduate surgical nursing preparation and guided operating room experience: A quantitative analysis. *Nurse Education in Practice*. 2016;16(1):217-24.



## FP21

### THE PERCEPTION OF PATIENT SAFETY CULTURE AMONG SURGICAL NURSES

**Erturk Melek**

**Turkey**

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**Objective:** This study was conducted to determine surgical nurses' perception of patient safety culture.

**Method:** The study was conducted by totally 206 nurses working in the surgery departments of four hospitals (one university and two state and one private) who approved to participate in this descriptive study. The "Questionnaire Form" and the "Hospital Survey on Patient Safety Culture" were used as data collection tools.

**Results:** Average age of the nurses was 29.0±6.6 years; and 64.9% of them had undergraduate degree and 50.5% worked in state hospitals. General average of the positive responses in the Hospital Survey on Patient Safety Culture was 46.5±20.4% (Min: 12.7%, Max: 85.8%); it was 51.1±17.3% in the university hospital, 47.3±26.5% in the private hospitals and 43.2±25.6% in two state hospitals. When the survey was analysed, we determined that the highest positive response percentage averages belong to the subscales of "Teamwork within unit" and "Feedback and communication about errors" whereas the lowest positive response percentage averages belong to the subscales of "Non-punitive Response to Error" and "Frequency of Error Reporting". As for the main reason for making medical errors; 94.2% of the nurses blamed the high number of patients per nurse, 87.9% fatigue and stress due to prolonged working hours and 56.8% carelessness, negligence and lack of sleep.

**Conclusion:** The perception of patient safety culture of the enrolled nurses was determined to be at moderate levels. In-service trainings should be held and working conditions and shift hours of nurses should be improved to develop patient safety culture.

**The implications for perioperative nursing:** Patient safety culture constitutes an important component of patient safety. This present study provides information on the perception of patient safety culture of surgical nurses.

**Keywords:** medical error, patient safety, patient safety culture, surgical nursing.

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## THE EFFECT OF TRAINING PROVIDED FOR PATIENTS WITH INTESTINAL STOMA ON CARE DEPENDENCY

**FP22****Ozer Nadiye****Turkey****Oral Erdağı S.\*, Özer N.\*\*****\*:Kafkas University, \*\*:Atatürk University**

**Objective:** Examine the effect of training provided for patients with intestinal stoma on care dependency. Material and Method: The target of the study consisted of all patients receiving colostomy at General Surgery Clinics of Atatürk University Research Hospital between July 2012 and April 2014, where the study was conducted. The sample group was selected by using the improbable sampling method and while the first 30 patients receiving colostomy at general surgery clinics between these dates constituted the group not trained (control group), 30 patients receiving colostomy afterwards constituted the group trained (experimental group).

The prerequisite for individuals to be included in the study involved;

- Accepting to participate in the study,
- Being 50 and older,
- Having a waking consciousness and establishing a communication in order to apply the surveys and training (having no hearing impairment or illiteracy)

**Experimental Group:** The patients receiving colostomy were trained by using a training manual, which was prepared in accordance with literature, for postoperative 10 days. A silent environment was prepared for patients to receive the training. Patient description form and care dependency scale were applied to patients before the training. The care dependency scale was reapplied to patients on the phone one month after the training.

**Control Group:** Following the operation, patient description form and care dependency scale were applied to patients receiving colostomy. The care dependency scale was reapplied to patients on the phone at the end of the first month following the discharge.

### **Materials Used in Data Collection:**

#### **- Patient Description Form**

Being used in collecting the data, the patient description form involved questions about the descriptive characteristics of patients.

**- Care Dependency Scale:** Items of the "Care Dependency Scale" will be evaluated over the 5-point likert scale. Scale items are rated with the likert-type scoring ranging between 1 and 5. The rating is as; 1= Completely dependent, 5= Almost / completely independent. While the lowest score is 17, the highest score is 85.

While the high scale score signifies that the individual is independent in meeting her/his care needs, the low scale score signifies that the individual is dependent in meeting her/his care needs.

An ethics committee approval and an institutional permission were obtained before starting the study. Patients were informed and consents were received from those who wanted to participate. Percentage distribution, mean, analysis of variance, Mann-Whitney U, Kruskal-Wallis test, and t test were used in assessing the data.

**Results:** It was determined that patients had an age average of  $65.56 \pm 7.62$  in the experimental group and  $62.00 \pm 8.40$  in the control group; 40% were female, 60% were male, 33.3% were primary school graduates, 51.7% had a temporary stoma and 48.3% had a permanent stoma. The total mean score of the scale obtained by patients in the experimental group was determined as  $33.26 \pm 4.25$  in the postoperative period and  $53.96 \pm 8.83$  in the first month following the training. The total mean score of the scale obtained by patients in the control group was determined as  $29.63 \pm 4.00$  in the postoperative period and  $42.96 \pm 5.40$  in the first month following the operation. A significant difference was determined between the two groups in terms of total mean score ( $p < 0.05$ ).

**Conclusion:** As a result of the study, the group receiving a training regarding stoma was found to have a higher score of care dependency.

**Key word:** Intestinal stoma, care dependency.



## FP23

### TURKISH STUDENTS VIEWS ABOUT THE CLINICAL PRACTICES OF SURGICAL NURSING

*Rizalar Selda*

*Turkey*

**Introduction:** Clinical practice has an important place in nursing education programs. Opinions of the students about the clinical practice will be beneficial to eliminate the deficiencies and for the clinical applications to make better. This descriptive cross-sectional study was conducted in order to define the views of the nursing students during surgical clinic practice.

**Materials and Methods:** The research population was comprised of 120 nursing students at Health School, second class. A sampling method was not used and the entire population was targeted but 110 students agreed to participate and were included in the study sample (participation rate of the research: 91.6%). The research data were collected in December 2014 with a question form which was developed by the researchers. Number-percentage calculation and mean tests Wilcoxon Signed Ranks Test ve Paired Samples Test were used in the data analysis.

**Results:** The average age of the students was found that  $20.43 \pm 2.06$ . In the study, it was found that 62.7% were female, 64.5% were chosen willingly the nursing school and 76.4% were happy of studying in their school. 59.1% of the students were asked to conduct the theoretic lessons and practice together. It was found that 33.6% of students had difficulties during a team practice, 31.8% of them during the application processes, 15.5% of them with the teaching staff, 14.52% of them with themselves and 4.5% of them with their group of friends. It was stated that 71.8% of students wanted to work at surgery clinics, 75.5% at the operating room after graduating. Paired t-tests showed significant mean differences between the scale points of the institution opportunities, acquisition of clinical practice and nurse qualifications in both the university and state hospital; the scale points of the state hospital was higher than university hospitals. Paired t-tests showed no significant mean differences between the scale points of the teacher qualifications, operating room facilities and suggestions in both the university and state hospital.

**Conclusion:** In this study, were found that the students have often difficulty with team members and the clinical field.

**Key Words:** Nursing, student, clinical practice

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# E- Posters





## TOPIC A. SCIENTIFIC RESEARCH

EP001

### ACCORDING TO THE ENHANCED RECOVERY AFTER SURGERY CAN WE TRADITIONALIST OR INNOVATIVE IN PREOPERATIVE PERIOD?

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**Aim:** The purpose of the study is determining compliance status according to ERAS protocols in preoperative application in surgery department.

**Methods:** This descriptive designed study was conducted in two different provinces in the eastern Black Sea region university hospital surgical clinics. The sample of the study consisted of 17 surgical clinics' responsible nurses. Data were used a questionnaire consisting of 50 questions developed by the researchers which is collected by face to face interviews with the responsible nurses from clinics. The data used in the evaluation of the number and percentage.

**Results:** In 88.2% of surgical clinics, when the hospitalization given information was detected. 94.1% of the clinic after the termination of the oral intake at night; it was determined that 88.2% of full bowel cleaning has not done. 64.7% in surgical clinics included in the study that was done premedication and 47.1% of the premedication was revealed in the operating room. Approximately three-quarters of the clinic, patients being evaluated for the risk of deep vein thrombosis; but clinics are not worn compression socks all patients of more than half, mostly over 40 years old patients are dressed socks in major surgery.

**Conclusions:** The study was conducted in the majority of surgical clinics of the university hospital by the ERAS protocol was detected; was found to be compliance with preoperative information and suited to preoperative bowel preparation, antibiotic prophylaxis, thromboembolism prophylaxis and partially compliance to premedication; non-compliance to preoperative nutritional liquid.

**Implications for Practice:** The number of scientific meeting should be increased for improve application of ERAS protocols.

**Key words:** ERAS, fast tract, nursing, preoperative

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## ATTITUDES AND BEHAVIORS ON ORGAN DONATION IN TURKEY: A SYSTEMATIC REVIEW OF THE LITERATURE

**EP002**

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According to the 2011 European Commission Report, Turkey ranks only number 32 out of 37 countries that receive donations from cadavers; however, when it comes to living donor donations, Turkey is second in the world.<sup>1</sup> Organ donations typically come from living family members.<sup>2-7</sup>

**Aim:** To determine and discuss the situations affecting the organ and tissue donation according to the studies conducted in Turkey.

**Methods:** For this study, the key words "Turkey, organ donation, organ transplantation, attitudes, behaviors" were used. Google Article, MEDLINE, Pubmed, TurkMedline, Arastirmax, EbscoHost data bases were searched. Forty three studies were reviewed from 2006 to 2016, full texts in Turkish (25) and English (18).

**Results:** The 43 studies conducted on total 19764 individuals. Thirty three of the studies investigated the attitudes and behaviors of individuals against organ donation. The remaining 10 looked for both attitudes and information of individuals.

According to these studies, Turkish people were supporting organ donation. Despite that, it was reported that they had reluctant to receive an organ donation card. Cited reasons are (1)ignorance about cadaver organ donation and process, (2)the religious and cultural values they have, (3)fear of medical neglect, (4) bodily injury concerns of individuals, (5)inefficiencies and misunderstandings in the legislation, and fear of organ mafia, respectively.

These studies reported that the counseling services of nurses can influence decisions on organ donations, and mentor patients and families about organ donation.

The numerous living donors in Turkey draw attention to values and notions in Turkish culture about organ transplantation.<sup>1,7</sup>

**Conclusion:** The most important problem in organ donation is ignorance. Transplantations from living donors are legal, but more donations from cadavers should be encouraged. The attitude of society indicates that multidisciplinary medical teams need to establish cooperation with different disciplines (lawyer, cleric, politician such as)<sup>2-7</sup>.

**Key Words:** Organ donation, organ transplantation, attitudes, behaviors, Turkey

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## EP003

### COPING STRATEGIES AND QUALITY OF LIFE OF INDIVIDUALS WITH URINARY INCONTINENCE PROBLEMS WITHIN THE POST-RADICAL PROSTATECTOMY PERIOD

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**Background:** Prostate cancer is one the cancer types in the world, which is most common in men and increasing in prevalence with age<sup>1,2,3</sup>. Surgical treatment is considered to be the most effective approach for early-stage and localized prostate cancer and retroperineal radical prostatectomy is chosen frequently among the surgical treatment options. The major one of the post-radical prostatectomy problems that mostly causes anxiety and affects the quality of life in patients is urinary incontinence (UI) and patients try to raise their quality of life using the coping strategies they developed<sup>3,4,5,6</sup>.

**Aim:** The study was planned descriptive in order to investigate the coping strategies and quality of life of patients with UI problem post-radical prostatectomy.

**Method:** Population of the study consisted of patients who underwent radical prostatectomy in a university and a state hospital in Istanbul, and the study sample consisted of 38 patients who admitted to urology outpatient clinics of the same hospitals for post-operative follow-up and experienced post-operative UI. Before starting the study, written approvals were obtained from the ethical board and the institutions. Data collected using the “Incontinence Quality of Life Scale (IQLC)” with maximum score of 100 points and the “Data Collection Form” developed by the researchers were analyzed with frequency, mean, standard deviation, and the Man Whitney U and the Kruskal-Wallis tests.

**Results:** It was determined that the mean age of the patients attended the study was 62.36±8.20; 94.7% of them underwent robot-assisted radical laparoscopic prostatectomy operation; and the post-operative period was average 23.73±1.89 months. It was found that 57.9% of the patients received training and information about the urinary incontinence problem that would be developed in post-operative period; 78.9% had urinary incontinence when lifting something; 36.8% had urinary incontinence once a month; and 89.9% try to be near the toilet. The average overall score of the IQLC was determined 67.68±20.75 in this study. The IQLC score averages of those with 63 years old and above were found higher than those with younger ages, of those who did not receive training and education about urinary incontinence were higher than those who did receive, and of those who perceive their health status poor were high than those who perceive good and normal, and the difference between them was found significant (p<0.05).

**Conclusions:** The study continuing.

**Keywords:** Radical prostatectomy, incontinent of urine, quality of life, nurse.



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## CORONARY ARTERY BYPASS GRAFT(CABG) PATIENTS' CARE NEEDS AND DEPENDENCY AFTER DISCHARGE FROM HOSPITAL

**EP004**

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**Background:** Following Coronary Artery Bypass Graft (CABG), patients may suffer from various physiological and psychosocial problems. Patients who are discharged early from hospital after surgery experience most of the post-surgical problems at home. Awareness and knowledge of these problems is crucial to nurses' discharge training and the planning and implementation of home care services.

**Aim:** The study was undertaken to determine patients' care needs and levels of dependence during the first month after CABG surgery.

**Methods:** The sample of this descriptive and correlational designed study was composed of 107 patients who had undergone CABG surgery. The data were collected using a questionnaire form developed by the researcher. The Mann-Whitney U test, Kruskal-Wallis and One-Way Analysis of Variance, the Kolmogorov-Smirnov test, Correlation Analysis and the t test were used as statistical analysis.

**Results:** The health problems encountered by patients upon returning home after CABG were sleep disorders, pain, respiratory issues, and gastrointestinal system and activity-related problems. Patients needed the most care with sleep problems, chest pain, cough, constipation and an inability to maintain their sleeping position. Study results also revealed that four-fifths of the patients were completely dependent on care providers to shower, and three-fourths of them were partly dependent on care givers to change clothes. Being female was an important variable in terms of the number of health problems that required home care ( $p<.0001$ ) and care dependency ( $p=.01$ ). Patients with gastrointestinal problems needed more help than patients with the other common post-CABG problems ( $p=.0001$ ). We determined that as the problems of patients that required home care increased, so did their dependency ( $p=.009$ ).

**Conclusions:** The study results can contribute to improving the post-hospital discharge training and home care services of patients after CABG.

**Implications for Practice:** More attention should be given to the hospital discharge informational trainings and at-home care dependency needs of women.

**Key Words:** Care dependency, care needs, nursing care, Coronary Artery Bypass Graft Surgery, discharge Research Assistance Aydanur AYDIN

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## EP005

### DEPRESSION IN PATIENTS WITH DEGENERATIVE SPINE DISEASE

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**Purpose:** We prospectively studied depression occurrence in patients treated surgically for cervical myelopathy and lumbar stenosis. Depression occurrence was correlated with preoperative patients' status.

**Material and Methods:** There were 45 patients (23 males, 22 females, mean age 56.2 years, range 32-74 years). All patients completed preoperative a questionnaire for depression. Patients with cervical myelopathy completed the Japanese orthopaedic association score (JOA-score). The rest of the patients completed the visual analogue scale (VAS) for the assessment of pain.

**Results:** Twenty-eight patients suffered from cervical myelopathy and 17 from lumbar stenosis. Thirteen patients (28.8%) suffered from depression (10 from mild and 3 from moderate) Nine patients with depression were females and 4 males. None of these patients had a previous diagnosis of depression. No significance correlation was found between depression occurrence and gender ( $p=0.3$ ), age ( $p=0.6$ ) and disease type ( $p=0.8$ ). There was a trend towards a significance correlation between preoperative patient's overall status and depression occurrence ( $p=0.08$ ).

**Conclusions:** Depression was detected in a significant number of patients with degenerative spine disease. Patients with severe preoperative symptoms more frequent suffer from depression.



## DETERMINATION OF PARTICIPATION STATUSES OF OPERATING ROOM NURSES IN THE CONGRESSES

**EP006**

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**Background:** Surgical interventions, advancements of tools/devices used in conjunction with the scientific and technological developments raise different responsibilities in operating room nursing. The focus of rapid and adequate adaptation to the developments and changes in operating room nursing is to determine the training requirements specific to this field and to realize the in-house training, congress, conference and certification programs based on these requirements.

**Focus of interest:** The study was planned and conducted as descriptive to determine the participation statues of operating room nurses in the congresses.

**Methods:** The population of the study consisted of the nurses working in the operating rooms of a major hospital located in Istanbul, and sample of the study consisted of the surgical nurses who are not on leave and not on sick leave from June-2016 to December 2016 and accept to attend the study. Before starting the study, written approvals were obtained from the ethical board and the institution. Data were collected using the "Data Collection Form" developed by the researchers. Until now it has been reached 46 nurses. The data obtained were evaluated by frequency, mean, and standard deviation.

**Results:** It was determined that the average of age of the nurses included in the study was  $34.89 \pm 7.09$ , 84.8% (n=39) were female, 15.2% (n=7) were male, 56.5% (n=26) had bachelor's degree, professional employment years of 34.8 % were 16 years and over, averages of working year in the operating room were  $9.17 \pm 6.50$ , 82.6% (n=38) were working in the operating room with their own willingness, weekly working hour of 95.7% (n=44) was 40-49 hours, and 76.1% (n=35) were participated in the in-house training program regarding operating room nursing and 65.2% (n=30) were participated in congresses during their professional life. It was found out that 95.7% (n=44) of the nurses wanted to participated in congresses regarding operating room and surgical nursing regularly, however, 44.4% (n= 20) could not be participated in congresses because they could not find any financing organization.

**Conclusions and Implications for Perioperative Nursing:** The study continuing.

**Keywords:** Operating room nurses, congress, participation.

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## EP007

### DETERMINATION OF POST-OPERATIVE ANXIETIES OF PATIENTS TO UNDERGO OUTPATIENT SURGERY AND THEIR RELATIVES

*Nadiye Özer, Ayşegül Yayla, Aylin Öztürk, Zeynep Karaman Özlü, İbrahim Özlü*

**Purpose:** The purpose of this study is to determine the anxieties of patients, who will undergo outpatient surgical intervention, and their relatives concerning post-operation.

**Material and Method:** The population of this descriptive study consisted of patients who stayed in a state hospital in Ankara between November 2014 and February 2015. The sample consisted of 97 patients who were older than 18 years, agreed to participate in the study, and would undergo outpatient surgery in the mentioned hospital between specified dates. The data were collected by using a questionnaire prepared in the line with literature. Percentage distribution and means were used to assess the data.

**Results:** It was determined that the patients (46.4%) and their relatives (32.0%) experienced anxiety related to outpatient surgery, the patients were anxious about not completely recovering after surgical intervention (71.1%) and their relatives were anxious about not being able to control the pain at home (77.4%). It was determined that the patients (51.5%) wanted to undergo outpatient surgery to protect from side effects such as infection, and their relatives (45.4%) wanted outpatient surgery because the length of hospital stay was short. It was found that the patients (52.6%) and their relatives (16.7%) could not sleep soundly at night before the operation day. While a statistically significant difference was found between the anxiety status of the patients regarding outpatient surgery before the surgical intervention and their affected sleep ( $p<0.05$ ), there was no significant difference between gender, age, educational levels, experience, being informed before the surgical intervention and the opportunity of patients to ask questions in surgical clinics ( $p>0.05$ ).

**Conclusion:** It was determined that patients and their relatives experienced anxiety related to outpatient surgery and the anxieties of the patients affected their sleeps at night before the operation.

**Keywords:** Outpatient surgery, Patient and their Relatives, Anxiety



## DETERMINATION OF THE KNOWLEDGE LEVEL AND BEHAVIOR OF OPERATING STAFFS

**EP008**

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**Introduction:** Vocational skills development located at formal education in nursery is to be turned into competence in a laboratory and is tried to be consolidated with hospital practices<sup>1-4</sup>. Injection practices which are used during the skill courses are important in terms of occupational risks and medical errors.

**Aim:** The aim of study is to determine skill development situation in parenteral practice, to support nurse about skill development before graduating and to plan training on this subject to the final year nursing students according to the study results.

**Method:** In study which consists of descriptive values, information were taken with the data collection form from intern with face to face meeting. The study sample consisted of 133 final year students who participate as voluntary.

**Results:** 74.6 % of participants were female and the mean age of subjects were 22.25 years. When we investigated the practises which was no done in patients, it was found that 72.3% subjects no installed the catheter, % 73.7 of subject no made total parenteral nutrition, 64.3 of participants no performed blood transfusion. Also, 33.3 % subjects no made intravenous injection, 31.9 % of subjects no implemented intramuscular injection and 39,4 % of subjects no performed subcutaneous injection.

**Conclusion:** We can say that intern nurses graduates from not to be won enough practice skills in the results of study. It is suggested that to provide the safety of patients and staff and to prevent the medical errors, undergraduate and postgraduate application of additional in-company training orientation program can be organized.

**The effects on perioperative care:** In our country, new graduate nurses are usually employed emergency service, intensive care, anesthesia and reanimation clinics. This situation can cause troubles in terms of patient safety in the clinical trial setting.

**Key words:** skill, education, nursery, student

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## EP009

### EFFECTIVENESS OF EDUCATIONAL PROGRAMS TO PREVENTION OR REDUCE VENTILATOR-ASSOCIATED PNEUMONIA: A SYSTEMATIC REVIEW OF THE LITERATURE

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**Background:** Ventilator-associated pneumonia (VAP) is an important nosocomial infection, frequent device-associated, that has high morbidity and mortality.<sup>1</sup> Studies state that knowledge and practices of the nurses are inadequate with regard to prevent VAP.<sup>2-5</sup> The educational programs given to nurses are shown important to control the VAP in recent years.<sup>3,6-11</sup>

**Aim:** The aim of this study is to assess the effect of the educational programs of VAP prevention in the light of current research that are made on this subject.

**Methods:** Studies published between 2006-June 2016 contained databases (Medline, PubMed, CINAHL, EbscoHost and Cochrane) were reviewed. In this study, we have reviewed 9 descriptive study, 7 experimental researches and 2 systematic reviews.

**Results:** Seven of the researches were about the educational programs given to nurses, 9 of the researches were about their knowledge level. Studies show that nurses are inadequate with regard to prevent VAP, especially with regard to management and maintenance of devices.<sup>2,5-12</sup> Some studies indicated that nurses were required to renew their knowledge about current VAP care guides.<sup>5,11-13</sup> After the educational program given to nurses with regard to VAP subject, decreasing in the VAP incidence rates<sup>14-19</sup> and hospitalization costs<sup>19</sup> are indicated. There was no difference in mortality.<sup>16,17,19</sup> A few studies alleged that there cannot be made a significant difference with only giving education for nurses, and also control/discipline mechanisms are important too.<sup>16,19,20</sup> It is stated the most of studies that factors related to patients and other health professionals with regard to preventing VAP should not be overlooked.<sup>3,4,15,18-20</sup>

**Conclusion:** VAP can be reduced by various educational programs. However, this is not enough, team cooperation is necessary in order to prevent it. In addition, each country must make their educational programs according to their own facts, and research must continue.

**Key Words:** Critical care, surgical patient, effectiveness nursing education, ventilator-associated pneumonia.

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## EP010

### EVALUATION OF KNOWLEDGE ABOUT GENETIC SCREENING FROM SURGICAL PATIENTS AND THEIR RELATIVES

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**Objectives:** Today, it is expected that genetic diseases such as heart disease and cancer can be identified by genetic screening at an early age. In the study; it is aimed that the surgical patients and their relatives' assessment of information about genetic screening will be evaluated.

**Methods:** Research type is descriptive research. The universe of research is occurred by 135 patients and their relatives who are applied for the diagnosis and treatment to the surgical clinic of a special hospital. All the universe has been sample. Data is collected with a survey form which are prepared with using literature. There search data is evaluated with SPSS 21.0. The number and percentage distribution of data, the average of the numerical variable, Standard deviation, minimum, maximum values were calculated. Also with each other survey data was analyzed by chi-square analysis with statistical significance.

**Results:** There is 14.8% who is undecided about the beneficial or harmful genetic test, is university graduates. There is only 3.7% of participants who is accompanied with genetic analysis certainly is very important in early detection test. The majority of participants (22.2%) don't want to face cancer so don't take genetic analysis test, who (18.5%) want to take a genetic analysis test because they would like to take precautions.

**Conclusion:** In line with results; it is thought that the lack of knowledge about genetic analysis methods and the importance of them, or have false information. It is identified that the little people (n:35) take a bright view of genetic screening methods. It is thought that educate people about what are the genetic screening behaviors, the importance of them, and which situations they are necessary will lead to the development of positive thoughts about the genetic analysis methods.

**Keywords:** Genetic test, patient, patient's relatives.

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## EXPERIENCE OF PAIN IN PATIENTS WITH A CHEST DRAIN

**EP011**

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**Background:** Insertion of and having a chest drain is potentially painful (1). Adequate focus on pain relief is fundamental for the patient both during and after insertion of the drain (2).

**Purpose of the study:** To compare pain during and after insertion of a chest drain using two different drains. To explore different dimensions of patients' pain experiences with chest drains.

**Methods:** A cross-sectional study where pain and pain dimensions were measured using the "Brief, Descriptive Danish Pain Questionnaire" during and after insertion of chest drains. Participants were adult patients. Data was collected consecutively from January to May 2015 and from April to August 2016 at Aarhus University Hospital, Denmark.

**Theoretical framework:** Abnormal fluid or air between the pleura results in respiratory distress and can be critical, if untreated. The purpose of chest drain insertion is to remove abnormal fluid or air (3). Chest drains can be inserted in local anaesthetic in the ward environment using blunt dissection technique and large-bore tubes or using Seldinger technique and small-bore catheters (1,4). Nursing care for patients in the perioperative period requires knowledge and skills to avoid additional complications caused by pain (1).

**Preliminary Results:** During insertion of pigtail catheters (n=44) the mean level of patient experienced pain was light, while pain using chest tubes was moderate (n=23). Patients with chest tubes experienced significantly more pain at insertion, but not 1-2 hours or one day after insertion. 35% of patients described pain as shooting/stabbing 1-2 hours after insertion of chest tubes indicating sensory pain. An increasing number of patients reported this dimension the first day after insertion (48%); the opposite was seen for pigtail catheter (25% vs. 23%). There was no difference in pain intensity between rest and physical activity. Implications for perioperative nursing: Nursing care related to pain management should be individualised during and after insertion of a chest drain.

**Keywords:** pain, chest tube.

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# EP012

## FACING SECOND TIME WITH THE SAME FEAR: REOPERATION

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Reoperation is repetition the situation that caused the surgical situation or taking the patient again to surgery because of the complication. Surgery patients encounter many problems after the post operative period (1). The problems in this period affects the patient negatively and the patient should have reoperation in some cases. However, the patients who had second operation mortality and complication rates are also increasing. Deciding to have second surgery is a very difficult situation for healthcare workers (2). By taking into consideration of individual factors, revision of profit and loss relationship is effective in decision making (3,4). Surgical nurses who are working in the clinic which includes patients at risk of reoperations, should have clinical experience for initiatives to be implemented early detection (5,6). For this reason, surgical nurse must question the patient's story in preoperative term correctly, evaluate the individual factors, reduce the problems and manage of complications by implementing effective nursing care (7). Also, surgical nurse should know the risks of the planning discharge process for the person who had second surgery (8). And forwarding the precautions to be taken conditions will contribute to the realization of quality improvement.

**Keywords:** Patient care, perioperative nursing, reoperation

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## FACTORS AFFECTING SURGICAL FATIGUE

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**Background:** Fatigue is a process that is feeling by patient as debilitating exhaustion, loss of energy or malaise and that causes the physiological and psychological changes and the generally poor performance<sup>1,3</sup>. It is known that surgical fatigue developed by the post-operative response of the metabolism to surgical intervention is one of the most frequent cause for complaint and that it takes longer than the pain<sup>1,4,5</sup>. It is reported that post-operative fatigue is continued approximately 1 to 3 months after abdominal surgery<sup>1,2,5</sup>.

**Aim:** The study was planned as a compilation in order to determine and highlight the factors that affect surgical fatigue in pre-, intra- and post-operative periods.

**Method:** Studies that focus on the causes of post-operative fatigue and on its evaluation were screened from major data bases (Pubmed, Cumulative Index of Nursing and Allied Health Literature-CINAHL, International Nursing Index-INI, etc.) in a comprehensive manner.

**Results:** When reviewing the studies in the literature that studying surgical fatigue, it is seen that for patients, feeling themselves tired is associated with post-operative fatigue, anxiety and boredom; with their previous experiences about surgical intervention; malnourishment as well as the type and size of surgery. In this context, surgical fatigue is a diagnostic criteria that evaluates the patient's psychological and physiological condition as well as it is an important symptom to provide a holistic and qualified care.

**Conclusion:** Many factors have influence on the development of surgical fatigue, which can be defined as the sum of the post-operative psychological and physiological symptoms that delay the return of daily living activities. This symptom that extends the healing process in patients experiencing surgical intervention can only be determined by a comprehensive / sophisticated evaluation. By clinical studies to be conducted, the factors causing the development of surgical fatigue can be measured in an objective manner and focused on its effective management.

**Keywords:** Surgery, fatigue, postoperative fatigue.

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## EP014

### FLUID TREATMENT METHODS FOR SURGICAL PATIENTS

*Cilingir Dilek*

Ensuring adequate fluid therapy in the perioperative period have a significant role on meeting the increased metabolic requirements and the prevention of postoperative complications. In general for surgical patients fluid treatment methods which are based on calculation of the known or estimated fluid loss and called “liberal” or “restrictive” have been implemented. In restrictive fluid therapy at least fluid to be meet patients’ requirement have been implemented. For all that in liberal fluid therapy large amount fluid have been applied. Implemented fluid therapy according to these methods may be excessive or insufficient, for this reason some problems such as fluid loading and hypovolemia may develop. To avoid these problems, recently, it is recommended to implement individual goal directed fluid therapy in perioperative period. In individual goal directed fluid therapy amount and type of fluid to be applied have been selected cosidering individual characteristics of patients and treatment have been implemented under the guidance of determined criteria such as gastric mucosal pH, serum lactate level, **central venous oxygen saturation** and mixed venous oxygen saturation. In this fluid treatment method noninvasive or minimally invasive flow-based monitoring methods are used for measuring physiological parameters such as cardiac output and stroke volume. The main ones of these methods can be listed as dopler esophageal ultrasonography, pulse contour analysis, thoracic electrical bioimpedance and thermodilution methods. Especially in risky surgical operations individual goal directed fluid therapy have been recommended. In this rewiev, information concerning the implemented fluid treatment methods for surgical patients in the perioperative period is presented.

**Key words:** Perioperative period, Surgery patient, Monitoring, Fluid therapy



## INJURY STATUS AND INFLUENCING FACTORS IN THE OPERATING ROOM STAFF

**EP015**

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This study did in private hospital operating room in the health care workers employed in the incidence of injuries, surgical instruments, the factors that cause injuries and health workers in the prevention of injury and the knowledge of the application after the injury, is scheduled descriptive research to identify the skills and practices.

The research did between 1 April and June 1, 2016 , according to a questionnaire prepared by the researchers examined the source has been applied to, 20 doctors 16 nurses and 11 cleaning staff is working in the operating room. means and frequency analysis in analyzing the resulting data, the Chi-square test was used to compare the groups. Meaning level is determined as  $\alpha = 0.05$ . According to the data obtained from the study evaluation; during the professional life of 47% of the operating room staff where injury at least once; General Surgery department in the event of injury, most (56%) experiencing this chapter and Orthopedics (35.4%) and Neurosurgery (35%) showed the sections.

Most piercing-penetrative injuries with 63% experiencing a tool in the study; 35% of doctors that suture needle when disposing of immersing himself injured; 54.7% of the nurses needles or instruments or when they are injured, while the results do not rush; cleaning staff said they wounded while collecting the most waste.

Participants are a very small part (3%) were reported for injuries; 67.8% of those who reported that nurses; 26.4% of nurses and the cleaning staff taking hepatitis B vaccine; and operating is during exceed 3 hours of surgery, while requiring urgency; late at night or being done in the morning, more than the number of people in the operating room; insomnia, fatigue, breakfast failure, injury was found to increase the level of stress in operation. In addition, adequate rest, surgery was shown to reduce the injuries and the motivation is properly ventilated.



## EP016

### KNOWLEDGE LEVEL ABOUT DEFINITION OF SURGICAL APPLICATIONS AND CURRENT STANDARDS OF NURSING AND MIDWIFERY STUDENTS

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**Aim:** This study aimed that knowledge level and associated factor about definition of surgical applications and current standards of nursing and midwifery students' who have lesson/ course of surgical.

**Method:** The population of this study was composed of midwifery and nursing students who were studying at a university health school and who have lesson of surgical. It has not any sample method and data analysis performed on 135 students. The study obtained institutional permission and planned it as a descriptive. Datas collected by Socio-demographic questionnaires which formed by researchers and have surgical applications. We used for data analysis in SPSS 20.0 program. For evaluation we used descriptive statistics, non-parametric tests and correlation analysis.

**Findings:** 77.8% of the participants are feminine and the mean age is  $21.54 \pm 1.39$  (min: 19, max: 26). 64,4% (n: 87) are nursing students and 35,6% (n: 48) are midwifery students. The GANO of the students is  $2.68 \pm 0.59$  (min: 2, max: 4). 86.7% of students said that if nursing profession can be the standart informations must be.

Knowledge level and associated factor about definition of surgical applications and current standards of nursing and midwifery students' about perioperative processes, the correct answer was  $44.9 \pm 12.7$ , the level of application was  $37,6 \pm 15,4$  at the internship and the observation level was  $39,7 \pm 14$ , 4 were found. There is a significant difference between level of the knowledge caused by who think that professional standards should be ( $p < 0,05$ ). The level of knowledge ( $p < 0,001$ ), practice ( $p < 0,01$ ) and belief in practice ( $p < 0,05$ ) were positively correlated with GANO. There was a negative correlation between age and knowledge level ( $p < 0.05$ ).

**Conclusion:** We thought that students' need new methods for follow up to current information. For this reason, we suggest that mobile applications may be helpful / advisable for this.

**Key words:** Students, midwifery, nursing, surgical applications based on evidence



## KNOWLEDGES AND PRACTICES OF OPERATING ROOM NURSES FOR PREVENTING INADVERTENT PERIOPERATIVE HYPOTHERMIA

**EP017**

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**Background:** Prevention of inadvertent hypothermia that is one of the problems experienced often by patients in the perioperative period and ensuring and maintaining the normal body temperature in the perioperative period are important for preventing the complications of hypothermia, which might cause morbidity and mortality, for ensuring the comfort of the surgical patient and for developing the clinical outcomes. Therefore, the body temperature of the surgical patient must be monitored in regular intervals and interventions protecting the body temperature must be applied on time and effectively.

**Focus of interest:** This study was planned and implemented as descriptive to determine the knowledges and practices of operating room nurses for preventing inadvertent perioperative hypothermia.

**Methods:** The population of the study consisted of the nurses working in the operating rooms of a major hospital in İstanbul. The sample of the study consisted of 90 nurses who work for at least 6 months in the operating rooms of a major hospital in İstanbul and who were not on leave or on sick leave from July 2016 to December 2016 and who had willingness to participate in the survey. Prior to starting the study, required approvals from the institution and the ethical board were obtained. Data was collected using data collection forms which include questions such as age, educational background, how often and how the body temperatures of patients were measured, and what heating methods were used, etc. For the analysis of data, descriptive statistics such as frequency, arithmetic mean, standard deviation and percent were used.

**Results:** It was determined that the average of age of the nurses participated in the survey was  $38 \pm 4.66$ , total years of work was  $19.1 \pm 6.54$  and years of work in operating room was  $15.55 \pm 8.02$ .

It was determined that 85% (n=17) of the nurses participated in the survey had education regarding inadvertent perioperative hypothermia, that protection of patient against hypothermia was very important and the body temperatures of 85% of the patients were measured by the anesthetist, and that 55% did not heat patient pre-operatively in the waiting room, in the operating room and in the care unit following anesthesia routinely. It was found out that, in cases where heating is required, mostly hot air blowing system was preferred from active heating methods.

**Conclusions and Implications for Perioperative Nursing:** The study starting with a pilot survey is still ongoing.

**Keywords:** Hypothermia, inadvertent perioperative hypothermia, heating, operating room nurses.

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## EP018

### LEARNING NEEDS OF SURGICAL PATIENTS: TURKEY SAMPLE

**SOYER GEÇKİL**

**Names of Authors: 1- Özlem SOYER GEÇKİL \*,**

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**Background:** It is important to determine the patient's priority of learning needs because of to give an effective education and to enhance the quality of patient's care<sup>1</sup>.

**Aim:** Aim of this study was to determine post discharge learning needs of patients who had undergone surgery.

**Method:** This was a descriptive study. The permission was obtained from ethics committee, hospital institutions and patients. The study was conducted on patients in Ege University Hospital in İzmir, in Turkey, between dates April- June 2016. The sample consisted of 151 patients who had undergone surgery. Data were collected using by socio-demographic and medical status form and the Patient Learning Needs Scale.

**Results:** The mean age of patients was 46,86±13,05 years. 57,6% of the patients were female, 68,9% of the patients were married and 28,5% of the patients were graduated from high school. The mean stay of hospital was 11,27±10,34 days. 35.8 % of the patients are cared for general surgery ward. 80% of patients previously hospitalized. Reason of previously hospitalized of 47,5% of patients was treatment requirements associated with disease symptoms. %51,7% of patients stated they did not get discharge education. The mean total score learning needs of patients was 205,00±26,73. It shown that very important learning needs. The most important learning need of patients was the medications (33,96±4.81, importance level 4,24) and the least important learning need was the emotions related to the situations (19,49±3,70, importance level 3,86). The most important learning need of patients was question about manage the symptoms.

**Conclusion:** Results of this study showed that the learning needs of patients who had undergone surgery was high. For our institution was seen as more important responsibility will be taken to the nurse about discharge education of patients.

**Key Words:** Patients, Nursing, Learning Needs, Discharging.

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## MICROBIOLOGICAL SURVEILLANCE OF AIR QUALITY IN PROVISION OF PERIOPERATIVE CARE

**EP019**

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**Keywords:** Sterile Medical Devices, Air Bacterial Load, Coagulase Negative Staphylococcus.

**Background:** Sterile medical devices (MDs) shall be stored in a manner that prevents contamination from any source. The quality of indoor air plays an essential role in ensuring that sterile stock maintains its integrity. The periorative nurses should ensure safe MDs for use in operating room.

**Purpose:** The aim of this study is to assess the air bacterial load (ABL) in sterilized MDs storage zone using sedimentation sampling method.

**Methodology:** We studied microbiological contamination levels on 76 samples, collected in the period of 19 weeks from February to June 2016. Measurements were performed once a week (in operation) in a controlled humidity and temperature environment. Samples were taken using Petri dishes (Columbia agar 5% sheep blood; diameter 90 mm) left open to the air 1m from the floor, at least 1m away from walls or any obstacle throughout the 4h work period. After 48h incubation at 37° C the number of germs colonies counted and expressed as cfu/plate/4h.

**Results:** ABL ranged from 1 to 8 cfu/4h; EU-GMP-Annex-1 Grade C limit of 50 cfu/4h was fully fulfilled. All colonies were identified as Coagulase Negative Staphylococcus (CNS). Gram (+) MRSA, Gram (-) enterobacteroides and fungus were not found in cultivated samples.

**Conclusion and Implications:** ABL was increasing when more periorative nurses were present in sterilized MDs storage zone according to hospital daily surgery program. It is important to realize that monitoring the quality of air in critical care areas surveillance process helps in maintaining accepted levels of air quality also to have an influence on reduction in surgical site infection.

Faculty disclosure: No conflict reported

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## EP020

### MOBILE LAMINAR AIRFLOW UNITS TO REDUCE AIRBORNE BACTERIAL CONTAMINATION IN THE OPERATING ROOM: EXPERIENCES FROM A SWEDISH NEUROSURGERY DEPARTMENT

*Von Vogelsang Ann-Christin*

**Background:** Exogenous surgical site infections are caused by contamination of the surgical site during the actual operation. Contamination can be airborne or through contact with instruments or fluids, which may be contaminated during the operation. The unit of measurement for airborne bacteria is colony-forming unit (CFU) per m<sup>3</sup>. The microbiological quality in the operating room (OR) depends on numbers of staff, their clothing and level of activity, type of ventilation and door openings.

The majority of neurosurgical operations are classified as infection-prone clean surgeries since artificial implants are used, and thus require ultra clean air in the OR. A mean value of  $\leq 5$  CFU/m<sup>3</sup> in sampled air is used as a guideline to ensure ultra clean air.

**Aim:** To assess the effect of mobile laminar airflow (MLAF) units on the microbiological air quality in ORs with conventional turbulent ventilation.

**Method:** Active air sampling was performed during neurosurgical operations; in ordinary conditions and using additional MLAF units (Toul Meditech SteriStay and Operio). An air sampler was used to collect airborne microorganisms on agar plates. Sampling was conducted peripheral in the OR,  $\leq 0.5$  m from the surgical site and above the instrument table. The agar plates were incubated before the bacterial count.

**Results:** The data collection was concluded June 2016. A total of 199 agar plates were sampled during 38 neurosurgical operations, 19 with conventional ventilation, and 19 using additional MLAF. Preliminary results show significant reduction of CFU/m<sup>3</sup> in the sterile zone (surgical site and instrument table) when using MLAF. In the regression analysis only one variable significantly affected CFU/m<sup>3</sup>: the use of MLAF. Numbers of staff or door openings were non-significant variables.

**Implications for perioperative nursing:** The MLAF units significantly improve the microbiological air quality into ultra clean air levels in the sterile zone when used in conventional turbulent ventilation.

**Keywords:** Operating room, laminar air flow, colony forming units



## NOISE IN THE OPERATING ROOM: A LITERATURE REVIEW

**EP021**

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**Introduction:** Since 1960 hospital noise levels have risen around the world.<sup>(1)</sup> Surgical and invasive procedures are high-risk activities, that require vigilance, concentration, and situational awareness. Distractions and noise are impossible to remove completely from the perioperative environment.<sup>(2)</sup> This noise can be hazardous to patient safety and may cause occupational stress.<sup>(3)</sup>

**Purpose:** Identify effects of noise in the operating room by a literature review.

**Methods:** An systematic review of the literature by mobilising the descriptor "Noise" AND "Nurs\*" AND "operating rooms", using the PI[C]OD method. Were selected ten databases imaginable, between 2006-2016, included for analysis six articles.

**Results and Discussion:** After articles review were selected four main topics: *noise levels, noise sources, effects on staff performance* and *Patients perception of noise*. In all of the studies reviewed the noise levels were found to be considerably higher than recommended by WHO and the noise sources were related to equipment and staff behavior. The main effect, of noise on staff performance, is related to impaired communication, resulting in a negative effect on patient's safety. Communication between patient and surgeon or patient and nurse can decrease anxiety and can optimize the patient's experience during the procedure. The preventive maintenance of powered surgical instruments can reduce noise exposures and noise output should be considered when selecting replacement instruments. Keeping music at a low level and using hearing protection are other interventions to consider to improve noise levels in an operating room.

**Conclusion:** The average and peak noise levels in operations may be implicated in patient safety because they lead to poor communication and cause distraction, strain, stress and fatigue. This review establishes a basis of knowledge about the topics of noise levels, noise sources and the effect of noise on staff performances, from which new research can be built.

**Key words :** Patient safety; Noise; Operating room

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## EP022

### OPERATING ROOM MANAGEMENT IN THE EYE OF THE BEHOLDER: IMPROVING OPERATING ROOM EFFICIENCY

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**Background:** Operating room (OR) is a cost- intensive environment, and it should be managed efficiently. Improving efficiency by effective scheduling and monitoring of the overall OR performance are important. When redesigning the OR processes, changes should be given a clear target and the achieved results monitored and reported to everyone involved. Advanced, reliable, and easy to use information technology solutions for OR management are under development. Pre-operative clinic and functionally designed facilities support efficiency. OR personnel must be kept motivated by clear management and leadership, supported by superiors.

**Focus of interest:** One of the key methods here is proper OR management and optimizing the whole process or chain of processes involved in the treatment of a patient. Clear goals for OR management are essential: improving productivity and efficiency while maintaining high quality of care at all times. This requires motivated personnel and teamwork in every step of the patient care process. If all professionals working in the OR remain interested in developing their own work, we reach our goal: working smarter, not faster.

**Theoretical Framework:** The writing of this article took place through the review of international bibliography, focusing mainly in the attention on the views of improving productivity and efficiency while maintaining high quality of care in the treatment of a patient.

**Conclusions:** The complexity of the OR is in part due to the multidisciplinary stakeholders, each with a vital role, and the high level of collaboration required. Management failures results in inefficiency, delayed case starts, workarounds patient inconvenience. The structure of the daily operative management of an operating room needs redefining. There should be more focus on collaboration and communication between the care providers.

**Keywords:** Operating Room, Management, Processing, Resources, Personnel.

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## OPERATING ROOM NURSING IN TURKEY: AN INTEGRATIVE REVIEW

**EP023**

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**Background:** The operating room nurse provides a continuity of care throughout the perioperative period, using scientific and behavioral practices with the eventual goal of meeting the individual needs of the patient undergoing surgical intervention. This process is dynamic and continuous, and requires constant reevaluation of individual nursing practice in the operating room. And also nursing students participate in patient care at operating rooms. The operating room experience provides the opportunity of implementing theoretical knowledge about the subjects of patient care. Operating room environment is an important area for educating nursing students.

**Focus of interest:** The aim of this integrative review was to reach the studies about operating room nursing and nursing students in Turkey.

**Theoretical framework:** An integrative review with a systematic search of scientific material. The materials were acquired by searching electronic databases. Search of CINAHL, PubMed, Cochrane databases, Web of Science, Scopus yielded 16 citations; 4 studies met the review eligibility criteria. Screening was performed by using "operating room nurses Turkey", operating room nursing Turkey", "operating room student nurses Turkey" and "operating room student nursing Turkey" key words.

**Presenting relevant literature references:** It was determined that the studies were conducted between 2012 and 2016; two of these studies were descriptive, one of them was descriptive and cross-sectional and the other of them focus group interview; the sample size varied between 26 and 575 nurses and student nurses. Two studies included in this review were about profiles and lifestyles of operating room nurses, one of them about stress levels and coping strategies of students in operating room and the other was about students experiences in operating room.

**Conclusions and implications for perioperative nursing:** Especially we realized that there is insufficient as a number of studies. This review explored we need more studies about operating room nursing and nursing students.



## EP024

### OPERATING ROOM TEAMWORK: BEING AN EFFECTIVE TEAM PLAYER

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**Background:** Nowadays, healthcare has become more and more a matter of teamwork. The members of the team have to work together in an efficient and effective manner which requires a special attitude. Therefore, not only knowledge and skills, but also attitudes are the basis of teamwork in healthcare. Such an attitude is not always present in persons that are essentially trained to behave as individualists – as is the case in initial medical education. Conflicts are a problem in the whole of modern healthcare.

**Focus of interest:** Quality and safety of healthcare depend on team performance. Conflicts decrease team performance. A number of studied factors involved in the development and solution of conflicts are discussed. The impact of unresolved conflict includes loss of employee productivity, loss of morale and increased stress. If handled properly, conflict can have positive impact, for example it can motivate employees, stimulate creativity, serve as a medium for problems to surface and can prevent stagnation. It's necessary for all the nursing staff to receive training in conflict resolution, through continuing professional education courses.

**Theoretical Framework:** A literature search was performed in order to identify and review relevant articles Operating room teamwork.

**Conclusions:** There are many possible inductors of conflicts in the operating room. Such conflicts should be immediately resolved by open communication and respectful discussion amongst team members. Focus should be on avoiding the conflict and if it is inevitable, then resolving it. To this direction, specific interventions are needed to aim for cultivating respect and peaceful collaboration among team members and to foster high standards of patient safety and quality of care.

**Keywords:** Conflict Management, Conflict Resolution, Team Work, Operating Room, Efficiency

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## PREVALENCE OF LOW BACK PAIN IN OPERATING ROOM NURSES AND ASSOCIATED FACTORS

**EP025**

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**Background:** Although musculoskeletal system problems such as back, neck, shoulder and joint pain are seen in nurses who have an important role in healthcare professionals, the most observed problem associated with the musculoskeletal system in nurses is low back pain<sup>1,2,3,4</sup>. Operating room nurses are among the groups at more risk for the musculoskeletal problems such as pushing-pulling stretcher, bed or other equipment, transport patient to operating table or stretcher, giving position, supporting a limb for a long time, and prolonged standing in the same position<sup>5,6,7</sup>. In this context, it is important to determine the risk factors related to the working conditions of operating room nurses and to take necessary measures.

**Aim:** The study was planned in descriptive-correlational type to determine the prevalence of low back pain in operating room nurses and the associated factors.

**Method:** The population of the study consists of the operating room nurses working in the operating rooms of 3 major hospitals located in Istanbul, and study sample consists of the operating room nurses who are not on leave and not on sick leave from June-2016 to December 2016 and accept to attend the study. Before starting the study, written approvals were obtained from the ethical board and the institution. Data are collected using the "Data Collection Form" developed by the researchers. Until now it has been reached 20 nurses. The data obtained were evaluated by frequency, mean, and standard deviation tests.

**Results:** It was determined that 70.8% of the nurses who attended the study were female; 37.5% were operating nurses for 6 to 10 years; they work averagely 41.7083±3.18 hours per week; 91.7% do not do regular exercise; and 50.0% do job that requires heavy lifting rarely outside working hours. It was determined that 70.8% of the nurses who attended the study have low back pain; 59.3% of those with low back pain feel low back pain for the last one year, 58.3% feel low back pain for the last one month, and 37.5% have been using drug for the last one year. It was further determined that 62.5% of the study group lean forward more than five times a day; 70.8% stay in the same position more than five times a day; 58.3% hold a tool for a long time more than five times a day; and 41.7% lift/transport heavy medical materials more than five times a day.

**Conclusions:** The study is continuing.

**Keywords:** Low back pain, operating room nurse, risk factors.

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## EP026

### PROBLEMS ENCOUNTERED BY THE INDIVIDUALS WHO COMPLETED AND COMPLETING DOCTORATE PROGRAM IN OF SURGICAL NURSING IN TURKEY

*Emine Gündogdu, Meryem Yavuz van Giersbergen*

**Aim:** This research was carried out to determine the problems encountered by the individuals who completed and completing doctorate program in the field of surgical nursing in Turkey.

**Methods:**

**Type of study:** A descriptive study

**Location and time of study:** It was performed with those individuals who completed and completing their doctorate programs in the Department of Surgical Diseases Nursing between 15 June 2014 and 16 September 2014.

**Scope of Study and Sampling:** The scope of research comprised of all individuals (n=68) who completed and completing their doctorate programs in the Department of Surgical Diseases Nursing have comprised and its sampling involved 94 individuals who accepted to participate in research.

**Data Collection:** Data were collected by the researcher through a questionnaire (including 32 questions) developed in compliance with the literature.

**Data Assessment:** Data were evaluated on SPSS (Statistical Package for Social Science) program version 20.0.

**Findings:** It was observed that 41.5 % (n=39) of the individuals participated in research were in 25-34 age group, their mean age was 38.48 years and 96.8 % (n=91) were women. Of them, 55.3 % (n=52) had already completed their doctorate program and 27.7 % (n=26) were assistant professors and 91.5 % (n=86) were working at school as academicians. 96.8 % (n=91) of the individuals had completed their undergraduate education as nurses, 24.5 % (n=23) had completed undergraduate education at Ege University Nursing Faculty, 22.3 % (n=21) had received postgraduate study at Ege University Nursing Faculty and 31.9% (n=30) had taken doctorate education at Ege University Nursing Faculty.

It was determined that 39.4 % of the participants had begun on postgraduate education for individual development ( $x=2.255 + 1.182$ ) and 24.5 % (n=23) had hard time most while making translation during the course period of doctorate education ( $x=2.798 + 1.898$ ).

About the organization they were taking education, 44.7 % (n=42) of the participants reported that it has partially helped concerning finding resource, 41.5 % (n=39) reported that it has been very helpful while preparing topic, 46.8 % (n=44) reported that it has been very helpful while making presentation, 50.0 % (n=47) said it has been very helpful while completing shortages related to course and 29.8 % (n=28) reported that it requested the topic of doctorate thesis to be original ( $x=2.320 + 1.080$ ).

It was observed that 27.7 % (n=26) of individuals had experienced difficulty mostly during the process of determining the name of the topic and limiting it ( $x=1.840 + 1.958$ ); 30.9 % (n=29) during finding new resources throughout the doctorate thesis ( $x=1.723 + 1.786$ ); 34.5 % (n=23) about the permission problem during the application process of doctorate thesis ( $x=2.032 + 2.219$ ); 14.9 % (n=14) about being unfamiliar of the statistical analysis during writing phase of the doctorate thesis ( $x=2.629 + 2.998$ ) and 9.6 % (n=9) worried about answering questions related to the defense quiz of the doctorate thesis ( $x=0.723 + 1.290$ ).

It was established that 46.8 % (n=44) of the individuals who completed doctorate program had published their dissertations; 26.6 % (n=25) had their dissertations published in national congresses and journals; 16.0 % (n=15) had experienced hard time publishing their dissertations in foreign journals ( $x=0.968 + 1.616$ ); and 18.1 % (n=17) had experienced most of the dissertation-related problems throughout the doctorate education.

**Conclusion:** It was determined that individuals who participated in research had experienced problems mostly during making translation at the course period of doctorate education; while determining the name of the topic for doctorate thesis and limiting it; while finding new topic during the process of the doctorate thesis; about permission problem during the application process of doctorate thesis; about not knowing the statistical analysis during writing phase of doctorate thesis; about answering questions related to defense quiz of doctorate thesis, about having doctorate thesis published in foreign journals and about dissertation-related problems during the process of doctorate thesis.

**Keywords:** surgery nursing, doctorate, doctoral education problem



## PROTECTION STATUS OF HEALTHCARE PROFESSIONALS WORKING IN THE OPERATING ROOM FROM SURGICAL SMOKE

**EP027****Ikbal Cavdar****Ikbal Cavdar<sup>1</sup>, Yasemin Ozhanli<sup>1</sup>, Ahmet Karaman<sup>1</sup>, Ayfer Ozbas<sup>1</sup>, Cagla Dastan<sup>2</sup>, Ertugrul Goksoy<sup>2</sup>**<sup>1</sup>Florence Nightingale Faculty of Nursing, Istanbul University, Istanbul, Turkey<sup>2</sup>Cerrahpasa Medical Faculty, Istanbul University, Istanbul, Turkey*Florence Nightingale Faculty of Nursing, Istanbul University**Department of Surgical Nursing**Abide-i Hurriyet St. 34381 Sisli, Istanbul/ Turkey**Cerrahpasa Medical Faculty, Istanbul University**Kocamustafapasa St. No: 53 Cerrahpasa 34098 Fatih, Istanbul/ Turkey*

**Background:** Operating rooms are dynamic units where advanced technology is used; safe, quality and efficient health service is intended to provide, and besides, where many factors with high risk and may adversely affect the health are available<sup>1,2</sup>. Surgical smoke, one of these factors, occurs due to thermal destruction at the result of cutting or coagulation of tissues by electrocautery or laser during a surgical intervention. The mutagenic effect of surgical smoke occurred due to thermal destruction of 1 gr tissue is similar to 6 infiltrated cigarettes and more than 500,000 health workers are exposed to surgical smoke per year<sup>3,4,5</sup>.

**Aim:** This study was planned as a descriptive-correlation detector to determine the protection status of healthcare professionals working in the operating room from surgical smoke.

**Method:** The population of the study is consisting of the healthcare professionals employed in the operating rooms of three major hospitals located in Istanbul, and sampling of the study is consisting of the healthcare professionals who are not on leave and not on sick leave from August-2016 to April 2016 and worked in operating room at least for 6 months and accept to attend the study. Before starting the study, written approvals were obtained from the ethical board and institutions where the study was performed. The data were collected using the "Data Collection Form" developed by the researchers. A pilot study was conducted with 20 healthcare professionals. Frequency, mean, standard deviation, Mann Whitney U and Kruskal-Wallis tests were used in the data analysis.

**Results:** It was found that the average of age of the healthcare professionals attended the study was  $34.65 \pm 6.48$ ; 75% of them were female; 70% of them had bachelor's degree; and the duration of working in operating room of 65% is 9 years and above. It was determined that the first three symptoms of the healthcare professionals attended the study were headache (75%), fatigue (70%) and burning eyes (45%) respectively; that no protocol was implemented for surgical smoke in 90% of the institutions they work, and 65% of them caught a chronic disease after they started working in the operating room.

**Conclusions:** The study is continuing.

**Keywords:** surgical smoke, smoke evacuation, operating room personnel, inhalation risk.

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## EP028

### ROLE CONFLICT: NURSE LEADERSHIP VS NURSE MANAGEMENT

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**Background:** Although as a common perception both the terms “leader” and “manager” are synonyms, and are used interchangeably but in essence there is a big difference between these two terms. A leader can be an effective manager but a manager can not necessarily be a true leader. Management skills are as important as leadership skills, in addressing some of the failings. Leadership and management must go hand in hand. They are not the same thing. But they are necessarily linked, and complementary. Any effort to separate the two is likely to cause more problems than it solves. Both leaders and managers need to envision the future and lead the way towards a productive and efficient unit with satisfied personnel.

**Focus of interest:** Newly qualified nurses and new nurse managers are often expected to hit the ground running with no management training. A management framework is required to provide a consistent approach to management development for all staff in healthcare, irrespective of discipline, role, function or seniority. It is necessary to provide a framework in order to develop and prepare nurses for management. This article aims to highlight the role of nursing administration in setting up new supporting systems on hospital system and at the same time to influence the nursing staff to adopt and above all to participate in shaping the future for health care.

**Theoretical Framework:** The writing of this article took place through the review of international bibliography and the corresponding editorial, focusing mainly in administration and leadership terms

**Conclusions:** Management skills should be considered as a priority. Management should be seen as valuable and needed by everyone. A good start would be for the government and NHS to start promoting them with enthusiasm, giving them the same priority and profile as their leadership cousin.

**Keywords:** Management Skills, Leadership, Operating Room, Nurse Management, Efficiency, Administration

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## SURGERY PATIENTS' SATISFACTION LEVELS FROM THE NURSING-CARE SERVICES

**EP029**

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**Objective.** The aim of this study was to determine surgery patients' satisfaction levels from the nursing-care services.

**Methods:** This descriptive study included 189 patients treated in the surgical clinics of the a university hospital. This study was performed between 23 May and 23 June 2016. Data were collected through a sociodemographic information form and **Newcastle Satisfaction Scale from Nursing Care**. Total scores of scale can range 0-100, with higher scores implying higher patient satisfaction. Descriptive statistical were calculated for all variables. Student t test, and one-way ANOVA was used examine difference in independent groups. The correlations between variables were calculated by Pearson's Correlation. P values of less than 0.05 were considered statistically significant.

**Results:** The mean age ( $\pm$ SD) was  $54.7 \pm 12.5$  years (range: 18-84). 52.9% of the sample were males. The satisfaction point of the patients was found to be  $65.71 \pm 15.49$ . It was determined that highest satisfaction ( $3.72 \pm 0.86$ ) was from "respects of the nurses on privacy" and the lowest satisfaction ( $3.15 \pm 0.86$ ) was from "The way the nurses made you feel at home. There was no significant difference between nursing care satisfaction levels according to patients' sociodemographic data ( $p > 0.05$ ). Hospital stay and length of hospital stay after surgery were significantly negative correlated with nursing care satisfaction levels ( $p < 0.01$ ).

**Conclusions.** The results of data analysis showed that the satisfaction levels of patients from nursing-care services at the surgery clinics were over the middle level. In addition, this study showed that the impact of length of stay in hospital on satisfaction levels of patients from nursing-care services.

**Key words:** Surgical intervention; nursing care; patient satisfaction.



## EP030

### SURGICAL SMOKE AS BIOHAZARD

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**Introduction:** Biological hazards refer to the exposure to micro-organisms, cell cultures and human endoparasites, which may be able to provoke any infection, allergy or toxicity. Prevention measures can limit exposure to such risks; operating room staff should be responsible for their own safety and for that of their colleagues. Electrosurgical techniques, including laser surgery, have expanded immensely in the last few years. Pyrolysis of tissues produces ultrafine particles, volatile chemical and organic compounds, some of which are teratogenic or carcinogenic.

**Keywords:** smoke, operating rooms, surgical masks, occupational risks.

**Material and method:** Extensive literature review was undertaken in Epistemonikos, PubMed, and Tripdatabase. The search strategy combined the following search terms: smoke, operating rooms, occupational risks, and (surgical) masks. No date or language restrictions were applied.

**Results:** Particles in surgical smoke cause ocular and respiratory tract irritation. The contents of surgical smoke depend on the increase of the tissue temperature during surgery. The surgical plume created at high temperatures contains low concentration of carcinogens, while at low temperatures, such as harmonic scissors, it generates bio-aerosols which may contain multiple live agents as *Mycobacterium tuberculosis* resistant, viral DNA HBV, HCV, HIV, and HPV; also contains live cellular and biological components, which may present an infection risk due to the transmission of viable cells. The literature review reports some papers describing the presence of laryngeal papillomatosis due to CO<sub>2</sub> laser plume in operating room staff.

Prevention involves a correct smoke evacuation system, and the use of appropriate personnel protective equipment according to the type of intervention and the surgical instruments used.

**Conclusion:** The body of *evidence* documenting the *hazardous* components of *surgical smoke* is *increasing*. *Operating room staff needs to be aware of the impact on their health and be familiar with the use of appropriate surgical face masks.*

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## THE ATTITUDES OF NURSES WORKING FOR THE OPERATING ROOM TOWARDS PATIENT SAFETY

**EP031**

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This descriptive research was planned to assess the attitudes of nurses working for the department of operating rooms. The target population of the study was composed out of all the nurses who work at the operating rooms in Edirne (N=67). The research was conducted between March 2015- April 2015 period in Edirne Public Hospital Association, Special Hospital, Trakya University Faculty of Medicine, Department of operaitn rooms. SPSS 22.00 was used for the evaluation of data and variance analysis, tukey test, t test and frequencies were used for the statistical analysis. Descriptive statistical methods for evaluation of data (frequency, percentage, mean, standard deviation ) to examine normal distribution of Frequencies - descriptives distribution test and non- quantitative data to compare independent samples t-test was used to One Way Anova. Results in 95% confidence interval ,  $p < 0.05$  significance level was evaluated. %30.4 of operation room nurse was between 26-30 years old, 82% was women (n=42) and 58.9 % of operation nurse (n=33) was married in our research. Nurse who work univercity hospital 's 71.4% educated about security of patient. 20 public hospital 's nurse educated about security of patient (% 74,1). 4 nurse who work special hospital educated about security of patient (%66.7) As a result, all kind of hospital is the same result about team collaboration, job satisfaction, working conditions, secure environment, considerations related to management, determining the stress level and there is not statistically significant difference between grup of hospital and working time. ( $p > 0,05$ ). It is significantly higher in terms of the evaluation team collaboration ( $p = 0.023$ ). As a result, the nurses participating in the study had low attitude towards patient safety.

**Keywords:** operation, security patient security, nursing care, corporate culture



## EP032

### THE EFFECT OF HYDRATION AND CAFFEINE ADMINISTRATION ON POST- SPINAL ANESTHESIA HEADACHE: EXPERIMENTAL STUDY

*Ay Yayla*

**Aim:** The aim of the study is to examine the effect of hydration and caffeine, administered to patients operated with spinal anesthesia, on post-spinal headache.

**Material and Method:** The population of the experimental study consisted of patients who stayed in a state hospital in Kahramanmaraş between November and December 2014. The sample consisted of 90 patients who underwent operation under spinal anesthesia in the mentioned hospital between these dates and agreed to participate in the study. 3 groups administered with intravenous fluid and caffeine were formed and the patients were assigned to the groups according to rules of randomized controlled study by considering the order of the patients to take out of the operating room. 30 patients in the group I were administered with 3000 ml intravenous fluid, 30 patients in the group II were administered with 3000 ml intravenous fluid + caffeine, and 30 patients in group III were administered with 4000 ml intravenous fluid. The data were collected by using a questionnaire prepared in the line with literature. Percentage and chi-square test were used to assess the data.

**Results:** When descriptive characteristics of the groups were compared, it was determined that there was no statistically significant difference between the groups and the groups were similar. It was found that 23.3% of the patients in the group I, 20.0% of the patients in the group II, and 13.3% of the patients in the group III had headaches. Although there was no statistically significant difference between the groups, it was determined that number of the patients who experienced headache in the 3rd group was lower. It was determined in the study that the headaches of the patients relieved with rest, increased by the upright position, did not cover the back of the neck and shoulders, and increased with movement. When the headache characteristics of the groups and symptoms accompanying post-spinal headache were compared, no statistically significant difference was determined between the groups ( $p>0.05$ ).

**Conclusion:** It was concluded that hydration administered after spinal anesthesia in the groups decreased the development of headache.

**Keywords:** Spinal anesthesia, post-spinal anesthesia headache, different fluid administrations.



## THE FACTORS AFFECTING WOMEN PREFERENCES CESAREAN DELIVERY

**EP033**

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**Background and aims:** Cesarean is one of the most common major surgical operation on the World and also in Turkey. Cesarean rates of Turkey are quite more than 15% which has been recommended by World Health Organization. According to the 2014 data Health Statistics Yearbook for the Republic of Turkey Ministry of Health, the share of caesarean delivery is 51.1% in all births. According to the 2015 data from the World Health Organization, cesarean delivery rates was reported as %17 in the world, %37 in the Turkey. Although the life of the mother and baby savior operation if medical requirements cesarean carries risks arising from surgical procedures. It was continues the studies to reduce cesarean rates in all the World. Therefore this study aims to identify the women's choice of delivery methods of and the factors that affect their choice of delivery method.

**Methodology:** In this descriptive cross-sectional study, a total of 147 women who gave birth in a public hospital at during two months consisted the study group. A questionnaire including questions about demographic and obstetric histories and the choice of birth methods was used to collect the data. Using the tests which number, percentage, mean and chi-square, have been evaluated the data. Before performing the study, the ethics committee and institution permission, and informed consent of participants have been taken.

**Results:** The rate of vaginal birth among the study participants is 78.2%. The rate of cesarean among the study participants is 21.8%. The predominant reason of choosing the vaginal delivery was "Having heard that the more healthy" (%22.4). "Be a necessity that requires cesarean" (%44.9) were the predominant reasons to choose the caesarean mode. The statistical evaluations demonstrated "the doctors' suggest that cesarean" is found statistically significant on the choice of birth methods.

**Conclusion and suggestion:** Consequently, it was suggested for the nurses and midwives to enlighten and guide the women on the modes of delivery.

**Key Words:** Cesarean, delivery mode, vaginal delivery, woman.

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## EP034

### TURBIDITY AS A TEST METHOD FOR THE DETECTION OF BIOLOGICAL AND CHEMICAL CONTAMINATION IN SURGICAL INSTRUMENTS.

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**Keywords:** surgical instruments, optical density, infection control

**Background:** Proper reprocessing of reusable surgical instruments and other medical devices is a critical infection prevention strategy. In regards to instrument sterility and ultimately patient safety, one important fact prevails: an instrument that has not been properly cleaned cannot be effectively sterilized<sup>1</sup>.

**Purpose:** The determination of the optical density (OD) in surgical instruments (SI) before and after reprocessing into Washers-Disinfectors (WD) so the method can be part of quality management system in Rhodes General Hospital.

**Methodology:** Our study was created in environmental conditions according ISO 14664 with calibrated system MicroScan turbidity meter. The measurements involved 50 surgical instruments – surface control 5-6 cm<sup>2</sup> – in dirty and clean conditions. For sampling were used sterile cotton swab soaked in sodium chloride 0,9%. The suspension volume 3 ml N/S prepared directly in a test tube 12X83 mm. For chemical residues, water samples were taken from the supply line as close to the WD also from discharge point into the chamber during final rinse and thermal disinfection stage.

**Results:** The OD value of SI in dirty conditions ranged from 0.14 to 0.28, in clean condition from 0.03 to 0.04. Furthermore, the OD value from feed water was counted between 0.03 – 0.02 during final rinse and thermal disinfection stage between 0.03 – 0.02 (working solution OD value 0.12).

**Conclusions and Implications:** Turbidity provides a pass or fail test with high level of sensitivity for the blood and chemical residual contamination. Furthermore, is economical, reliable and very easy to use. Data collected are immediately available also the method offers comparable and generally valid results.

**Faculty disclosure:** No conflict reported

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## TURKISH OPERATING ROOM NURSES' EXPERIENCES REGARDING THEIR PROFESSION: A QUALITATIVE RESEARCH

**EP035**

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**Aim:** The study was undertaken to determine the opinions and experiences of operating room nurses regarding their profession.

**Method:** This descriptive qualitative study was conducted with nine operating room nurses who were chosen by purposive sampling. Data were collected through semistructured interviews and interpreted using thematic analysis.

**Findings:** Four main themes and three subthemes emerged from these semistructured interviews. The main themes were concerned with the nurses' opinions and thoughts, operating room working conditions, work problems and nurse-patient interactions. Sub-themes included clinical experience, professional development and the existence of a sense of belonging as related to the work environment. Nurses expressed that working in an operating room is a privilege, and they consider their work to be very specialized and exclusive compared to other areas of medicine. However, they suffer from high anxiety due to staff shortages, enclosed working spaces with little access to sun and fresh air, and exposure to anesthetic gases. The nurses also expressed the desire to provide more effective nursing care and to have more nurse-patient interaction, but they are fatigued and have difficulties taking care of their own basic needs. Yet the welfare of their patients remains a high priority, and after surgeries, the nurses remain deeply committed to patients' after-surgery progress. Nevertheless, in spite of all the difficulties, operating room nurses stated that they don't want to leave the operating room.

**Conclusion:** Our results showed that operating room nurses work in the operating rooms with dedication and satisfaction, but they experience many challenges and doubts because of work conditions.

**The implications for perioperative nursing:** Our results can be the impetus to develop strategies to increase nurses' morale and to improve operating room working conditions.

**Key words:** Operating room, operating room nursing, qualitative research

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## EP036

### TURKISH SURGICAL AND OPERATING ROOM NURSES CONGRESSES 1996-2016

*van Giersbergen Meryem Yavuz*

The first Turkish Operating Room Nurses Congress held in 1996 in Izmir organized by Ege University Surgical Nursing Department. The Turkish Surgical and Operating Room Nurses Association (TCAHD) are in existence since 1997 and are growing steadily since.

Turkish Surgical and Operating Room Nurses Association (TCAHD) is an organization set up to promote Turkish perioperative nursing, the profile and role in Turkey.

After developed association all congresses organized by TCAHD. Turkish Surgical and Operating Room Nurses Congresses are 9 congresses. Congress is held every two years. TCAHD has published 9 congress books and course handouts.

This presentation will be given information about Turkish Surgical and Operating Room Nurses Congresses distribution of topic, oral and poster presentation numbers and group topics.

Keywords: Turkish Operating Room Nurses, Congress, Turkey

## EP037

### VALIDITY AND RELIABILITY STUDY OF TURKISH FORM OF THE REVISED INDIVIDUAL WORKLOAD PERCEPTION SCALE PAKIZE

*Ozyurek Pak*

**Background:** To measure of the nursing work environment is utilized some scales in health care environments in Turkey. These instruments are not consist of staff nurses' perceptions of their work environment at the organizational level. The Revised Individual Workload Perception Scale is a psychometrically survey instrument that assesses five subscales important to an evaluation of the nurse's work environment.

**Aim:** To determine reliability and validity of Turkish version of the "Revised Individual Workload Perception Scale" developed by Cox and et al.

**Method:** This study was conducted in university, public and private hospitals in Afyonkarahisar province in the middle region of Turkey, between March and May 2016. Data was gathered from 569 nurses after obtaining ethical approval and official permission from the relevant hospitals' administrations. This Likert-type scale consisting of 29 items and five subscales was given to 20 nurses for the pilot study after language and content validity studies. After the scale was translated by researchers, it was reviewed for the content validity by linguist expert opinion and revised according to the recommendation. The statistical analysis of the scale was done using Exploratory Factor Analysis for the validity and the Cronbach Alfa coefficient for the reliability analysis.

**Results:** Factor analysis was supported the five subscales (manager support; peer support; unit support; intent to stay; workload) of Revised Individual Workload Perception Scale that explained for 62,86% of the total variance for nursing work environment. Manager support subscale had the highest explained variance (19,913%). The Cronbach Alfa coefficient for the reliability analysis was found to be 0.921 for the whole scale, and between 0,721-0,937 for the subscales.

**Conclusions:** The results of this study determined that the Turkish version of Revised Individual



Workload Perception Scale was valid and reliable. No item was omitted from a 29-item scale. The Turkish version of the Revised Individual Workload Perception Scale is recommended to evaluate the influence of contemporary nursing workforce regulation on nurses' perceptions of their work environment in Turkey.

**Keyword:** Nurses; workload perception; reliability and validity; scale.

## WORKPLACE STRESS IN HEALTH PROFESSIONALS: THE SILENT THREAT

EP038

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**Background:** Health care reforms in the past two decades have created a state of never ending change that is stressful for health care workers. Health professionals are particularly affected by economic constraints in healthcare systems that challenge their ability to provide high quality care according to their professional standards. Workplace stress levels have always been higher in the healthcare populations but research has shown that health care workers are reporting even higher levels of severe workplace stress.

**Focus of interest:** Many studies have demonstrated that nurses often suffer from workplace stress. Job-induced stress affects their physical and mental well-being and influences negatively both health-related quality of life and job performance. The purpose of this study was to investigate the coexistence potential correlation of these phenomena.

**Theoretical Framework:** The writing of this article took place through the review of international bibliography. Total of 300 studies were found and 60 of them were reviewed for this study.

**Conclusions:** The last fifteen years there was a significant increase of anxiety disorders in workplace and specifically in health organizations. The vast majority of the sample was nurses and practitioner doctors. However it is important to note that because of these cases, (which were persistent and repetitive), there were (increasing), negative impacts in mental and physical health of professionals. These were the key factors, due to which the employees are reluctant to work, or in many cases they think to quit their profession. The work environment in combination with other factors of the life of health professionals helps in triggering anxiety. Although the context is still under investigation by the authorities of health facilities. Also, health care professionals are invited to acquire knowledge for recognition of anxiety in the workplace and to develop policies and intervention in order to prevent and cope with the phenomenon.

**Keywords:** Health Professionals, Anxiety, Workplace, Conditions, Stress, Effects of Stress on Mental Health.

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## EP039

### A BRIEF LITERATURE SURVEY ON INDUSTRIAL ENGINEERING APPLICATIONS IN OPERATING ROOMS

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#### Introduction and Aim

Industrial Engineering (IE) is a branch of engineering which focuses on improving the efficiency of systems composed of human, machine, material, money and information. As early as the period of 1914-1916, Frank and Lillian Gilbreth, the pioneers of IE, published several articles describing the work they did in hospitals (1). The aim of this study was to evaluate the IE-related articles focusing on operating rooms in the 21<sup>st</sup> century.

#### Material and method

Data were collected from EBSCO, PubMed and Springer Link databases by using the keyword combination of “operating room”, and “industrial engineering” and the years of 2000-2017. The search results were evaluated for including an abstract, keywords, study methodology and results. A total of one hundred research work (n=100) were chosen as they are directly related to the subject matter. Results were given by numbers and percentages.

#### Results

The most popular research topics were “operating room (OR) scheduling (42%)”, “ergonomics (20%)”, “facility layout (11%)” and “safety analysis (9%)”. The research on OR scheduling mostly aims to improve the utilization of OR facilities and reduce waiting time of patients and surgery staff (2). Ergonomics related research mostly dwells on arranging physical environment and working heights and also suggests better body postures and standing supports (3). Facility layout concentrated research determines area requirements for operating theaters and locates the related units to improve the patient flow (4). The research focused on surgical safety analysis develops systematic methods to eradicate human error in surgical processes (5).

#### Conclusion

Among its divergent application areas, IE community focused on operating rooms as well which are dense working units of healthcare facilities and yielded satisfactory research results. We hope to draw attention to more multi-discipline research opportunities in the operating room settings.

**Keywords:** Industrial engineering, healthcare, operating room, ergonomics, surgery scheduling, literature survey

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## A NEW CARDIOTHORACIC SURGERY DEPARTMENT IN THE BARUCH PADEH MEDICAL CENTER. BEGINNING, DEVELOPMENT, RESULTS

**EP040**

***Presented by: Osnat Hanina. RN, BA Elena Rozin. RN The Baruch Padeh Medical Center, Poriya. Israel***

The Medical Center is located on Poriya Ridge above Tiberias, and serves the population of Tiberias, the Golan Heights, Jordan Valley, Lower Galilee, and various inhabitants from nearby cities, villages, Kibbutzim and Moshavim. A diverse population of Jews and various minorities of all religious denominations are served by the Medical Center, and includes ultra-orthodox, observant and secular Jews, as well as Arabs, Muslims, Christians, Druze and Circassians.

Until 2015, no unit with a specialization in cardiothoracic surgery had been established in the entire region of the Galilee, Golan Heights and the Jordan Valley. The nearest medical centers were in Haifa or Tel Aviv for patients that needed bypass graft surgery, valve implantation surgery, aortic surgery, etc. Even cardiothoracic trauma, whether of injured civilians (due to car accidents) or soldiers could not be appropriately surgically addressed in any of the medical centers located in the north region of Israel (Poriya, Zefat, Naharyia or Afula), and casualties would be rushed to Haifa or the Central part of Israel via the air or ambulance.

Consequently, all the large and vibrant population of the Northern part of the country is definitely needs this kind of health services close to its place of living.

The great change occurred during the spring of 2015, the Cardiothoracic Surgery unit was established as part of the Cardiovascular department at the Baruch Padeh Medical Center, Poriya.

Through the establishment of the Cardiothoracic Surgery unit the cardiovascular healthcare of patients is provided with the availability of procedures such as bypass graft, valve implantation and correction, including the usage of minimally invasive procedures and emergency operations (such as aortic rupture, and cardiothoracic injuries).



## EP041

### ANXIETY AND DEPRESSION IN PATENTS WITH PERMANENT PACEMAKER

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Permanent pacemakers are used to control long-term heart rhythm problems. After the first permanent pacemaker implant in 1958, the use of this device has grown enormously mainly due to the advances in technology. According to estimations, more than 300,000 patients in the United States receive a permanent pacemaker each year and about 900,000 pacemakers are implanted, worldwide.<sup>1-3</sup> Given the population ageing, the number of elderly patients undergoing permanent cardiac pacemaker implantation is increasing. Specifically, the 70% to 80% of pacemakers are implanted in patients older than 65 years old.<sup>4,5</sup>

#### **Methods**

A computer search of the literature was conducted in PubMed and Google scholar using the following key-search terms: "pacemaker", "anxiety", and "depression".

#### **Results**

According to the literature review, this implanted device is held as a "salvage" by the vast majority of patients, however, it imposes significant changes to personal, family and social life for cardiac patients. As a consequence, patients frequently experience problems from medical dimension, mainly anxiety and depression that persist for a long time.<sup>6,7</sup> 41.4% of individuals with pacemaker (mean age 66.7+/-2.5 years) was experiencing anxiety in spite of the positive transplantation results in the sense of wellbeing, the physical function and concentration.<sup>6</sup> These disorders may exert devastating consequences on the outcome of the disease involving a longer hospital stay, higher hospitalization rates and costs, non-compliance with treatment and failure of risk factor modification.<sup>6,7,8</sup> Continuous nursing care may relieve the intensity of depression and anxiety before and after implantation in elderly patients (mean age 68,2±8,5 years old) undergoing pacemaker implantation.<sup>8</sup> The scale Hospital Anxiety and Depression (HADS) is one of the most common questionnaire consisting of 14 items that assess how respondents felt during the previous week. Seven of the 14 questions assess the level of depression (questions 2, 4, 6, 8, 10, 12 and 14) and the other seven evaluate the level of anxiety (questions 1, 3, 5, 7, 9, 11 and 13).<sup>9,10</sup> Health professionals often ignore or fail to recognize this psychological burden of patients either due to their focus on biological dimension of the disease or due to their lack of adequate training and awareness.<sup>11,12</sup> In attempt to address anxiety and depression, is vital for patients to understand that this implantable device does not provide solution to arrhythmia, but faces the rhythm disturbance when it occurs. At the same time, patients need to expand their knowledge about the device as well as to strengthen their self-care including : a) adherence to anti arrhythmic medication (dosage, method of administration, prevention-treatment adverse events), b) regular device control (threshold stimulation, battery level, etc.), c) education to recognize early signs and symptoms of cardiac disorders rhythm, d) adoption of life style modifications and prior physical activity and finally e) acceptance of limitations in their daily life.<sup>1-5,13</sup>



## Conclusions

Assessment of anxiety and depression in patients with permanent pacemaker should be an integral part of clinical practice. Holistic and individualized nursing care demands evaluation of anxiety and depression levels before and after a pacemaker implantation as well as factors associated with these variables. Moreover, a patient-oriented treatment model that implies cooperation between patients and health professionals will significantly ensure the success of treatment.

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## EP042

### ARE THE PATIENTS HOSPITALIZED IN SURGICAL CLINICS FRAGILE AND DEPRESSIVE?

**Oral Erdağı S\*, Eskici V., \*\* Yayla A., \*\*Özer N. \*\***

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The objective of this study is to evaluate the fragility and depression of patients aged 60 and older, hospitalized in surgical clinics of a university hospital. While the population of the study consisted of patients aged 60 and older who were hospitalized in surgical clinics and accepted to participate in the study, the sample group consisted of 65 patients who accepted to participate in the study during the period when the study was conducted. A questionnaire prepared by reviewing literature, as well as Edmonton Frail Scale, and Geriatric Depression Scale were used to collect the data.

It was determined that 50.8% (s=33) of patients who participated in the study were male, had an age average of  $71.50 \pm 7.77$ , 63.1% had undergone no operation and 70.8% (46) had at least one chronic disease. It was also determined that 26.2% of patients were hospitalized in the General Surgery Clinic, 50.8% were hospitalized at least twice within the last one year, and 35.4% (23) fell for at least once within the last one year. While the Edmonton Frail Scale mean score of patients was determined as 8.10 (frail), the geriatric depression mean score was found to be 15.20 (depression).

Comparing the frail mean score of fragility with patients' state of having undergone an operation, presence of a chronic disease, being hospitalized within the last one year, having fallen within the last one year, and educational status; the difference between them was statistically significant.

Comparing the mean score of geriatric depression scale with who would look after patients after the operation, the functional performance status, psychological state, and the identification of the patients' general health; a statistically significant difference was observed.

As a consequence, regarding the evaluation of geriatric patients hospitalized in surgical clinics, it could be recommended to evaluate their depression and fragility, regularly follow elderly individuals with depression and fragility, and enable relevant staff to form treatment and care programs.



## CREATIVITY FOR DEVELOPING STUDENTS' PROFESSIONAL IDENTITY

**EP043**

**DEDONDER Audrey, SCHELLEKENS Wivine (Belgium)**

As a perioperative nurse, we work daily in an interdisciplinary team. In order to position ourselves within this team, it is important to work on our professional identity.

As tutor, we teach students specializing in perioperative care (post baccalaureate) at Parnasse-ISEI Nursing School (Belgium). Professional identity generally starts at the level of training sessions. We decided to initiate a class aimed at stimulating the students in that field.

Professional identity can be defining like « the way different groups identifies themselves at work against peers, leaders and other groups. Identity at work is based on distinct collectives representations. » (Sainsaulieu 1985<sup>1</sup>)

We proposed a methodology said "active". By that way, students build their knowledge around a project: they decided to make a film. The aim of this film was to explain the perioperative nursing professions' to baccalaureate nursing students. The video is now available on Youtube: <https://www.youtube.com/watch?v=F1s86iXsvHQ>

At the heart of this project lie two values of our institution: innovation and skill valorization.

A qualitative assessment of the project was made by the stakeholders. This will be one of our presentations' topics.

Because professional identity is constantly evolving, we hope this has helped our students to set the necessary foundations in order to build their own future professional identity.



## EP044

### DAY SURGERY PATIENT COMFORT AND FACTORS EFFECTING THE PATIENT COMFORT

**Rahşan Çam\*, Havva Yöner\***

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Day surgery is a surgery that is the patients are discharged on the same day. Thanks to developments in anesthesia and surgical techniques, ambulatory surgery has spread rapidly in many countries. Patients are treated with day surgery in many areas such as ENT(ear-nose-throat), orthopedics, gynecology, general surgery, cardiovascular surgery, plastic surgery, pediatric surgery, patients oral and dental surgery. Comfort concept, has been used in nursing for a long time and provide information about the quality of care. Day surgery is being applied to more patients in more cases every day. Comfort, which is expected result the of nursing care, is very important for providing better nursing care.

This study was performed to determine day surgery patients' comfort and factors that effects the patients' comfort. 300 patients who were admitted to day surgery have been included in this study. Individual Characteristics Form, Perianesthesia Comfort Scale and State-Trait Anxiety Inventory Form have been used to collect research data.

The mean score of comfort  $70.197 \pm 11.01$  average STAI score of  $43.7 \pm 9.03$ , trait anxiety scores averag  $46.77 \pm 7.51$  were found to be in this study.

As a result, patient's comfort is effected by variables satisfaction with care, the time of giving information about surgery, previous hospital experience. Some of other variables have effect anxiety levels but comfort level has not effected by this variables.

**Key Words:** Day Surgery, Comfort, Nursing.



## EVIDENCE BASED PRACTICE FOR MANAGING PERIOPERATIVE PATIENTS IN THE PREVENTION OF DEEP VEIN THROMBOSIS AND PULMONARY EMBOLISM

**EP045****Voight Patrick****KEY WORDS:** Deep Vein Thrombosis, Pulmonary Embolism, Prevention, Risk Assessment

As a personal survivor of a Deep Vein Thrombosis (DVT) and massive Pulmonary Emboli (PE) my chance of dying according to statistics was 1 in 4. Fortunate for me, luck and excellent medical treatment saved my life. PE is one of the leading killers of patients in the United States and around the world annually. DVT and PE have been called the “silent killer” since 80% of the patients with DVT are unaware that they have any signs or symptoms in the first place. According to The Joint Commission, deaths in our hospitals due to Pulmonary Embolisms are considered to be the number one preventable hospital acquired condition. Statistics further show that between 10% - 25% of all deaths in our hospitals are related to a pulmonary embolism and if managed appropriately could have been prevented. Perioperative Nurses are the front line for assessing and identifying patient risk levels in order to implement prophylactic measures to reduce the patient risks and save lives.

**Objectives:**

1. Describe the physiology and risk factors associated with blood clot formation that can lead to Deep Vein Thrombosis (DVT) and Pulmonary Emboli (PE)
2. Understand the evidence based risk factors that put an individual at risk for developing DVT
3. Discuss the signs and symptoms to assess patients for possible DVT and/or PE
4. Discuss evidenced based protocols for the prevention and treatment of DVT or PE

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## EP046

### EXAMINING THE POSTOPERATIVE PAIN ASSESSMENT RECORDS OF NURSES IN TURKEY

***Sevilay ERDEN, Sevban ARSLAN, Sevgi DENİZ, Derya GEZER, Pınar KAYA***

**Background:** Inadequate postoperative pain document is an international problem and the need to solve. Although there are many recommendations and guidelines for adequate pain assessment (1), the studies report that the quality of postoperative pain documentation do not meet acceptable standards (2,3). The aim of the study was to examine nursing pain assessment and analgesic records for the first 48 postoperative periods.

**Methods:** This retrospective and descriptive study was conducted at the Çukurova University Faculty of Medicine Balcalı Hospital, Department of General Surgery, with the permission of the ethical committee of the medical faculty. The study samples consisted of records of patients who had surgery between January 2014 and January 2015. We summarized the clinical data and pain assessment data of the patients with available files.

**Result:** We examined 421 patients' records for the first 48 postoperative hours. None of the patients' pain records included intensity, location, duration and quality of the pain. In the first 2. postoperative hours more than half of the all analgesic injections (63.9%) were intramuscular which is in contrast to the postoperative pain guidelines. Analgesics of the each patient was evaluated at 2, 4, 8, 12, 24, 36, 48. postoperative hours and respectively 29.0%, 99.8%, 60.8%, 53.0%, 43.5%, 58.2%, 65.1% of the patients did not applied any analgesics. Also, according to the nursing records, none of the Non-pharmacological methods used in patients.

**Conclusion:** The postoperative pain in early period was not assessed and record properly. We should enhance awareness about pivotal role of the pain assessment records for effective pain management plan. Thus, the continuing online and distance education courses can be organised in our country.

**The implications for perioperative nursing:** Documenting pain enables understanding and managing the pain experience, individualize analgesia, good communication between staff, and early detection of complications related uncontrolled pain and analgesia.

**Keywords:** Nursing, Pain, Patient Records, Postoperative

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## EXPERIENCES OF THE PATIENTS STAYING IN THE INTENSIVE CARE UNITS AND THEIR ANXIETY AND DEPRESSION STATES

**EP047**

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**Aim:** This study was conducted as descriptive and cross-sectional so as to determine the experiences related to intensive care unit (ICU) of the patients staying for at least 24 hours in the medical and surgical intensive care units.

**Method:** 52 volunteer patients aged 18 and older who stayed in the intensive care units for at least 24 hours and were then taken to clinic constituted the population of the study. Patient Information Form, Intensive Care Experience Scale (ICES) and Hospital Anxiety and Depression Scale (HADS) were used in the collection of data. Research data were collected through face-to-face interview.

**Results:** It was determined that mean duration of stay of the patients in the ICU was  $79.42 \pm 62.37$ , the reason of stay in ICU of 34.6% of the patients was trauma and 61.5% of the patients stated they witnessed the treatment and care of other patients in the ICU. It was found that 30.7% of the patients who witnessed the treatment and care of other patients stated they felt uncomfortable with that situation. The mean score of the patients that they got from ICES was  $49.51 \pm 6.05$  and HADS was  $8.67 \pm 3.84$  for anxiety, and  $9.36 \pm 3.30$  for depression. A significant relationship was found between the reasons of stay in ICU and ICES. It was found that there was a significant relationship between the gender, educational status, reason of stay in intensive care unit of the patients and the mean score for anxiety of HADS. A significant relationship was determined between educational status, gender of the patients and the mean score for depression of HADS.

**Conclusion:** It was found as a result of our study that the mean score of the patients that they got from ICES and from HADS for both anxiety and depression was moderate.

**Keywords:** Anxiety, Depression, Intensive Care



## EP048

### HEALTH PERCEPTION AND AFFECTING FACTORS IN SURGICAL PATIENTS

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**Background:** Measurement of health perception includes assessments of the biological dimensions of health, perceived well-being, physical, mental, social functionality and pain evaluation(1).

**Focus of interest:** The objective of this study is to determine health perception and affecting factors in surgical patients.

**Theoretical framework:** Beliefs, attitudes and perceptions are specified as factors influencing health behaviors(2). Health Perception Scale was developed by Diamond et al.(2007). Turkish validity and reliability was made by Kadioglu and Yildiz (2012). It includes 15 scales, 4 subscales(3).

**Methodology:** This is a descriptive research carried out between June 2015 - August 2015 with 629 patients who agreed to participate in the study. Data was collected with Health Perception Scale(HPS) and personal information form. The datas were analyzed with IBM SPSS 21 statistical software package.

**Conclusions:** The age of study group was between 20-75, with mean of  $46.50 \pm 15.97$  years. Health perception scores were between 15-69, with mean of  $38.43 \pm 7.70$  points. There was found significant difference between age, education level, marital status, status of having a chronic disease, number of hospitalizations and health perception scores ( $p < 0.05$  for each one).

**Implications for perioperative nursing:** The low scores of health perception of patients requires an examination of health behavior after surgery for adaptation. With the identification of factors that can impact on health perception it is important for planning necessary care.

**Key words:** perception of health, surgical patients, surgery

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## EFFECTS OF PULMONARY REHABILITATION ON RESPIRATORY FUNCTION AND QUALITY OF LIFE IN PATIENTS UNDERGOING ON ON-PUMP CORONARY ARTERY BYPASS GRAFT SURGERY METHOD

**EP049**

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**Background:** After Coronary Artery Bypass Graft Surgery (CABGS) as a risk surgical operation, among important causes that increase postoperative mortality and morbidity is pulmonary complications. In this survey, the effects of pulmonary rehabilitation programme on respiratory function of the patients having CABGS via On-Pump method before and after the surgery, respiratory function test, arteriel blood gas parameters, 6 minutes walking test and life quality is investigated.

**Method:**The population of this randomised survey is composed of the patients hospitalising at Afyonkarahisar Private Park-Hayat Hospital cardiovascular surgery clinic in order to have CABGS via On-Pump method and volunteering to take part in the research. A sample of 30 patients composed of randomly determined 15 patients both for the experimental group and the control group was planned. The Experimental group was trained preoperatively and a pulmonary rehabilitation programme including basic breathing techniques, deep breathing techniques, bronchial hygiene techniques, incentive spirometry usage, lower and upper extremity exercises and patients' mobilization. Postoperatively, pulmonary rehabilitation programme was carried on. On the control group however, usual nursing care was applied. Finally, all the patients' features, arteriel blood gas results, respiratory function tests results, 6 minutes walking test results and life quality scale (SF-36) results will be evaluated and compared.

**Results:** Our survey still continues. the number of patients scheduled is achieved until the date of the Congress, poster abstracts our results will be shared.

**Key words:** Coronary artery bypass graft surgery, pulmonary rehabilitation, quality of life

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## EP050

### IMPROVING THE DELIVERY OF HEALTHCARE IN SURGERY THROUGH PERFORMANCE IMPROVEMENT, ACCOUNTABILITY AND RESPONSIBILITY

***Voight Patrick***

**KEY WORDS:** Performance Improvement, Lean, Governance, Empowerment, Leadership Accountability  
Across the world; inefficiencies, poor patient throughput, lack of coordination and poor quality care drive costs in our healthcare systems, hospitals and Perioperative Services. In many countries it is estimated that 30% of spending on healthcare is related to these inefficiencies and lack of care coordination.

With Nursing and other healthcare professionals at the front line caring for patients, we first-hand see the impacted related to broken processes in our daily work. As a result, in many situations, workarounds have been developed in order for us to carry out our daily patient care activities. Workarounds seem to become the “new normal” in order for us to provide care to patients. In many cases, patients’ lives are at risk when this new normal becomes routine in providing care.

There are numerous performance improvement methodologies capable of eliminating waste and poor care in our hospitals and operating rooms. These methodologies help us redesign patient care and nursing care processes in order to: improve efficiencies and throughput; coordinate care; improve quality and safe patient care. In order for processes to be redesigned and implemented, nursing and other healthcare professionals must have the understanding and skills to think, redesign and implement new processes.

No matter what performance improvement methodology is utilized, a key aspect of sustaining the effects of the performance improvement is nursing empowerment and leadership accountability. Without these core skills and competencies, the improvement efforts realized will be short lived and quickly return to their prior, inefficient and unsafe state.

#### **Objectives:**

1. Discuss drivers of inefficiencies in our Operating Rooms and their effect on patient care.
2. Discuss the various performance improvement methodologies related to improving patient care, cost, quality and throughput.
3. Discuss the roles, responsibilities and skills for Nurses and other healthcare professionals in leading performance improvement in our surgical departments
4. Discuss leadership and staff responsibilities in sustaining effective change in our work environments

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## INVESTIGATION OF HYPOTHERMIA INCIDANCE AND RISK FACTORS IN PATIENTS UNDERGOING SURGERY

**EP051**

**Authors:** *Fatma Vural, Buket Çelik, Zeynep Deveci, Kübra Yasak*

**Objective:** The aim of this study was to determine the incidence of inadvertent hypothermia in patients undergoing surgery and determine associated risk factors for inadvertent hypothermia.

**Method:** This prospective, descriptive, cross-sectional study was carried out in January -August 2016, with 144 patients, over the age of 18 years, underwent various operations. Data was collected with the "Hypothermia Data Collection Form". Body temperature was measured at the tympanic membrane in the waiting room, operating room and PACU. The data was analyzed by SPSS 20.0, number, percent and Kruskal Wallis, Mann Whitney U and X2 analysis.

**Results:** The mean age of the patients was  $53.59 \pm 15.88$  years and 62.50% of them were male. Before anesthesia, 89% of the patients were found to be normothermic ( $36.37 \pm 0.51^\circ\text{C}$ ). During operation 74.30% of the patients were found to be hypothermic ( $35.52 \pm 0.69^\circ\text{C}$ ). Post anesthesia, 75.70% of the patients were found to be hypothermic ( $35.43 \pm 0.73^\circ\text{C}$ ). There was no statistically significant difference between age, ASA score, body mass index (BMI), duration of operation and inadvertent hypothermia ( $p > 0.05$ ). There was a significant difference between the patients who were applied the heating method during the operation (n:40) and did not apply the heating method during the operation (n:104) ( $p < 0.05$ ). It was found that inadvertent hypothermia more in the patients who had body temperatures were between  $35.0$ - $36.0^\circ\text{C}$ .

**Conclusion:** As a result of this study, it was observed that rate of inadvertent hypothermia was high during and after surgery. It is recommended to use the heating methods before and during surgery for prevention and management hypothermia.

**Key words:** Inadvertent Hypothermia, Incidence, Risk Factor, Operating Room



## EP052

# MUSCULOSKELETAL DISORDERS AND WORK-RELATED RISK FACTORS IN OPERATING ROOM NURSES: A REVIEW

*Brdnik Bla*

**Background:** Musculoskeletal disorders (MSD) represent one of the leading causes of occupational injury and disability in the developed and industrially developing countries (1-3). The prevalence of work-related musculoskeletal disorders (MSD) among health care providers and especially registered nurses has been extensively reviewed in the literature (4-8). Reported prevalence MSD pain for nurses was highest in the low back, followed by shoulders and neck (7). Know risk factors are activities such as heavy lifting, repetitive tasks, banding, twisting, low job control etc. (8-9). While most researchers have concentrated on general hospital nurses, little is known about ergonomic stresses in a more specific group of hospital workers, such as operating room (OR) nurses (10).

**Objectives:** The aim of this study was to determine the prevalence of musculoskeletal disorders among operating room nurses and to identify main work related risk factors.

**Methods:** A total of 20 articles on prevalence of MSD and risk factors were included in the review. All articles were published in peer-reviewed English-speaking journals and subjected to a quality review.

**Results:** Lower back symptoms were found to be the most prevalent problem in OR nurses with a past year prevalence of 52,7% - 84%. Many OR nurses reported more than two musculoskeletal symptoms during the last 12 months. The main work-related risk factors are manual handling activities (lifting, pushing, pulling, lowering heavy objects etc.) prolonged standing, shift work, time pressure.

**Conclusion:** ORs are not only a physically but also psychologically demanding working environment. The data suggest that it is important to promote programs for prevention of MSD among OR nurses. And try to reduce physical and psychological stress in OR.

**Key words:** Musculoskeletal disorders, Operating room nurses, Prevalence, Risk factors

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## NURSES SOCIAL CAPITAL AND JOB SATISFACTION

**EP053**

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**Background:** Social Capital and Job Satisfaction are multidimensional concepts that relate with nurses health care provision.

**Purpose:** To assess the impact of Social Capital on nurses' Job Satisfaction.

**Research problems:** How nurses' social capital impacts their job satisfaction.

**Material and Methods:** It is a quantitative research study. This study was conducted in 125 employees of a General Hospital in Central Greece (response rate = 86.6%) in March 2016. The Greek version of two questionnaires the Social Capital Questionnaire (SCQ) and Job Satisfaction Survey (JSS), were used. The analysis was conducted using SPSS 19.0. In the univariate analysis, the relationships between the patients' personal characteristics, their quality life and the CBI were tested using Students't-tests and one-way analysis (ANOVA). Pearson correlation coefficients examined if there was a relationship between patients' quality life and perceptions of caring. The level of significance was set at  $p < 0.05$ .

**Results:** Fifty eight percent of the samples were women, 41-50 years old. Statistically significant correlation was found between age and tolerance to diversity with younger nurses having a significantly higher score in tolerance to diversity. Their working experience also correlated significantly with the level of Social Capital with those having up to 10 years of service to show greater tolerance for diversity and greater sense of security compared to those with over 11 years of service. The total Social Capital showed low positive correlation with the nature of nursing work, with the feeling of safety and overall satisfaction.

**Conclusion:** Higher levels of nurses' Social Capital can improve their job Satisfaction and improve their provision of patient care.

**Implications for Perioperative Nursing:** Perioperative nurses with high social capital may have higher job satisfaction and engage more to health organization.

**Key words:** Social Capital, Job Satisfaction.

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## EP054

### OPERATING ROOM MANAGER'S EDUCATIONAL BACKGROUND

**Karathanasi Konstantinia**

**Background:** Managing the surgical process in the operating room, one of the most expensive parts of the hospital, can be very complex and challenging.

**Focus of interest:** Effective Operating Room Management is essential for optimal patient outcomes and financial well-being.

**Purpose of the study:** Identify the mandatory educational background and necessary knowledge of an effective Operating Room (OR) Manager.

**Theoretical framework:** OR Manager's position -as a decision maker in the surgical suite- requires educational experience, knowledge, leadership skills and emotional intelligence

**Brief description on methodology:** The study was conducted on a sample of 735 nurses, surgeons and anesthesiologists of 34 Greek hospitals. For the collection of data an anonymous self-completed questionnaire was developed, to collect information about surgical suite organization and manager's educational experience and background. Cohen's kappa coefficient obtained values between 0.7-1 while the correlation coefficient between categories received values 0.77 to 95. The internal consistency reliability was tested by using Cronbach  $\alpha$  coefficient which resulted in  $\alpha=0.8$ .

**Results:** The overall response rate was 60,8%. 68.7% of nurses believed that an OR Manager sought have a background knowledge in economics, 33.4% to have master's degree in management and 62,9% to have a specialty in surgical care. 64,8% of doctors also mentioned that at least 5 years' experience in surgical field sought be an additional qualification.

**Conclusions:** OR management position requires a master's degree in economics and a previous working experience in surgical suite.

**Implications for perioperative nursing:** Since in many countries OR management is mostly performed by the OR nurse manager, this means that the OR nurse manager sought be additionally qualified.

**Key words:** Operating room manager, Productivity, Efficiency, Manager competencies, Skills

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## PERCUTANEUS CORONARY INTERVENTION: PATIENTS' NEEDS

**EP055**

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### **Problem description**

During recent decades, percutaneous coronary intervention (PCI) has been acknowledged as the most common non-surgical procedure that treats narrowing (stenosis) of the coronary arteries. PCI consists a preferred treatment choice for ST-segment-elevation acute myocardial infarction if it is available within 90-120 minutes of first medical contact. Coronary intervention is classified as following : a) Primary P.C.I that treats myocardial infarction in acute phase without prior thrombolytic therapy, b) Rescue P.C.I which is performed when the narrowing of the coronary arteries remains on failure of thrombolytic therapy and c) Facilitated P.C.I which is defined as the use of pharmacological treatment mainly delivered prior to a planned PCI, in order to bridge the PCI-related time delay.<sup>1-4</sup> Patients undergoing P.C.I experience various needs not only before but also after the procedure.

### **Method**

Medline, Embase and CINAHL were searched for publications on patients' needs when undergoing coronary intervention. The keywords used were "coronary intervention", "acute coronary syndromes", "ST-elevation myocardial infarction", "coronary stent", "revascularization", and "patients' needs".

### **Results**

According to the literature review, in the initial stage, patients undergoing P.C.I have to confront with the sudden of cardiac event or other various difficulties regarding early access to hospital and delays in transferring from non-interventional to interventional hospitals. Immediately after hospital admission, informed consent and deep understanding of the expected results or possible consequences of this treatment method, is a matter of vital importance.<sup>5-8</sup> More in detail, the Heart Team discuss treatment options with patients whereas in emergency threatening life cases, the decision is made according to a specially designed treatment protocol used by each center which additionally takes into serious consideration other factors such as gender, race, economic status, and patients' desires.<sup>1-4</sup> Given the importance of the therapeutic regimen, it is surprising that patients who have undergone P.C.I have the tendency to underestimate the severity of cardiovascular disease for several reasons such as the short hospital stay, the fast procedural technique, the pain relief and direct return to work.<sup>9</sup> In this phase, patients need accurate information that will improve their attitude towards the disease. Shortly before leaving hospital and within the frame of secondary prevention, patients should be encouraged to adopt a healthier lifestyle, which recommends: a) immediate cessation of smoking and alcohol consumption, b) improving of dietary habits, c) systematic follow-up, d) taking medication (adherence to antiplatelet therapy) e) mild and daily physical activity and f) development of self-care competence.<sup>1-4</sup>

### **Conclusions**

Appropriate training, guidance and support provided by health professionals will help patients to acquire the strength and knowledge to face with the demands of the disease. P.C.I approaches will be most effective when tailored to individual patients' profiles and needs.

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## EP056

### PHYSICAL EXAMINATION STATUS OF NURSING STUDENTS

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**AIM:** The aim of this study is to determine the physical examination status of the nursing students.

**RESULTS:** The mean age of 359 students participating in the study is 20,64±1,54. 87.5% of the students reported that students needed to perform physical examination. 80.5% of the students participating in the study stated that they received training about physical examination. 70.2% of the students reported that they received the training in surgical diseases lesson. 64% of the students stated that they received the training from their training teacher. While 97.5% of the students think that physical examination training is necessary, 85.2% of them think that this course should be compulsory and 83.8% of them think that this training is important in the patient care process, only did 58.5% of the students report that they performed physical examination in a clinic. 47.4% of the students reported that the reason why they didn't perform physical examination was because patients could feel discomfort due to the gender differences. 90% of the students stated that physician order was not necessary to perform physical examination.. The question of "What do you take into consideration while performing physical examination?" was addressed to the students, 91% of the students responded to this question as scalp on inspection. 81% of the students responded as edema and pulse controlling on palpation. 92% of the students responded as respiration and 88% of them responded as heart sound on auscultation. 78% of the students responded as hygiene requirement on olfaction. 55% of the students responded as reflex action on percussion. It was found that fourth-grade students used physical examination methods more than the other grades of students, and this result was statistically significant (p<0,05).

**CONCLUSION:** A great majority of the students have information about physical examination, but it is important not to perform physical examination due to the gender differences.

**Key words:** Physical examination, nursing student, training

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## PREDICTORS OF NON-TECHNICAL SKILLS IN SURGERY: A PROSPECTIVE STUDY

**EP057**

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### Background

Communication and teamwork failures have frequently been identified as the root cause of adverse events and complications in surgery. Few studies have examined contextual factors that influence surgical teams' non-technical skills (NTS). The purpose of this prospective study was to identify and describe predictors of NTS in surgery.

### Objectives

The purpose of this prospective study was to identify and describe predictors of NTS in surgery.

### Method

We assessed NTS of surgical teams at two hospitals using the revised 23-item NOTECHS and its subscales (communication, situational awareness, team skills, leadership, and decision making). Over 6 months, two trained observers evaluated surgical teams' NTS with a structured proforma. Inter-observer agreement across hospitals ranged from 86%-95%. Multiple regression models were developed to describe associations between hospital, role, specialty, length of surgery, team membership, miscommunications, interruptions, surgical safety checklist use, prior team training, patient acuity, and total NOTECHS scores and its subscales.

### Results

We observed 161 surgical procedures across eight teams. The total amount of explained variance in NOTECHS and its five subscales ranged from 24% (adjusted R<sup>2</sup> 0.21, p <.001) to 46% (adjusted R<sup>2</sup> 0.44, p <.001). In all models, there were inverse relationships between surgical specialty and total number of miscommunications and teams' NTS.

### Conclusions

Most predictors of team performance identified herein are amenable to improvement. The behavioural indicators that characterise effective NTS performance are transferrable across surgical specialties, and can therefore, be developed.

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## EP058

### THE EFFECT OF ELDERLY PATIENT FOLLOW-UP CONDUCTED BY OPERATING ROOM NURSES ON THE EARLY POST-OPERATIVE PERIOD PARAMETERS

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**Aim:** The objective of this study is to determine the effect of elderly patient follow-up conducted by operating room nurses on the early post-operative period parameters.

**Material and Method:** This quasi-experimental study was conducted between July 2013 and January 2015 with 80 patients, who accepted to participate in the study, in the Orthopedics and Traumatology clinic and operating room of Atatürk University Research Hospital. The data were collected with descriptive characteristics and early post-operative evaluation form. While the categorical measurements were evaluated with number and percentage, numeric measurements were assessed with mean and standard deviation. The  $\chi^2$ , t test and Mauchly's W test were used to compare the numeric measurements.

**Results:** In all three measurements of intergroup comparisons, in the control group, the mean scores of respiration and pain were higher; body temperature was lower in the Post-Anesthesia Care Unit (PACU) and transfer; oxygen saturation was lower in the transfer and clinic. All of the experimental group patients in the PACU were conscious and no patient expressing nausea existed in the experimental group in the PACU and transfer. The difference between the groups was statistically significant. ( $p < 0.05$ ).

As a result of repeated within-group measurements; while there was no difference in the experimental group in terms of systolic blood pressure, oxygen saturation, and body temperature ( $p > 0.05$ ), the difference in the control group was statistically significant ( $p < 0.05$ ). In the repeated measurements of both groups, the mean scores of pain, respiration, pulse and diastolic blood pressure showed no statistical difference ( $p > 0.05$ ). While the patients expressing pain and fear were mainly observed in the control group, those feeling safe and expressing their emotions easily were mainly observed in the experimental group and the difference between the groups was statistically significant ( $p < 0.05$ ).

**Conclusion:** It could be asserted that the follow-up of an operating room nurse is effective on pain management, efficient respiration, protection of body temperature, and feeling safe of a patient.

**Keywords:** Elderly patient, operating room nursing, post-operative care.

## EP059

### THE INVESTIGATION OF EARLY MOBILISATION TIMES AT FIRST 24 HOURS OF ADULT PATIENTS AFTER THE SURGERY

*Ugurlu Asu*

*TBA*



## THE INVESTIGATION OF SURGICAL SERVICE NURSES

**EP060**

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**AIM:** The purpose of the study is to investigate the opinions of the nurses who work in surgical services about noise.

**FINDINGS:** The average age of participants of the survey is  $25,19 \pm 6,14$ , the time spent in the profession is  $52,2 \pm 56,50$  months and 59,4% of nurses have bachelor's degree.

56,3% of the nurses predicted the level of noise in which they worked as disturbing. To the question of "What are the sources for disturbing noise in clinic?", 59,4% of the nurses have indicated that computer noise, 48,5% personnel dialogues, 46,9% sounds of monitor, crying and snoring, %43.8 the patient's speaking with visitors and 42,2% personal cell phones are disturbing. To the question of "Choose the appropriate complaints that you think arise from the noise in the clinic?" 85,9% of nurses indicated the stress, %81,3 discomfort, %79,7 headache.

For the question of "Do you take precautions aimed at noise?", 89,1% of the nurses have indicated that they take care of shutting doors and windows slowly, 78,1% that they wear noise-free shoes/slippers.

While for the question "Is there any applications in your institute to decrease the noise?", 68,8% that visitors in crowded rooms are limited, 64,1% that meetings aimed at education are arranged in the saloons that are not clinics; 84,4% indicated that single patient rooms are not provided, 79,7% that headlining that absorbs acoustic sounds are not used, meeting rooms for meetings among family members/visitors and personnel are not formed, 59,4% that sound level of announcements is not adjusted.

**CONCLUSION:** In order to determine the sources of noise in hospitals and to sweep disturbing sources of noise; the awareness, education of healthcare professionals, administrative rules that all personnel must obey and taking precautions to decrease the levels of noise are needed.

**Keywords:** Noise, hospital, nurse.

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## EP061

### THE NEEDS OF PATIENT RELATIVES WHO STAY AT 3RD STEP INTENSIVE CARE UNIT

**Hatice AKYÜREK, Sevban ARSLAN**

**Background:** 3rd step intensive care units are places where patients with such complicated conditions as respiratory insufficiency or multiple organ dysfunctions are admitted and respiration support and high level of medical care and treatments are provided. That study was descriptively and cross-sectionally undertaken in order to determine needs of patients who stayed at 3rd step intensive care units health care.

**Methods:** The study was done at the general intensive care unit of Adana Çukurova Dr. Aşkim Tüfekçi Public Hospital under Public Hospitals Union between September 2015 and February 2016. The population of the study was composed of the significant others of patients who were hospitalized at the tertiary intensive care unit between the September 2015 and the February 2016. No sampling was done and the whole population was targeted. 180 significant others of the patients volunteered to take part in the study. In order to collect the data, "Investigator's Personal Information Form" prepared by the researcher and "Critical Care Family Needs Inventory" (CCFNI) developed by Molter (1979) were used to determine the needs of relatives of patients. *The data were collected using a face to face interview. For the assessment of the data; SPSS 21.0 (Statistical Package for Special Sciences) was used.*

**Result:** CCFNI of patient relatives found to be 44.78±8.85 for "support" and "proximity" subscales, 41.60±5.49 for "knowledge" subscale; 33.62±3.37 for "assurance" subscale and 24.32±4.88 for "comfort" subscale.

**Conclusion:** As a result of; it was identified at intensive care unit of patient relatives needed support and proximity, knowledge, assurance and comfort; respectively. The knowledge and confidence requirements of family members have been increased due to planned hospitalization in the intensive care units of the patients and due to the intensive care experience of their relatives.

**Key Words:** Intensive care, family needs at intensive care, intensive care nursing

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## THE OPERATING ROOM EXPERIENCE TO NURSING STUDENTS: A QUALITATIVE STUDY

**EP062**

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The application areas in nursing education offer the opportunity to learn and apply professional models in addition to improving clinical experience. The aim of the study is to describe the experiences of the nursing students in the operating room and the effects of this experience. The study was carried out with students who completed the surgical application of the fourth grade in the Department of Nursing at Karadeniz Technical University Health Sciences Faculty. The data were collected by the researcher using a semi-structured interview.

The students were interviewed using the maximum diversity sampling of the operating room experiences. Voice recordings were taken for the data and evaluated by content analysis method. Three themes were formed as student nurses' perception of operating room, factors affecting the experiences of the operating room and opinions about the operating room practice. It was determined that the students who had positive experiences had better definition of operating room. It was found that the nurse candidates were satisfied with this practice and that the employee was inadequate to reinforce their experience. It was seen that they were satisfied with the theoretical training given to them before they went out to the operating room applications but they experienced deficiencies in their application skills. It was found that nurse candidates who criticized the practice complained about the shortness of the general population. Positive opinions on the experience of the operating room are thought to be contributing to the development of the students' clinical skills and thus contributing to the growth of confident nurses.

**Key words:** Operating room, Nurse students, Qualitative Study, Content analysis



## EP063

### CAN PICTURES OF THE NATURE INFLUENCE ANXIETY AND WELL-BEING DURING ELECTIVE SURGERY IN LOCAL ANESTHESIA?

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#### **Background**

Patients going through surgery in local anesthesia often have a sense of anxiety and stress and thus need support to relax. Different distracting intervention is known to reduce the anxiety and stress. Pictures of the nature, has to our knowledge not been used to support patients comfort during surgery in local anesthesia.

#### **Purpose**

The aim was to evaluate the effects of looking at pictures of the nature on patients' experience of anxiety, relaxation, well-being, and pain during elective surgery in local anesthesia.

#### **Design**

A three-armed randomized intervention was performed at three different hospitals.

#### **Methods**

Adult patients undergoing surgery in local anesthesia were consecutively randomized into three groups, one group looking at pictures of the nature on an Ipad, one group listening to sedative instrumental music and one control group receiving ordinary care during surgery. State Trait Anxiety Inventory (STAI) short form was filled in before the surgery and just before discharge STAI and VAS-scales on anxiety, relaxation, well-being, and pain were filled in.

#### **Preliminary results**

Patients n=240 (54 % women), with a mean age of 58 ( $\pm$  17) years participated in the study. There was no difference between the three groups related to anxiety after surgery. Younger patients had significantly higher degree of anxiety and lower degree of relaxation and wellbeing ( $p < 0.05$ ), postoperatively.

#### **Conclusion**

Looking at pictures of nature during surgery in local anesthesia is as relaxing as listening to sedative instrumental music. Offering patients to look at nature pictures could be a complement to listening to music.



## EMOTIONS & NURSING CARE EFFECT OF NURSES' EMOTIONS ON NURSES' CAREGIVING ROLES IN SURGICAL WARDS

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### INTRODUCTION

Nursing is a profession that aims to help to the patients, identify the care needs of them and ensure the dealing with problems and the meeting the requirements of them (Metin, 2015). In the literature, despite the contributions of the nurse caring behaviour healthcare organisations, the factors effecting caring behaviour have not been identified and investigated adequately (Kaur et al., 2013). Especially, surgical units is a stressful environment due to the necessary of long-term closeness with the patients and the health care team, the presence of life threatening situations and the quick decision making (Karabulut&Çetinkaya, 2011). Because of that patients live fear and anxiety related to the surgery, nurses have important roles for understanding feelings and relieving anxiety of the patients (Gürlek&Yavuz, 2013). On the other hand, performing painfull medical procedures to the patients may cause the feelings of the nurses such as stress, anxiety and guilt (Tunç et al., 2014). Both patients and nurses have emotions (Atilla Gök, 2015). Nurses may better understand patients' values, anxieties and concerns, deal with interest anxieties more actively and be more compassionate by the understanding feelings of them (Atilla et al., 2013). As an dispensable components of the life, emotions are effective on shaping judgements and behaviors of the people and affects tasks that performed cognitively. People demonstrate different reactions towards participating in or refraining from activities with intensive emotions (Duyan et al., 2011). When viewed from this respect, appropriately exposing the feelings and reaction to the feelings of others correctly at the right time are important skills that nurses should have (Metin, 2015). In the study performed by Atilla Gök (2015), it was stated that pain suffering by yhe patients cause experiencing negative feelings by the nurses. In this respect, it is considered that surgical steetings can be emotional intensity units and the study aims to determine effect of the emotions of the nurses who had been working in surgical units on their caregiving roles.

### METHODS

This descriptive and correlational study was conducted with 74 nurses who was working in Trakya University Health Center for Medical Research and Practice, Surgical Units (operating room, surgical wards and emergency room) and voluteered to participating in the study. Data were collected by data collection form prepared by the researchers, Attitude Scale for Nurses in Caregiving Roles (ASNCR) developed by Koçak et al. (2014) and Need for Affect Scale (NAS) developed by Maio & Esses (2001) and adapted to Turkish Culture by Duyan et al. (2011). Data analysis was performed in SPSS 16.0 and frequency, percentage, mean, standard deviation and correlation analysis were used for data assessment.

### RESULTS

In this study, it was found that mean age of the nurses was  $31.91 \pm 6.01$ , mean of professional experience time was  $10.48 \pm 6.31$  and mean of the working time weekly was 46.586.58. Most of the nurses were working in the shift procedure and had surgical experience related to her/himself or relatives. In their clinic, 54.2% of the nurses reported that they were faced with emotionally distressing situations and most emotionally distressing situation was death in painfull conditions and at a young time. It was found that point of motivation to approach emotion-inducing situations was  $8.25 \pm 12.36$  and avoidance of emotion-inducing situations point was  $-8.24 \pm 13.07$ , mean score of ASNCR was  $3.89 \pm 0.70$ . Attitude subscale related to the nurses' roles about elimination of the selfcare needs and consulting score was 3.750.84, attitude subscale related to the nurses' roles about protection of the individuals and being respectful their rights score was 4.170.72 and attitude subscale related to the nurses' roles about treatment process score was 3.750.73. It was found a statistically significant relationship between nurses' motivation to approach emotion-inducing situations and their caregiving roles, when nurses' motivation to approach emotion-inducing situations points increased, scores of ASNCR and subscale increased.

### CONCLUSION

This study is a research on effect of nurses' emotions on the nursing care that provided by them. This study demonstrated that the attitudes for caregiving roles of the nurses who were providing perioperative care



to the patients in the surgical units was good level and nurses' motivation to approach emotion-inducing situations had positive effects on these attitudes. It is important to meet the emotional needs of the patients as well as their physical needs for increasing the quality of nursing care. Especially, in the surgical units, emotion-inducing situations are more frequent because of the fact that the patients faced with anxiety, fear, physical losses, pain and more negative situations in the perioperative period. Nurses who were caring surgical patients should be aware of the patients' and their self emotions towards emotion-inducing situations and improve themselves in terms of recognizing and understanding emotions of the patients. Also, institutions should allow the nurses to recognize their feelings and to reflect on the nursing care through psychological trainings and meetings. Further researchs that will be performed in other clinical areas and specific units and examined the relation nurses' emotions and patients' satisfaction are recommended.

## EP065 INFLUENCE OF ORGANIZATION CULTURE ON OR STAFF PERCEPTION

*Binkin Ilya*

### **Background:**

The organization culture is of great importance influencing the subjective perception and feelings of the team members. This in turn creates motivation to ensure quality and safety of the patient undergoing surgery.

### **Objective:**

To examine the characteristics of the organizational culture and how these influence on the perception, attitudes and beliefs of the team members in the operating room.

### **Methods:**

The survey was based on a questionnaire, which includes investigation of 79 team members. The questionnaire's three sections examined the participants' views and perceptions of the organization culture at three levels (organizational, departmental and individual performance). Pearson correlation coefficients, t tests and multiple regression analysis were used to analyze the data.

### **Results:**

Analysis of organizational characteristics to which the medical team members attributed the highest degree of importance included: quality, efficiency, commitment, technology and innovation, while organizational characteristics as initiative, empowerment and marketing were rated as having a lesser degree of importance.

There is an inverse relationship between the perceived level of importance the organizational culture has on the organizational level and the local administration level, and the perceived level of importance the organizational culture has on the individual employee.

### **Conclusions and recommendations:**

- There is great importance in matching expectations, taking into account the perception of the organizational culture on various levels.
- Strengthening and maintaining the highest level of quality and safety performance of the teams in the operating room, while continuously raising levels of efficiency as key to employee empowerment.
- Promotion and development of subjects such as: initiatives, empowerment and marketing.



## MANAGEMENT OF INSTRUMENTATION USING NUSS TECHNIQUE

**EP066**

**Autors:** *Dr.Zan Mitrev, dr.Tanja Angjuseva, dr. Nikola Hristov, scrub nurse Katerina R.Janev, scrub nurse Aleksandra R.Tunev*

**Goal:** Remodel and correction the chest wall over a 2 or 3 year period with Pectus excavatum or other sternal deformities.

**Introduction:** Pectus excavatum is a chest disorder occurring approximately one of every 1000 children. Severe cases have heart compression (with mitral valve prolapse, heart murmurs and A-V conduction delay), pulmonary compromise, because of that chest pain, chortness of breath and reduced exercise condition. The ideal age for intervention is between 8 and 13 years.

**Materials:** Good preoperative planning, preparing and measurement. Care for contraindications (mental or neurological conditions, metal sensitivity reactions, quality of bone). The procedure is performed under general endotracheal anesthesia with muscle relaxation and an epidural block for both operative and postoperative pain control.

**Methods:** Few standard steps in surgical technique. Positioning the patient (supine position with both arms abducted at the shoulders), measurements, modeling selected bar for each patient and setting, stabilization of the implant, restoring normal lung function. Intensive postoperative monitoring and prevention of possible complications (pain, discomfort, metal sensitivity, skin irritation, infection, pneumothorax, migration or loosening of the implant, inadequate or incomplete remodeling). After 3 years we use the same technique for removal the bar implants.

**Results:** For a period of 5 years in our hospital was operated 15 patients with only one complication (displacement of one implant-during the first postoperative day).

**Conclusion:** Chest correction with minimally invasive operation. Reduces operating time and minimal blood loss. Early return to regular day activities with excellent long-term cosmetic result.

**Keywords:** Chest correction, minimally invasive, Nuss Technique, long-term cosmetic result.



# EP067

## MANAGING OPERATIVE PEDIATRIC TRAUMA IN A NON-PEDIATRIC TRAUMA CENTER

**Wadlund Diana**

Unintentional traumatic injury is the leading cause of death for children over the age of one year and accounts for 65% of all injury related deaths in children under the age of 19. Annually in the United States, approximate 20,000 children die as the result of traumatic injury. For every child that dies from an injury, 40 are hospitalized and 1120 are treated in emergency departments. Yearly, 50,000 children acquire permanent disabilities from traumatic injury.

Although these statistics from the United States are staggering, pediatric trauma occurs worldwide and is becoming an increasingly global health problem.

When a pediatric patient presents to an adult trauma center, it is with the assumption that they will be evaluated for extent of injury, stabilized and transferred to a pediatric designated trauma center if it is deemed necessary. But what happens when the child's injuries are so severe that they require surgery before transfer can be accomplished?

On a dark cold day in late December 2013 we found out what happens. In an effort to improve the care and survival of pediatric trauma patients who present to a nonpediatric trauma center, we would like to share our struggles and triumphs with our perioperative colleagues.

**Key Words:** Pediatric, Pediatric Trauma, Pediatric surgery, Pediatric Injury

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## MITRAL VALVE PROLAPSE AND CEREBRAL ISCHEMIA

**EP068****Perovic Velisava*****Institute of Cardiovascular Disease "Dedinje", Belgrade, Serbia***

**Background :** Mitral valve prolapse (MVP), with 2% general population prevalence (more frequent in younger women) is benign condition. Although rare, this patients can experience serious complications, such as sudden cardiac death (0,5 - 2%) and stroke (0,6%).

**Aim:** The aim of this study was to identify the prognostic value of a group of risk factors that were obtained by combining non-invasive methods (echocardiography and holter-ECG) in assessment of risk for stroke (embolic/ischemic) in subjects with non complicated MVR.

**Methods:** There were 158 subjects examined in the period 2012. in ultrasound lab. They were divided into two groups. In the first group there were 40 subjects aged 20-45 (36% male, 64% female) with clearly identified MVP without complications. In the second group there were 87 subjects aged 37-50 (22% male, 78% female) with clearly identified MVP without complications who suffered stroke in observed period. The following statistical tests were used: t-test, variance analysis, chi square test, binary logistic regression and descriptive statistics. In all the tests applied the level of significance was set at 5%.

**Results:** We determined by using statistical methods that a group of risk factors: anterior mitral leaflet thickness-AMLt ( $7,15 \pm 1,2$  mm;  $p < 0,05$ ; HR 5,7), interatrial septal aneurysm ( $p < 0,05$ ; HR 9,6), paroxysmal atrial fibrillation ( $p < 0,05$ ; HR 8,7), left atrium systolic volume-LAVs ( $42,6 \pm 10,7$ ,  $p < 0,05$ ; HR 3,8) and asystolic pause ( $3,5 \pm 1$ s;  $p < 0,05$ , HR 5,2) defined by a combination of non-invasive methods can predict stroke onset with a 87% sensitivity, in patients with MVP.

**Conclusion:** This study confirmed that by combining non-invasive methods we can create a group of risk factors with a 87% prognostic sensitivity for onset of stroke, extremely rare (1/6000 patients per year) complication. Our results can help in identification of high risk group of patients with MVP and possibility for onset of this dangerous thromboembolic life threatening complication, and to give opportunity for prevention.



## EP069

### PRESSURE ULCER RISK FACTORS IN PATIENTS UNDERGOING SURGERY: A CRITICAL REVIEW OF THE LITERATURE

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**Introduction:** A pressure ulcer is defined as a localized injury to skin and underlying soft tissue usually over a bony prominence, as a result of pressure. Patients undergoing surgery are at high risk for pressure ulcer development. The pressure ulcer can occur anywhere in the body. If a pressure ulcer begin within three days (72 hours) after the surgical procedure, it most likely indicates that the ulcer occurred during surgery. The rate of intraoperative acquired pressure ulcers ranges from 12% to 46% in surgical patients.

**Aim:** The main goal of the systematic literature was to determine perioperative risk factors that contribute to the development of pressure ulcers in the operating room.

**Method:** The literature was reviewed using the electronic database PubMed, CINAHL and MEDLINE. From 2000 to 2016 were examined to determine risk factors of pressure ulcers. Key words searched were "pressure ulcers, surgical patient, operating room, surgery, risk factors". All studies identified during the database search were assessed for relevance to the review based on the information provided in the title and abstract. Inclusion criteria: adult population for surgery procedure. Exclusion criteria: pediatric population, case-study, systematic review and patients self-report. The search was limited to articles publish in English. The 2454 abstract examined. Eight study were identified as potentially eligible. Six prospective cohort and three retrospective study reviewed. The studies include a total of 8350 patients.

**Result:** Pressure ulcer incidence was 1.3%-24.1%. Risk factors associated with surgery-related pressure ulcer were; the length of surgery, skin temperature (over 38°C), intraoperative hypothermia, type of operation position, male gender, older patients, weight loss, lower bod mass index and serum albumin, history of congestive heart failure, liver disease, renal failure, diabetes, peripheral vascular disease, corticosteroid use, incontinence, being unable to move independently prior to surgery, intraoperative use of blood products.

**Conclusions:** Operating room nurses play an important role in identifying existing or new pressure ulcers. They must take a comprehensive approach to protecting their patients from pressure ulcers.

**Keywords:** nursing, operating room, perioperative, pressure ulcer

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## RISKS AND COMPLICATIONS IN ELDERLY PATIENTS WITH DIABETES UNDERGOING TOTAL JOINT ARTHROPLASTY

**EP070**

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### **Problem description**

During recent years, population ageing is expanding at an alarming rate, worldwide. As a consequence, it has been remarked a progressive growth in the prevalence of both diabetes mellitus (DM) and arthritis.<sup>1</sup> Additionally, total hip or knee arthroplasties are rapidly increasing since arthritis is predominantly a disease of the elderly.<sup>2</sup> Several studies have shown that co-existent comorbidity such as diabetes mellitus may exert a negative influence on surgical outcome. It is a matter of great importance to review the outcome, risks, and complications in diabetic patients undergoing total joint replacement.<sup>3, 4</sup>

### **Method**

The database Google Scholar was searched to access relevant articles. The keywords were "diabetes", "elderly", "hip and knee replacement" "joint replacement", "complications".

### **Results**

Though, total joint arthroplasty consists a common surgical procedure, however, it involves various risks or complications for patients with diabetes mellitus. It is widely established that Diabetes mellitus affects the musculoskeletal system, delays collagen synthesis and impairs phagocytosis.<sup>4</sup> On the other hand, major surgery leads to metabolic stress, with an increase in catabolic hormone secretion and inhibition of anabolic hormones, particularly insulin.<sup>5</sup>

All the above factors are related with higher incidence of several infections as well as with delayed wound healing after any surgical procedure.<sup>6,7</sup> Preoperatively, is essential for diabetic patients to achieve glycemic control while during surgery is crucial to avoid hypoglycaemia and ketoacidosis.<sup>8</sup> Regarding perioperative care, the surgical team should take all the necessary measures to optimize patient outcomes (skin preparation, antibiotic prophylaxis, avoid feet pressure, etc.).<sup>9</sup> Furthermore, diabetes specialist team is responsible to avoid or minimize patients' complications. More in detail, diabetes specialist nurse has been shown to reduce the length of hospital stay in patients with diabetes, irrespective of the admission reason.<sup>10, 11,12</sup>

### **Conclusion**

Glycaemic control implementation is a key-element for avoiding delays to surgery, complications, postoperative infections and difficulties in healing. The diabetes specialist team may play an important role through teaching, training and support, thus facilitating the surgical procedure and the treatment success.

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## EP071

### THE EFFECT OF THE PRE-OPERATIVE FASTING TIME ON ANXIETY LEVEL

**Authors:** Özlem Bilik, Yaprak Sarıgöl Ordin, Zeynep Deveci, Buket Çelik, Emel Sütsünbüloğlu, Özgül Karayurt

**Objective:** The aim of the study was to investigate the effects of the preoperative fasting time on pre-post operative anxiety in patients undergoing orthopedic surgery.

**Methods:** This prospective, descriptive and cross-sectional study were conducted with 133 patients over 18 years age and undergoing orthopedic surgery in August 2015-January 2016. Patients were divided into two groups: first group had a fasting time of between 0-8 hours and second group between 9 hours-above. Data was collected by "Descriptive Characteristics Form", "Visual Analog Scala", "The State-Trait Anxiety Inventory (STAI)". Data was analyzed by number, percentage, mean, Student's t-test.

**Results:** The mean age was  $52.37 \pm 20.03$  (n = 59) in the first group and  $55.44 \pm 19.80$  (n= 74) in the second group. In the first group, majority of patients had primary school graduates (57.60%), lower income (55.90%), ASA I (%57.60), chronic disease (%45.80). In the second group, majority of patients had primary school graduates (52.70%), lower income (74.30%), ASA II (%51.40), chronic disease (%47.30). There was no statistically significant difference between the groups in terms of mean scores of other descriptive characteristics, pain and STAI (p < .05). There was no statistically significant difference between the groups in terms of pre-post operative STAI point scores (p > .05).

**Conclusion:** The results show that the preoperative fasting time did not affect the pre-post operative anxiety levels of the patients. This result can be explained by the fact that the patients mostly focus on the results of the surgery and accept the suggestion of the health workers without questioning in the Turkish culture. Literature stated that patients have anxiety due to death risk, organs and tissue loss, disability, pain and fear of losing sexual function in the perioperative period.

**Key words:** preoperative fasting time, anxiety, nursing

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## THE INFLUENCE OF MUSIC THAT HAS BEEN PLAYED BEFORE INVASIVE SURGERY ON PHYSIOLOGICAL AND PSYCHOSOCIAL PARAMETERS

**EP072**

**Alev GÜZELÇİCEK**  
**Gülay OYUR ÇELİK**

**Objectives of the study:** This study was conducted to determine the pre-treatment effects of listening music to patients on parameters such as physiological (heart rate, blood pressure, respiratory rate and pain) and psychological (stress, anxiety) in Invasive Intervention and Diagnostic Laboratory.

**Method of the study:** This study is an experimental research that was performed in a sample of 60 patients at İzmir Kâtip Çelebi University Atatürk Training and Research Hospital. Data collection instruments used in this study consist of participatory data form involving demographic characteristics, the State-Trait Anxiety Inventory Form, and vital signs recording form of pain, stress and anxiety visual analog scale (VAS).

**Findings of the study:** SBP for pre-treatment and after Femoral Shear, DBP for post-treatment and after Femoral Shear, pulse and respiratory rate have been found to be different between groups ( $P < 0.05$ ). VAS values have been found different for groups ( $p > 0.05$ ), while VAS values of control group were significantly higher than experimental group for post-treatment ( $p < 0.05$ ). Before and after treatment, state anxiety scale pre-test and post-test scores had statistically significant difference between groups ( $p < 0.05$ ), while other parameters had not ( $p > 0.05$ ). KGY scores had statistically significant difference between the groups ( $p < 0.05$ ).

**Results of the study:** Respiration, KGY and VAS values were found to be positively affected by music. According to the results of the anxiety levels of patients, it can be suggested that music may reduced the anxiety in accordance with specified conditions.



## EP073

### VIDEO FILMS CREATION, AS LEARNING STRATEGY AND ITS APPLICATION IN NURSING STUDIES

*Piscalkiene Victoria*

#### **Substantiation of learning method**

Contemporary learning paradigms claim, that learning process has to be open and flexible. Therefore a learning environment has to be flexible and oriented to the achievement of professional competences. Optimization of class work and self-study, applying IT and extending students' learning experience in formal and non-formal learning environments, provides more attractiveness, effectiveness and innovation for the educational process. Undoubtedly, formal things such as aims of the study programme, learning outcomes of the study subjects or modules play a vital role in the selection of study methods. Thus, lecturers have many opportunities what methods to offer for students. Students have to be motivated to apply all potential to achieve learning outcomes, thus their learning should be based on stimulating activity, when various active and interactive methods are integrated. Project-based method or creative tasks encourage to develop students as personalities and allow to achieve intended learning outcomes. As many authors claim, the main idea of problem-based learning is to search for ways and tools to foster students' discovery of knowledge, self-study, and creativity. Problem-based learning encourages students to identify an existing real problem and using all resources to search for solution. As researches carried out world-wide show, that it is possible to apply ICT in the clinical education of study programmes designed for health care specialists. Higher schools that prepare nursing specialists have some intentions to apply multimedia technology into the study process. This means, that students' theoretical knowledge and practical skills will be shaped in a line with evidence based practice. Concept based (*look, listen and feel*) acquisition of clinical nursing skills is a modern and effective feature of preparation of nurses.

#### **Aims of teaching/learning method and description of the activity**

In 2015 autumn semester was introduced a new method of short video films making into the study programme of General and Special Surgical Nursing. This was designed for the second year students of General Practice Nursing study programme that study General and Special Surgical Nursing (6 ECTS). The task of the self-study project allows to achieve no less than three (listed below) professional competences as defined in the study programme: to communicate and collaborate with patients and their family members; to be able to personalize nursing in the all stages of nursing process, etc.

*Short description of the task: working in team* (4-6 students) to make a short video film, which would depict activity of nurse ensuring psychological needs of a patient and carrying out patients' teaching.

The self-study project was carried out by 90 second year students of General Practice Nursing study programmes (three academic groups). Before the task, students were explained about the aim of the project, answered questions on video making, and were instructed how to work in team.

All video films met the aim of the self-study project and allowed to achieve intended learning outcomes of the study programme and acquire professional competences as defined in the study programme. (a total number of short video films is 17).

Topics selected by students for short video films.):

- ☐ Training of an adult patient (rendering information) before the meniscus knee surgery.
- ☐ Clinical and psychological preparation of a child for appendectomy (appendix removal) operation.
- ☐ Psychological preparation and training of a child and his/her family members for the adenoids (tonsils removal) operation.
- ☐ Training of an adult patient (information) and a psychological operation before the appendectomy (appendix removal) operation.

#### **Process of short video films making and its effectiveness in the point of view of students**

Second year students of the General practice nursing were asked to fill in questionnaire. **The aim of the survey** is to assess the process of video films making and its efficiency.

The method of the survey – a semi-structured questionnaire.

Students use various sources of information for video films creation. Students searched for information in the internet (67.5%), books and textbooks (60.8%) and analysed e-learning



material (54%). Less than a third of students used their own personal experience or relatives/friends' advice. In addition, although less frequently, they used experience acquired during practice, read scientific articles or employed samples provided by a lecturer.

One of the biggest problems, that students face with while making video films, was absence of the suitable environment for filming. About 1/3 or 32.4% of students stated that it was a problem. 23% of all the students that participated in the survey, claimed that they had technical problems. Shortage of technical skills can be best illustrated by this statement "Nobody from the group could use *Movie Marker programme*". Some students indicated that there were problems scheduling time (20.2 %), some faced with lightning and sound recording disturbances (14.8 %). As a result of lack of experience, students, while carrying this task, burst into uncontrollable laughing (13.5 %) or had a phobia of speaking in front of a camera (8.1 %). In the course of teaching, application of the short video films making allowed students to benefit both professionally and personally. Almost all students (81%) improved their knowledge or acquired new one in the particular situations.

More than 60 % students claimed that activities regarding the task allowed to improve communication and collaboration with patients and their relatives as well as team work skills. During the filming, students experienced positive emotions (20.2%), acquired or improved public speaking skills (22.9%); indicated that acquired knowledge will apply in their personal life once they get sick or need to prepare for an operation (9.4%), others stated that gained or developed technical skills in video films creation (8.1 %).

It has been identified that for the accomplishment of the task 6.3 hours were allotted, yet some students devoted 2 or 3 hours, meanwhile students from one group spent even 48. Students positively evaluated their own (8.8 points), and members of the group's contribution into the accomplishment of the project. Almost all students (96%) indicated, that participation in the presentation of video films filmed by their peers was useful.

### Assessment of the self-study project

Assessment of the self-study project was done in formal and non-formal way. *Formal assessment when lecturers evaluated students' works using grades* (grades were high, 9 and 10 respectively).

*Non-formal assessment.* Students of the General Practice Nursing study programme had an opportunity to participate in video films review during which they had to select **three** video films that they liked most. During an individual and secret voting, students had to select best video films regarding contents and quality of the presentation. After summing up results, three prizewinning places were determined. During the next lecture, winners were announced. Representatives of the winner groups received prizes (chocolate medals indicating prizewinning places 1, 2, 3).

**Required material resources for the implementation of the teaching/learning method:** special premises for video films making, preferably health care institution); filming equipment (video cameras, smart phones); classroom, multimedia and PC, prizes (medals or something else)

### Conclusions

Learning environment should be flexible and oriented to the achievement of professional competences. Students have to be motivated to apply all learning potential to achieve intended learning outcomes. Short video films making is based on simulation method, applying active and interactive methods, constructive knowledge and skills acquisition processes that are based on cooperation, team work, self-study, responsibility, creativity and evidence based practice.

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## TOPIC B. PERIOPERATIVE/CLINICAL PRACTICE

**EP074**

### A REVIEW OF POSTOPERATIVE PAIN ASSESSMENT RECORDS OF NURSES

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#### Background

Inadequate postoperative pain documentation is an international problem which needs to be solved. Although there are many recommendations and guidelines for adequate pain assessment, the quality of postoperative pain documentation do not meet the acceptable standards. The aim of the study is to review the pain assessment and analgesic records of nurses within the first 48 hours in the postoperative period.

#### Methods

This retrospective and descriptive study was conducted in Cukurova University, Faculty of Medicine, Balcali Hospital, Department of General Surgery. The records of a total of 421 patients older than 18 years of age who underwent surgery under general anesthesia and were followed within the first 48 hours of postoperative period between January 2014 and January 2015 were analyzed. The clinical and pain assessment data of the patients were obtained using the patient files.

The ethical approval was obtained from Cukurova University, Faculty of Medicine, Non-Interventional Ethics Board (Decision no:16; Date: 05.06.2015) and a written permission was received from the chief physician of Cukurova University, Faculty of Medicine, Balcali Hospital (27/04/2015-5054 /18649120-302.08.01).

#### Results

The mean age of the patients was  $46.03 \pm 15.4$  and the most frequently performed surgery was colorectal surgery (63.7%) (Table 1).

emographic and surgery-related data of the patients (n=421)

		n	%	Meant $\pm$ SD (Min-Max)
		.	.	46.03 $\pm$ 15.4 (15-87)
	Male	196	46.6	-
	Female	225	53.4	
Disease	Yes	139	33.0	-
	No	282	67.0	
pe	Colorectal Surgery	268	63.7	
	Breast- throid Surgery	61	14.5	
	Hernia surgery	45	10.6	
	Upper GIS Surgery	34	8.1	
	Others (splenectomy. drainage of abscess etc.)	13	3.1	

No pain assessment scale was used, and none of the pain records of the patients included intensity, location, duration and quality of the pain (Table 2).



Table 2. The Records of Nurses Regarding Postoperative Pain Assessment

	2. hr		4. hr		8. hr		12. hr		24. hr		36. hr		48. hr	
	n	%	n	%	N	%	n	%	n	%	n	%	n	%
No	421	100	421	100	421	100	421	100	421	100	421	100	421	100
Yes	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	421	100	421	100	421	100	421	100	421	100	421	100	421	100

The analgesic records indicated that the highest percentage (70.8%) of analgesic use was within the first postoperative two hours (Table 3). Diclofenac sodium was the most commonly administered and recorded analgesic, while dolantine was the least used one. More than half of the all analgesic injections (63.9%) were administered by intramuscular route. No non- pharmacological intervention including massage, hot-cold application, or positioning was reported in the nursing records.

Table 3. The Records of Nurses Regarding Postoperative Pain Treatment

		2. hr		4. hr		8. hr		12. hr		24. hr		36. hr		48. hr	
Recording of the postoperative painassessment															
		n	%	n	%	n	%	n	%	n	%	n	%	n	%
No		123	29.2	421	100	258	61.3	222	52.7	183	43.5	245	58.2	274	65.1
Yes		298	70.8	-	-	163	38.7	199	47.3	238	56.5	176	41.8	147	34.9
The analgesics were recorded															
Opioids	Tramadol Hcl	22	5.2	-	-	3	0.7	9	2.1	8	1.9	7	1.7	6	1.4
	Dolantin	2	0.5	-	-	2	0.5	2	0.5	3	0.7	1	0.2	2	0.5
NSAID*	Diklophenac sodium	270	64.1	-	-	155	36.8	185	43.9	165	39.2	123	29.2	97	23.0
	Parasetamol	4	1.0	-	-	3	0.7	3	0.7	62	14.7	45	10.7	42	10.0
Recording of the route of the analgesics															
No		122	29.0	420	99.8	256	60.8	223	53.0	183	43.5	245	58.2	274	65.1
Yes		299	71.0	1	0.2	165	39.2	198	47.0	238	56.5	176	41.8	147	34.9
The route of the analgesics were recorded															
IM		269	63.9	1	0.2	156	37.1	183	43.5	167	39.7	123	29.2	96	22.8
IV		30	7.1	-	-	8	1.9	13	3.1	17	4.0	13	3.1	12	2.9
Oral		-	-	-	-	1	0.2	2	0.5	54	12.8	40	9.5	39	9.3
Recording of the nonpharmacological methods															
No		421	100	421	100	421	100	421	100	421	100	421	100	421	100
Yes		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total		421	100	421	100	421	100	421	100	421	100	421	100	421	100

\*NSAID: Non-steroidal anti-inflammatory drug.

## Conclusion

The postoperative pain was not assessed properly as recommended in the acute pain guidelines, also pain assessment and analgesic records were insufficient. Therefore, nurses should increase the awareness on the pivotal role of pain assessment records ineffective postoperative pain management. In addition, the administration of the hospital should support the use of standard pain assessment and recording via electronic patient record system, continue online education courses and give feedback on the records of nurses regarding pain management.



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## EP075

## A SYSTEMATIC REVIEW ABOUT SURGICAL SMOKE CONTENTS

**Meryem YAVUZ van GIERBERGEN, Arzu ASLAN**

**Background:** OSHA estimates that 500,000 health care workers are exposed to surgical smoke each year (13). Although the long-term deleterious effects from exposure to surgical smoke and bio-aerosols have not been clearly established. This study aimed to evaluate the studies on contents of surgical smoke (plume).

**Methods:** Database searches were carried out on Cochrane Library, PubMed, Science Direct, Cambridge, and Proquest Medical and Health Package Wiley Interscience files, using the inclusion criteria of 'surgical smoke,' 'surgical plume' 'hazards,' 'health risks,' 'analyze,' 'electrocautery smoke,' 'constituents' and 'chemical composition'. Studies were included if they documented the constituents found in surgical smoke during surgical procedures and analyze the smoke. Studies were excluded if they were animal based, preclinical experimental work, conference abstracts, or opinion-based reports.

**Results:** The inclusion criteria were fulfilled by 11 studies. All these studies were examined surgical smoke (plume) content analyzed. They used to liquid chromatography, gas chromatography, mass spectrometry, infrared spectroscopy, ultraviolet and visible light detection for content analyze. Of the four studies were performed laparoscopic surgery and the nine studies were used electrocautery. Various compounds were detected in the studies. Compounds found in surgical drums in these studies were: acetone, acrylonitrile, acetylene, allene, ammonia, benzene, butadiene, butene, butyrolactone, carbon disulphide, carbon monoxide, cyclopentadiene, decene, diacetylene, dichloroethane, di-*t*-butylbenzene, ethane, ethanol, ethenyl, ethyl acetylene, ethyl benzene, ethylene, formaldehyde, furancarbox, heptene, hexene, hydrogen cyanide, hydrogen fluoride, isobutylene, isooctane, mecaptomethane, methane, methyl ester, methylbenzene, methylpropene, pentadiene, pentene, piperylene, propanenitrile, propene, propenylacetylene, propylene, sevoflurane, styrene, thiocyanic acid, toluene, vinyl acetylene, water vapor, xylene (1, 4-6,8-12,15,17,18).

**Conclusion:** Research studies have confirmed that plume and bio-aerosols contain odor-causing and odorless toxic gases, vapors, dead and live cellular debris (including blood fragments), and viruses



(2,3,7,9,10,14,16). These airborne contaminants can pose respiratory, ocular, dermatological and other health-related risks, including mutagenic and carcinogenic potential, to patients and operating room personnel (2,3,7,9,10,14,16). Understanding the environmental hazards of surgical smoke and bio-aerosols produced during operative and invasive procedures is paramount to the implementation of adequate protective measures for both patients and personnel involved in their care.

**Key words:** surgical smoke, surgical plume, contents, electrocautery smoke, chemical composition

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## EP076

### A THREAT TO THE HEALTH OF PATIENTS AND HEALTH CARE STAFF: SURGICAL SMOKE

*Serpil Yüksel*

**Background:** Surgical smoke is a significant risk that arises during surgery. It threatens the health of patients and health care staff. It is also referred to as smoke layer, cloud, aerosol, cautery smoke, vapor and mist. It results from the energy that is transmitted to tissues through heat generators, such as electrocautery, laser and ultrasonic devices. The integrity of the cell membrane is destroyed, intracellular fluid is vaporized, and the cell contents spray out due to heat. Most of the surgical smoke released as a result of these cellular changes is composed of water (95%) and 5% consists of particles. Surgical smoke affects both patients and the operating room staff. It has cytotoxic, genotoxic, teratogenic and mutagenic effects. The chemicals and particles inside the smoke lead to various health problems, such as breathing problems, hypoxia, nausea, vomiting, stomach ache, dizziness, headache, dermatitis, myalgia, asthma, rhinitis, conjunctivitis, cardiovascular problems, hepatitis, nasopharyngeal lesions, carcinoma and leukemia. The higher the density level of benzene, one of the carcinogenic chemicals in surgical smoke, the higher the risk for leukemia. Peritoneal absorption of carbon monoxide gas, one of the main components of surgical smoke, can cause fatal carbon monoxide poisoning.

**Conclusion:** Preventive steps should be taken, awareness should be raised and smoke removal protocols should be established for the safety of the patients and the health care staff. Operating room nurses are always exposed to surgical smoke.

**Implications of perioperative nursing:** First of all, operating room nurses' knowledge and awareness of surgical smoke and its effects should be checked, and then their attention should be drawn to the importance of the issue through training.

**Key Words:** Operating room, Operating room nurses, Surgical smoke, Smoke removal protocols

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# AN EVIDENCE-BASED NURSING STUDY FOR USING INTRAOPERATIVE NEUROMONITORING OF RECURRENT LARYNGEAL NERVE CAN REDUCE VOCAL CORD PALSY IN PATIENTS DURING THYROID SURGERY

EP077

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**Keywords:** “thyroid surgery,” “intraoperative neuromonitoring,” “IONM,” “recurrent laryngeal nerve monitoring systems,” “recurrent laryngeal nerve visualization,” “recurrent laryngeal nerve palsy”

**Background & Object:** Recurrent laryngeal nerve (RLN) injury is a frequent source of thyroid surgery. Intraoperative neuromonitoring (IONM) during thyroid surgery not only for localization and identifying the RLN but also as a way to reduce this complication by preventing RLN injuries. The aim of this evidence-based nursing study was to evaluate the potential improvement of IOMN verse RLN visualization alone (VA) in reducing the incidence of vocal cord palsy.

**Methods:** The database PubMed PubMed/MEDLINE and EBSCO was searched by using the keywords. Studies were screened the article titles and abstracts, which included all randomized controlled trials and cohort studies related to RLN monitoring during thyroid surgery. According to the Oxford Centre for Evidence-Based Medicine, there are four studies were be fined.

**Result:** One of 1a study was review for overall, transient, and permanent show that none of these difference were statistically significant when comparing the result of IONM group with those VA group, and the length of operative time of total thyroidectomy was also similar in both group. The others of studies show that there were a significant different in total and transient RLN palsy ( $p=0.007$ ,  $0.007$ ,  $0.001$ , and  $0.04$ ,  $0.011$ ,  $0.003$ , respectively); however there was no statistically significant in the persistent RLN rate ( $p=0.08$ ,  $0.368$ ,  $0.202$ ).

**Conclusion:** The conclusion of this study is that IONM is a reliable tool for RLN localization and identification during thyroid surgery. The value of IONM in predicting postoperative vocal cord function was encouraging. However, only one study result can be interpreted as indicating that there is no real benefit of IONM over VA in reducing rate of RLN palsy.

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## EP078

### AORNS MODEL OF EVIDENCE-BASED PRACTICE

*Spruce Lisa*

**Background:** The Association of Perioperative Registered Nurses (AORN) developed an evidence-appraisal model that has been translated into a tool aimed to guide users to critically and objectively evaluate the scientific body of literature. AORN's tool has been successfully used by reviewers to evaluate the literature which is then synthesized into AORN's National Guidelines. AORN's National Guidelines are referred to by nurses and other healthcare professionals to make policy and practice changes throughout the nation. The AORN guidelines are also used by state health departments and accrediting agencies to survey facilities to assure evidence based practices are being followed. This model has evolved over the past three years of use and now can be used by all specialties of nurses who are interested in evaluating and applying evidence to practice.

**Purpose/Aim:** The aim is to describe the current AORN model to demonstrate how the model can be applied to evaluate the evidence for quality and to determine a level of evidence used to make perioperative and other nursing practice recommendations.

**Method:** AORN's Nursing Practice Team began using an evidence-based practice model in 2011 adapted from The Oncology Nursing Society and tools adapted from the Johns Hopkins Evidence-based Practice Model. The tools were used for several years and were found to have poor interrater reliability. Feedback and information from the earlier models were used to create the current, comprehensive model.

**Outcomes:** AORN created a new model for evidence based practice and new tools for appraising evidence that allowed for better interrater reliability and an increased understanding of how levels of evidence were assigned to practice recommendations. AORN follows the National Guidelines Clearinghouse requirements for guideline creation, and AORN's tools and model are now recognized by NGC as an example of how guidelines should be created.

**Implications:** The current AORN model of evidence-appraisal can be used by any nurse or healthcare professional interested in assessing the literature to ground practice and make informed decisions. This model is also helpful to individuals learning about EBP or working on a hospital project or advanced degree.



## BREAST RECONSTRUCTION AND SEXUAL DYSFUNCTION AFTER MASTECTOMY

**EP079**

**Sevban ARSLAN, Sevgi DENİZ, Özlem ŞAHİN, Şeyma YURTSEVEN**

Breast cancer (11,9%), the second most common cancer in the world, is one of the biggest traumas for women to live in. Breast cancer, as well as the fear and concern of having cancer, leads to the loss of the “breast” which is of great importance for the identity of the woman. The most common and frequently used treatment method for breast cancer is the surgeon. After mastectomy, women perceive themselves as “half, incomplete, diseased and ugly”, and live depression, helplessness, hopelessness, and anger feelings. In addition to these feelings, the loss of this organ, which is seen as a symbol of sexuality in women, is thought to deteriorate the body image and thus to harm sexual functions. This perception is being tried to be greatly reduced by breast reconstruction operations. When we look at the studies done, we found that patients who underwent breast reconstruction after mastectomy had higher body image and self esteem than patients without reconstruction, that having confidence had a positive effect on sexual function and less sexual dysfunction. Denizgil and Sonmez (2015) have shown that breast conserving surgery is more advantageous in terms of body sensation and sexual function than total mastectomy in their studies with 50 women with breast cancer.

As a result; It has been observed that post-mastectomy breast reconstruction operations play an important role in increasing the quality of life of breast cancer patients, in increasing body image and self-esteem and accordingly in decreasing sexual dysfunctions experienced by women at various levels. In this context, the nurse should be aware of the often overlooked sexual dysfunctions among the problems that women with breast cancer experience in multiple and different sizes. When resolving these problems, they should help improve the coping methods, should use the support groups or treatment methods.

**Key words:** breast cancer, breast reconstruction, sexual dysfunction

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## EP080

### CAN REFLEXOLOGY REDUCE THE MUSCULOSKELETAL PAINS OF THE SURGICAL NURSES?

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**Background:** Nurses working in operating rooms perform pushing, pulling, heavy lifting and bending-torsion-like movements continuously and frequently, apply excessive force to their spines by performing activities exceeding their capacities such as manual lifting and moving patients and equipment, and are faced with injuries, sprains and strains.

**Focus of interest:** The aim of this compilation is to review the studies investigating the effect of reflexology on the musculoskeletal system pains.

**Methods:** The scientific publications were reviewed in PubMed, [ScienceDirect](#), [Google Scholar](#) and OVID databases published from 2004 to 2016 using the key words of musculoskeletal system pain, lumbar pain, pain control, reflexology, and complementary and alternative therapy, etc.

**Results:** The musculoskeletal pain affects the individual's life physically, psychologically, and socially in negative manner and decreases the quality of life. Therefore, controlling the pain experienced is important for individual relief, increasing the quality of life and preventing the loss of workforce. In addition to the use of pharmacological methods commonly in pain control today, the use of pharmacological methods with non-pharmacological methods is becoming common. In the recent studies, reflexology is defined as an important supportive non-pharmacological method for reducing pain, anxiety and agitation, ensuring relaxation and comfort, improving the sleep quality and quality of life.

In a study conducted by Quinn, Hughes and Baxter (2008) where the effect of reflexology on lumbar pain was investigated, reflexology applied to patients for a duration of forty minutes weekly for six weeks and it was found that reflexology reduced the degree of pain of patients with lumbar pain. In the study of Gunnarsdottir and Peden-McAlpine (2010) where the effect of reflexology on the symptoms of patients with fibromyalgia was investigated, it was found that reflexology significantly reduced pain experienced associated with particularly head, neck and arms. And in the study of Eghbali and et al. (2012), it was found that reflexology which was applied for 40 minutes three times a week for two weeks reduced patients' lumbar pain at a statistically-significant level ( $p < 0.001$ ).

**Conclusions and Implications for Perioperative Nursing:** The results of various clinical studies conducted in different fields suggest that reflexology is a supportive method for the control of musculoskeletal system pain.

**Keywords:** Musculoskeletal system pain, lumbar pain, pain control, reflexology, and complementary and alternative therapy.

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## CANNULATION FOR ECMO ORGANIZATION OF SURGICAL EQUIPMENT

**EP081**

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ECMO is a modified heart-lung machine designed for long term use and is used in severe lung and/or heart failure, when conventional intensive care fails and when the patient meets a 80 % risk for mortality. Deoxygenated blood is drained from the patient via a cannula in a central vein and is oxygenated before it is returned to the patient. ECMO does not cure the underlying disease, but “buys time” for treatment. Cannulation of the patient is a surgical procedure, which occasionally may be extremely urgent. In-house cannulations are performed in the NICU, PICU, ICU, OR or in the trauma room.

The OR nurse is responsible for preparing the surgical instruments and together with the surgeon for preparing the patient including sterile prep of the operating field. In order to minimize the time between the decision to initiate ECMO and the start of cannulation a strict organization of surgical instruments and presurgical routines have been developed.

### **Cannulation at referring hospitals**

Surgical instruments, sutures, disposables etc. are packed and stored in a large travel bag. Tisseel® and the surgeon's loupe glasses are added before each trip. The referring hospital provides the operating table, instrument table, surgical cautery and suction.

### **Conclusion**

The present organization enables the OR nurse to prepare the patient and instruments without any unnecessary delay and the surgeon to initiate the cannulation within a short time after decision to initiate ECMO has been made regardless if the patient is cannulated in-house or at a referring hospital.



## EP082

### COMPARISON OF PAIN INTENSITY SCALE PREFERENCES AMONG POSTOPERATIVE ADULT PATIENTS IN TURKEY

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**Key words:** Postoperative pain; pain intensity scale; patient preference; Turkish adults.

**Background.** Evidences support patients can use pain intensity scales to report pain reliably and validly (1-5). In Turkey, there is lack of studies to compare patient pain scale preference in various age groups.

**Objective.** To determine patient pain scale preferences in various age groups and compare the level of agreement among four pain scales commonly used during postoperative pain assessment.

**Methods.** This was a descriptive comparative study and 120 surgical patients were recruited purposively with 40 in each group: young adults, middle-aged adults, and elderly. Postoperative pain intensity were rated with the numeric rating scale (NRS), the verbal descriptor scale (VDS), the faces pain scale (FPS), and the visual analog scale (VAS). Postoperative first day, patients were interviewed for the scores of current pain intensity and the worst, least, and average pain. Scale preference and and simplicity were investigated. The scale face validity, convergent validity were assessed.

**Results.** For scale preference nearly half of the subjects most preferred the VDS followed by the NRS. The pattern of scale simplicity was quite similar with the pattern of scale preference. The NRS was the most preferred and simplest scale in the young group and middle-aged adult group. For the elderly group, the VDS was selected as the most preferred and simplest scale ( $p < .01$ ). For scale accuracy, the total number of scale inaccurate responses in all subjects was remarkably low. The convergent validity of all four pain scales were supported in use with the three groups.

**Conclusions.** These findings demonstrate that all four scale can be options for Turkish adults to report pain intensity. However, the VDS emerges as the best scale with respect to preference, simplicity, and error rates.

**Implications for perioperative nursing.** The patient's individual needs or preferences should also be considered for the selection of a right tool (1-3).

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## COMPASSION FATIGUE IN SURGICAL AND OPERATING ROOM NURSES

**EP083**

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**Background:** Compassion fatigue is defined as physically, emotionally, socially and spiritually exhaustion that causes great decrease in the desire, skill and energy of caregiver to empathize with others and to give care. Compassion fatigue indicates physically, emotionally and spiritually exhaustion in relation to care to patients in significant emotional pain and physical stress<sup>1,2</sup>. Compassion fatigue is also a natural result in individuals who help and give healthcare to traumatized or suffering people. Although all healthcare professionals are at this risk, the group at highest risk is nurses in this regard<sup>3,4,5,6</sup>.

**Aim:** The study was planned descriptive in order to determine compassion fatigue of surgical and operating room nurses.

**Method:** Population of the study will be the nurses working in surgery clinics and operating rooms of the Cerrahpasa Medical Faculty Hospital of Istanbul University from July-2016 to January-2017. 24 nurses were reached in the first survey. Before starting the study, written approvals were obtained from the ethical board and the institution. Data collected using the "Compassion Fatigue Scale" with maximum score of 100 points and the "Data Collection Form" developed by the researchers were analyzed with frequency, mean, standard deviation, and the Man Whitney U and the Kruskal-Wallis tests.

**Results:** It was found that 58.6% of the nurses attended the study were between the ages of 26-35, 93.1% were female, 72.4% have bachelor degree, and 48.3% worked in surgery clinic or operating room for 6 to 10 years. While the average score of the nurses obtained from compassion fatigue scale was 54.06±11.71, the highest score obtained from the scale was found 75 and the lowest score was found 36. It was determined that those nurses with post-graduate degree obtained scores lower than the scale, however, that there was no statistically-significant difference when compared the educational background with the score obtained from the scale ( $p>0.05$ ). When compared the working year with the scores obtained from the scale, it was found that the nurses working in surgery clinics and operating rooms for 11 to 15 years obtained scores higher than the others.

**Conclusions:** The study is continuing.

**Keywords:** Compassion fatigue, Surgical Nursing, Operating Room Nursing

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## EP084

### CONSTIPATION FREQUENCIES IN PEDIATRIC POPULATION

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**Background:** Constipation is a frequently seen problem in childhood. Parents often ignore the importance of constipation. The individual how constipated might have many complaints and they can affect the quality of their own lives or the lives of their family. **Therefore, it becomes crucial to identify the constipation issues in children and start the treatment as soon as possible.**

**Purpose of Study:** The aim of this study is to evaluation of the frequencies pediatric surgery outpatient clinic.

**Methodology:** The target population of this study that is the descriptive type was constituted by the children and their parents who came to the Pediatric Surgery Department of the University Hospital for examination, and the sampling of the study was constituted by the children and their parents (n=246) who agreed to answer the study questionnaire. After the approval for the study was obtained from the Faculty of Nursing Ethics Committee, the written permission was obtained from the Hospital. The questionnaire (31 questions) that has been established by reviewing the literature was used in collecting. The data was evaluated in numbers and percentage in SPSS 16.0 software package.

**Results:** It was determined that 25.6% of the children were in the age group of 6 to 12, 71.5% of them were males. It was determined that 15.9% of the children had constipation complaints. When the defecating of the children was examined in accordance with the ROME III constipation diagnoses criteria, it was determined that the 11.8% of the children had one, 2.0% of them had two, 1.6% of them had three, 0.4% of them had four and 0.4% of them had five of the criteria. It was determined that 3.3% of the children had fissure problems. 3.7% of the children were directed to the constipation clinic.

**Conclusions:** As it was seen in the results of the study on constipation problem in children, although the constipation problem in children is not recognized by the parents, the screening regarding the ROME criteria gave rise to the thought that this issue might be a bigger scale problem than it was thought to be. The children who had constipation problems were directed to the constipation clinic.

**Key words;** Constipation, pediatric surgery, nursing

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## EP085

### DIFFERENT TECHNIQUES OF SUBURETHRAL SLINGS USED IN THE SAME PATIENT

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**KEY WORDS:** To deepen in the utilization of different techniques of the suburethral ling as a treatment for stress urinary incontinence (SUI), from lower to higher complexity. A young patient who has had an hysterectomy performed and presents severe SUI. She went under surgery in 2008 in which Gynecare TVT Obturator System technique was used and 2 years later it failed. The TVT was removed and a new adjustable one was placed (TOA sling, PRESURGY) in 2011 with a new recurrence in 2013. In 2014 TOA sling was removed and a Remeex prosthesis (NEOMEDIC) was placed. Different techniques are available for the treatment of SUI based in the use of suburethral slings made of polypropylene multifilament net, like the ones we present.

The material used varies according to which one we are using but all of them present excellent results with an important increase in our patients life quality.

This are surgical techniques gradually more laborious that may be applied according to the complexity of each case.

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## EP086

### DONOR IN CONTROLLED ASISTOLIA (MAASTRICHT III). RESULTS AFTER 4 YEARS OF EXPERIENCE

**Castilla Maria**

**TBA**



## EFFECTS ON SEXUALITY OF MASTECTOMY IN THE BREAST CANCER: SYSTEMATIC REVIEW

**EP087****Özlem GÜNER\*****Yelda CANDAN DÖNMEZ\*\*****Gül ERTEM\****\*Ege University Department of Women's Health and Diseases Nursing, İzmir, Turkey**\*\*Ege University Department of Surgical Nursing, İzmir, Turkey*

**Objective:** The aim of this study is to analyze of the effects on sexuality of mastectomy applied to patients with breast cancer in the studies conducted during the period 2006-2016.

**Method:** In the literature review, keywords such as "mastectomy and sexuality-299", "mastectomy and sexual life -45", "mastectomy and sexual dysfunction-19", "mastectomy and sexual disorder-84" and "Mastectomy and sexual adjustment-104 " were entered in to the Pubmed data base and the articles were reached. The articles in the Pubmed data base are restricted using some criteria. In this context, 6 articles which published in English full-text (between 2006-2016), subjects were human and female and containing sexuality after mastectomy in patients with breast cancer were examined. This studies that meet the secriteria has created the universe of work. In this study, the entire universe is covered.

**Results:** The results of the 6 studies in accordance with the determined criteria in the data bases summarized. In a qualitative study of 20 Iranian women who were mastectomized by Fouladi et al.(2013), all women reported sexual dysfunction and were found to be at the point of post-operative problems(2). In a study conducted by Jassim and Whitford(2013), 54% of women who under went mastectomy performed on 118(50%) of 239 women with breast cancer were found to have a poor sexual function(3). In a study by Mariaperez et al.(2010), mastectomy patients(35.7%) were 2.7 times more likely to report sexual problems at two year follow-up(6). Alicikus et al.(2009), conducted a study of 40 patients(49%) who were active in the sexually active after breast cancer treatment who deterioration that occurred in sexual inter course and the most common cause of this change seems to be relevant concern over health(44%) and followed by a feeling of disability(38%)(1). In the study of Montazeri et al.(2008), 82.6% had mastectomy who that 82.3% of the patients were found to have sexual dysfunction(5). In the study of Keskin and Silver(2011), 42 patients who had undergone mastectomy operation were evaluated with the Golombok Rust Sexual Function Scale and consequently appeared to have higher depression than sexual dysfunction(4).

**Conclusion:** It has been shown that mastectomy in patients with breast cancer affects sexuality negatively in these studies. Nevertheless, because of the majority of studies show that sexual dysfunction is not related to mastectomy and that lack of randomized studies, so further studies are needed to interpret the results correctly in practice.

**Keywords:** mastectomy, sexuality, breast cancer

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## EP088

### EMERGENCY HEALTH CARE WORKERS' THOUGHTS RELATED TO INAPPROPRIATE USE OF EMERGENCY DEPARTMENTS

*Perihan Perihan*

All over the world; inappropriate use of emergency departments is accepted as a common problem that affects the quality of the services provided and productivity of the emergency department personnel. The current study was descriptively undertaken in order to determine views of the emergency department health care personnel about inappropriate use of emergency departments. The study was conducted with 124 emergency department health care personnel who worked at six hospitals located in a province in Turkey. The data were gathered using a form of 16 questions designed by the researcher and evaluated with numbers and percentages. It was found out that all of the participants thought that the emergency department where they worked were inappropriate used. It was noted that most of the emergency department personnel considered half of the visits paid to the emergency departments as inappropriate and thought that these such visits happened between 7:00 p.m. and 1:00 a.m. According to the health care personnel; the reason for the most commonly seen inappropriate using was renewing prescription. It was seen that almost all of the participants thought that the general belief that emergency health care services provided care for all kinds of health problems led to the inappropriate visits. Most of the emergency department personnel were of the opinion that inappropriate use resulted in interruption in the treatments of the emergent cases and decreased professional motivation. The results of the study will provide information related to status and causes of inappropriate use of emergency departments.

**Key Words:** Emergency nursing, emergent treatment, workload, health services, burnout

## ENHANCED RECOVERY AFTER SURGERY PROTOCOL AND NURSES' ROLES

EP089

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Today, with advances in surgical practices and anesthesia techniques, as distinct from the traditional approach, the patient care in surgical process is based on evidence-based practice (1). In the studies it is shown that with the approaches and evidence-based practices that are instituted to improve high level treatment and care in the surgery provides enhance recovery and decrease mortality related to surgery. Enhanced Recovery After Surgery (ERAS) protocol or so called Fast Track Surgery (FTS) is located among the evidence-based practices (2). The key elements of ERAS protocol include preoperative counselling, preoperative nutrition, standardized analgesic and anesthetic regimens and early mobilization. ERAS protocol was applied firstly in colorectal surgery (3,4). Then, in many surgical fields has been obtained successful results. With applying of ERAS protocol, it is aimed shortening length of stay in the hospital during surgical process, accelerating of recovery after surgery, prevention of complications and morbidity, and reduction of hospital costs (5,6,7). ERAS protocol is required a multidisciplinary approach including surgeons, anesthesiologists, nurses, physiotherapists and dietitians (1,8). Surgical nurse must take an active role in every stage of the surgical process including preoperative, intraoperative and postoperative period. Therefore, surgical nurse should reflect to the patient care to ERAS protocol, should follow recent publications related to ERAS protocol and should be open to development. In this review, ERAS protocol and nurse's role is discussed.

**Key Words:** Enhanced recovery after surgery protocol; Fast track surgery; Nursing

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## EP090

### ERAS RECOMMENDATIONS FOR POSTOPERATIVE CARE IN GYNECOLOGIC/ONCOLOGY SURGERY

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Enhanced recovery (ER) has also been described as “fast-track”, “rapid” or “accelerated” recovery. The main goals of ERAS programs described to date are to reduce the length of hospital stay after surgery and speed patients’ return to normal daily activities without increasing complications, readmission rates, or cost.

The purpose of this article is observe the evidence available for gynecologic/oncology surgery postoperative care elements and make recommendations. This effort forms the basis of the ERAS® Guideline for postoperative care in gynecologic/oncology surgery.

The literature searched the Medline, EMBASE, PubMed, and Cochrane to search medical subject headings including “gynecology surgery”, “gynecologic oncology” and all postoperative ERAS® items. The results below are grouped according to their high and low levels of evidence. Major practices with high evidence level are:

Major practices with high evidence level are:

- Patients should wear well-fitting compression stockings and have intermittent pneumatic compression.
- A regular diet within the first 24 h after gynecologic/oncology surgery is recommended.
- ERAS elements that reduce metabolic stress should be employed to reduce insulin resistance and the development of hyperglycemia.
- Perioperative maintenance of blood glucose levels (b180–200 mg/dL) results in improved perioperative outcomes; glucose levels above this range should be treated with insulin infusions and regular blood glucose monitoring to avoid the risk of hypoglycemia

Applications with low evidence level are:

- The use of postoperative laxatives and chewing gum
- Intravenous fluids should be terminated within 24 h after surgery; balanced crystalloid solutions are preferred to 0.9% normal saline
- Peritoneal drainage is not recommended routinely in gynecologic/oncology surgery including for patients undergoing lymphadenectomy or bowel surgery
- Urinary catheters should be used for postoperative bladder drainage
- Patients should be encouraged to mobilize within 24 h of surgery

As a result; ERAS® recommendations leads to improved patient satisfaction, less variation in patient care, shorter length of hospital stay, and a reduction in complications and re-admissions.

**Key Words:** gynecologic surgery, enhanced recovery, ERAS, fast-track surgery, postoperative care

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## EVOLUTION OF POSTOPERATIVE HANDOVER WITH THE INFORMATION TRANSFER AND COMMUNICATION ASSESSMENT TOOL FOR SURGERY (ITCAS CHECKLIST 3)

**EP091**

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**Objective:** Postoperative handover is one of the most critical phases in the care of a patient undergoing surgery. In this study, postoperative patient handover was evaluated using the Information Transfer and Communication Assessment Tool for Surgery (ITCAS Checklist 3).

**Methods:** The Information Transfer and Communication Assessment Tool For Surgery (ITCAS Checklist 3) is a tool that is used to monitor the patient handover from the operating room to the postoperative care unit after an operation. The necessary permissions to use the tool were obtained. To ensure the validity of the language of the form, translation to Turkish language, back translation and pre-application were performed. After expert opinion was obtained, the data was analyzed via the Content Validity Index (CVI). The average score of each item was evaluated as more than three. There are no invalid items. "Other..." item was added for written explanations at the end of the tool. Its language validity having been done, the tool was used for postoperative patient handover at Ege University Medical Faculty Hospital, Department of Surgery and the occupancy was assessed according to handover dates and in its own right.

**Results:** According to the research result, it was detected that patient handover using the Information Transfer and Communication Assessment Tool for Surgery (ITCAS Checklist 3) is effective. It was also found out that it is more effectual to perform the written patient handovers via checklists.

**Conclusion:** Use of the Information Transfer and Communication Assessment Tool for Surgery (ITCAS Checklist 3) may facilitate standardization of this critical activity and thereby improve the quality of patient care.

**Keywords:** Patient handover, ITCAS checklist 3, Surgical patient

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## Antony Betsy





## FROM EVIDENCE BASED PRACTICE TO CARE BUNDLE: TIME FOR NURSES TO MAKE THE MOVE

**EP093**

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Care bundle is defined as implementation of interventions together that when each one of all execute individually effects patients outcome positively. All of the interventions that are constituting the concept of the care bundle which was initiated by Institute for Healthcare Improvement in 2001 are evidence base practice. There are lots of advantages of developing care bundle (1,2,3,4,5). Care bundle is a whole interventions which shortens the duration of hospitalization, reduces complications and mortality. In addition to these, it diminishes carelessness, standardize the care and enhance management process in the units (6,7). Some factors are needed to develop an effective care bundle. Using care bundle finds out positive results for patient, institute and health professionals. Fundamental philosophy of care bundle is focus how the best care can be provided, not how does it be. There are some characteristics that separate the care bundle from other care methods and make it specific. To be all interventions which are place in the bundle care is tested with randomized controlled trial, has I evidence- based level, is not open to dispute and doesn't include contradiction is one of its characteristics (1,2,3,4,5,8,9). Multidisciplinary approach, team work and communication are the key elements of the care bundle. Nurses have important role in the implementation of care bundle in this multidisciplinary approach, because they are primer health professionals who are practitioner of patient care. The purpose of this review is to introduce the care bundle and to discuss its the strengths and limitations of its on nursing care

**Key Words:** Care bundle, patient, nursing care.

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## EP094

### IDENTITY VERIFICATION FOR PATIENT SAFETY: OPINIONS AND APPLICATIONS OF NURSES AND PATIENTS FOR USING IDENTIFIER WRISTBANDS

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**Purpose of the study:** The study was conducted to evaluate the opinions and applications of nurses and patients about using identifier wristbands.

**Material and Method:** This descriptive study was conducted with 102 nurses and 175 patients at two hospitals in Trabzon, Turkey. It was collected with the question form developed by the researchers. The data was evaluated with percentages.

**Results:** About three fourth of the nurses stated to believe that installing identifier wristbands to patients and identity verification should be done by the nurses. It was found out that almost all the participants verified their identities before blood/ blood component transfusion and going to the operating room by means of wristbands. Almost all the nurses stated that the wristbands should be changed when an allergy is noticed and about three fourth of the nurses stated that they should be changed when they lose their qualities and when the patient is transferred to another clinic. It was assessed that majority of the participant patients were installed wristbands during the admission process and that more than half of them were not informed about installing the wristband. Of the 90.9% patients expressed that the nurses installed the identifier wristbands and 61.1% of them expressed that the nurse trained them about the wristband. Less than half of the patients stated that their names were verified by looking at the wristbands before x-ray, operation and blood insertion.

**Conclusion:** According to the study results, it was assessed that the nurses generally have enough knowledge of using identifier wristbands. It was assessed that the aim of installing the wristbands was not explained well enough to the patients.

**The implications for perioperative nursing:** The results of this study can be guiding for making the use of identifier wristband in verification of patient identity a standart application.

**Key Words:** Identifier wristband, identity verification, nurse, patient, patient safety

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## INCREASING AWARENESS TO “NEAR-MISS” EVENTS AMONG THE OPERATING ROOM TEAM AS PART OF QUALITY ASSURANCE IN TREATMENT OF PATIENTS UNDERGOING SURGERY

**EP095**

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**Introduction:** Near miss (NM) – a wrong action or series of actions which were performed or were intended to be performed that did not result in patient harm.

The operating room accumulates or “creates” many cases of near miss events which are never reported.

### Objectives:

- ☐ To improve awareness to occurrence of (NM) events.
- ☐ To increase the number of reports of (NM) events in the computerized system.
- ☐ To meet the requirements of the Joint Commission International (JCI).

**Background:** A recent international survey\* among perioperative room nurses revealed the high prevalence of (NM) events: 74.2% reported preventing a wrong site/procedure, 65.3% reported preventing medication errors, 47.9% reported preventing failures in instrument sterile reprocessing, 35.4% reported preventing retained surgical instruments or absorbent materials at the surgical site.

In Our operating room, we found no reports of (NM) events.

A local survey distributed among 33 perioperative nurses in our center, revealed factors for lack of reports:

- ☐ Lack of knowledge regarding (NM) events
- ☐ Lack of willingness to invest time reporting cases which did not result in harm to the patient.
- ☐ Lack of institutional guidelines
- ☐ Lack of knowledge regarding criteria for reporting
- ☐ Fear of involvement in an investigation
- ☐ Fear of the association between reporting and negligence.

**Methods:** Staff meeting focused on (NM) events: definition and importance of reporting.

Introduction and implementation of a reporting system into the computerized system.

Establishing a safety and quality care computerized program based on examination of patient charts and identifying problems.

**Results:** A rise in the number of reports to approximately 6 reports a month.

**Conclusions and recommendations:** to expand the process to additional operating room sites and surgical departments in order to improve the perioperative process and raise awareness among perioperative nurses to (NM) events and the importance of reporting them.

\*Steelman, Victoria M., Paula R. Graling, and Yelena Perkhounkova. “Priority patient safety issues identified by perioperative nurses.” AORN journal 97.4 (2013): 402-418.)



## EP096

### INFLUENCE OF NURSING INFORMATION IN PREOPERATIVE ANXIETY

**Goncalvez Marco**

A great amount of patients reveals several levels of anxiety when has undergone a surgery, a critical moment in an ailing person. It is fundamental to develop a specific knowledge in this area characterized by an enormous subjectivity, in order to help nurses to define the best forms of action based on scientific evidence (1)(2).

This study aims at evaluating preoperative anxiety and the information that patients have about the anaesthetic-surgical procedure, in the elective surgery; it also aims at analyzing whether some sociodemographic variables influence the anxiety; and analyze the relationship between the information that patients have and the level of anxiety.

A quantitative, descriptive and correlational study was developed in 200 patients undergoing elective surgery. A questionnaire for socio demographic characterization, an Information Scale and the State Trait Anxiety Inventory has been applied.

The results reveal that the patients in the study showed average levels of anxiety, finding statistically significant differences according to sex (3). The preoperative information showed to be related significantly with the number of elements of the household and with time on the waiting list. The patients are better informed about the organizational and logistical aspects compared to nursing care.

In conclusion, the results allow us to conclude that nurses should invest in the strength of information related to preoperative education during perioperative period. As an autonomous practice, the importance of information in the quality of the performance in nursing cares and gains on health must be highlighted. We suggest a structured, objective, and individualized intervention.

**Keywords:** Information; Nursing; Preoperative; Anxiety

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*Preferred type of presentation: Poster*



## INFORMATION AND SUPPORT NEEDS OF WOMEN WITH FIRST DEGREE CLOSE BREAST CANCER

**EP097**

**Sevban ARSLAN, Şeyma YURTSEVEN, Sevgi DENİZ**

Among the most diagnosed cancer types in the world, breast cancer (11,9%), which is the second most common cancer, is also the most common cause of death among female cancers. The best way to combat breast cancer, which affects women so much, is to control known risk factors before cancer develops. One of the most important of these risk factors is genetic predisposition.

Genetically occurring breast cancers account for 5-10% of all breast cancers. It is of utmost importance to evaluate the family narrative in determining the genetic breast cancer risk. Because the individual's risk of developing breast cancer increases the number of close relatives with breast cancer and increases the incidence of breast cancer at an earlier age.

Women who live intensely with close relatives of cancer experience together with their physical risks and their emotional impact. When we look at the literature, it is determined that women who have breast cancer in family history have feelings such as fear, anxiety, uncertainty and helplessness. Evans et al (2016), have shown that hereditary cancer in their family is particularly difficult for young women to make long-term and complex decisions for medical management. In a study conducted by Sinicrope et al. (2009) in the USA, it was determined that girls who have breast cancer want to learn about breast self-examination, clinical breast examination, mammography, breast cancer risk and healthy lifestyle.

Preventing breast cancer requires complex knowledge and skills. Cancer prevention and early diagnosis is a reality that can be possible with the education of women. In this context, nurses as role models should use blood-based knowledge and practices and meet the information and support needs of women with a high risk of breast cancer. While meeting these needs, they should also protect their own health and enlighten society as an example.

**KeyWords:**Information and support requirement, first degree relatives, genetic breast cancer, breast cancer risk.

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## EP098

### INVESTIGATION OF THE BEHAVIOR AND ATTITUDES OF OPERATING ROOM NURSES ABOUT RADIATION-EXPOSURE

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**Background:** Since the discovery of X-ray, the use of radiation is increasing significantly in conjunction with advances in medical and radiation technologies. Radiation is used effectively in the diagnosis and treatment of diseases in modern medicine. Healthcare professionals can be exposed to radiation on a daily basis exposure to radiation is increasing in this process. Therefore, failure to reduce the professional exposure leads for cumulative radiation to damage not only to employees but also to patients<sup>3,1,4</sup>. Radiation is used in many procedures in operating rooms and prolonged exposure may occur. Therefore, the risk of exposure to radiation particularly by operating room nurses is very high<sup>2</sup>.

**Aim:** The study was planned descriptive in order to investigate the attitudes and behaviors of operating room nurses about radiation-exposure.

**Method:** The population of the study consists of the operating room nurses working in the operating rooms of 2 major university hospitals located in Istanbul, and study sample consists of the operating room nurses who are not on leave and not on sick leave from July-2016 to January-2017 and accept to attend the study. 22 nurses were reached in the first survey. Before starting the study, written approvals were obtained from the ethical board and the institution. Data was collected using the "Data Collection Form" developed by the researchers. The data obtained were evaluated by frequency, mean, and standard deviation tests.

**Results:** It was determined that all of the operating room nurses attended the study was female, 44.4% were operating room nurses for 11 to 15 years and 88.9% worked more than 40 hours per week. It was found that 77.8% of the nurses working in operating room exposed to fluoroscopy, 82.6% taken protective measures, all of them used personal dosimetry, and 88.9% not exercised due diligence in using fluoroscopy.

**Conclusions:** The study is continuing.

**Keywords:** Nursing, Surgery, Radiation effects

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## NURSING RESEARCHES RELATED HIP AND KNEE REPLACEMENTS SURGERY IN TURKEY:LITERATURE REVIEW

**EP099**

**Arzu ASLAN, Meryem YAVUZ van GIERBERGEN**

**Background:** Joint replacement is a surgical procedure in which parts of an arthritic or damaged joint are removed and replaced with a metal, plastic or ceramic device called prosthesis. Hip and knee replacements are common orthopedic procedures that can greatly improve patients' quality of life and provide relief from the pain caused by various musculoskeletal diseases. The nurse has an important role in the preparation, care and support of the patient throughout the surgical journey. Holistic assessment and effective pre and post-operative planning facilitate patient-focused care and optimal recovery.

**Aim:** The purpose of this literature review is to determine the nursing researches related to hip and knee replacement surgery care in Turkey.

**Methods:** In this literature review, Council of Higher Education Thesis Center, Turkish nursing journals and surgical and orthopedic nursing congress books were examined.

**Results:**

Twelve studies were found in Turkish nursing journals. The studies addressed the pain level, depression level, patient expectations, preparation for surgery and post-operative compliance. Eleven congress books of surgical nursing and orthopedic nursing congress were examined and thirty one oral/poster presentations were found. Thirteen of these presentations were related to the total hip replacement. Seventeen theses were found in Council of Higher Education Thesis Center. Ten of these theses were master's thesis. These are including post-operative pain management, self-care power, functional status, post-operative comfort, discharge education, quality of life issues.

**Conclusion:** There is limited study about hip and knee replacement surgery nursing care in Turkey. There is a need for further study in this area.

**Key words:** orthopedic surgery, nursing, review

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## EP100

### OPINIONS OF SURGICAL NURSES ABOUT PATIENT AND EMPLOYEE SAFETY: FIRST RESULTS

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**Purpose of the study:** The current study was undertaken in order to determine opinions of surgical nurses about patient and employee safety.

**Material and Method:** This descriptive study was done with 20 nurses employed at the operation room of a university hospital in Rize, Turkey. The data were gathered using a questionnaire designed by the researchers. The data obtained were assessed using percentages.

**Results:** The participant nurses stated that many factors affected patient and employee safety at the operation rooms. It was determined that the factors that threatened patient safety were risks created by cables (85.0%), risk of falling (50.0%), problems during patient transportation (45.0%), slippery grounds (35.0%) and infection risks (25.0%). Besides, the factors that threatened employee safety were risks created by cables (95.0%), lack of personnel (85.0%), radiation exposure (80.0%) and stress experienced by surgery nurses (10.0%). Measures to be taken for patient safety were coordinated working and tying patients to operation tables during surgery (70.0%), designing large patient rooms (20.0%) and provision of cleaner rooms (15.0%). Measures to be taken for employee safety were sufficient air-conditioning (90.0%), building more suitable operation rooms (85.0%) and employment of more qualified and sufficient number of personnel (80.0%).

**Conclusion:** According to the study results; it was detected that many factors affected patient and employee safety at the operation rooms and of these factors, the most important ones were risks created by cables, risk of falling, lack of personnel and radiation exposure.

**The implications for perioperative nursing:** We are of the opinion that the results of the current study may be guiding for increasing awareness of surgical nurses about patient and employee safety at operation rooms, decreasing possible complications and taking the necessary measures.

**Key Words:** Employee safety, patient safety, surgical nursing

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**PATIENT'S BODY AND NURSING ADVOCACY IN PERIOPERATIVE CARING****EP101****Balzan Sara****Keywords:** body, embodiment, advocacy, perioperative nursing.

The aim of this speech is to contribute to focus the body concept as “lived experience” by patient and the advocacy role of nurse in perioperative caring. Nurses are the healthcare workers who have the most prolonged and intimate contact with patient’s body (1) and undeniable is its centrality in nursing care (2). The body is not just flesh to be touched or the function on which to focus medical attentions but it is the expression of human existence (3). The embodiment concept gives back to patient his entirety and complexity (4). In fact, the embodiment refers to the emotions and feelings experienced through the body and expresses the uniqueness of each individual (5). Respecting their individuality, nurse offers to patients diligence, commitment, support and, above all, protection (6). In the high – tech care context as the operating room, the risk to “objectify” the patient’s body is very high. This is a problematic aspect of incorrect use of medical technology that gives dangerous distances between patient and health professional and makes the human being particularly fragile and further away from his history (3). The intimacy of operating patient is compromised and his/her desecrated body is no longer capable of protecting the person living in it. As advocate, nurse becomes patient’s frontline of defence (7), protecting him/her with emotional intelligence and responsiveness, without fearing emotional engagement (2). In the operating room ward steps are brief, the moments of *caring* shrunk and the intensity of care grows. In perioperative pathway, some long awaits which patient lives alone can be filled up with precious moments of caring, also made of silent empathy (8).

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**Preferred type of presentation:** oral



## EP102

### PATIENT COMMUNICATION FOLLOWING LARYNGECTOMY: A PILOT STUDY USING VISUAL COMMUNICATION GUIDE

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**Objective:** The aim of the study was to determine the effectiveness and functionality of the “Visual Communication Guide”.

**Method:** A combination of qualitative and quantitative research design was implemented in this study. Fourteen partial-laryngectomy patients participated in the study, along with 20 health personnel who were in charge of care and treatment of these patients.

**Results:** The patients stated that the visual communication guide was helpful in expressing themselves to their relatives and health care team. Health care team as well as the patients found the images in the guide clear enough and easy to understand, and the colors and sizes of the images and fonts were adequate. The patients also stated that the issues covered in the guide were handled appropriately, and they found it very useful. However, half of the patients felt that it did not contain enough images. The health care team thought that the guide was convenient and saved time in communication, however, it did not contain enough material to enable the patients’ to share their psychological needs. After analysing qualitative data, four main topics were determined. These were: “the experience of being unable to speak”, “quick and easy communication”, “sense of confidence”, and “positive and negative aspects”.

**Conclusion:** We have come to the conclusion that visual communication guide was functional, beneficial and useful for serving the communication needs of laryngectomy patients.

**The implications for perioperative nursing:** Loss of voice and consequent communication problems with the patients is a major challenge. Although the study reveals that the patients can communicate by means of the visual communication guide that we have developed, we still need further studies.

**Key words:** nonverbal communication, nursing, laryngectomy, Visual communication guide.

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## PERIOPERATIVE AIRWAY MANAGEMENT FOR NURSES USING THE TOTAL TRACK DEVICE

**EP103**

**Martinez Cruz N; Guiu Lázaro Gemma; Ballo N**

### Introduction

A wide range of tools and techniques are currently available for perioperative airway management. A new device, however, now allows direct airway visualization, ventilation and intubation simultaneously. With these advantages, particularly in difficult cases, TotalTrack is becoming widely used in airway management. It is therefore necessary that OR nurses working with anaesthesiologists are trained in the use of this advice in order to provide optimal patient care.

### Objectives

To promote the best practices for perioperative airway management using Total Track.

To provide high quality care with the use of Total Track in cases of difficult airway management.

To share our experience and provide appropriate nursing training in the use of TotalTrack in collaboration with anesthesiologists regarding the indications and correct use of the device

### Method

Literature review of perioperative nursing and use of TotalTrack for management of difficult airflow.

Update and sharing of experience with a multidisciplinary team.

### Expected Results

Promotion of excellence in perioperative nursing care.

### Key words

Totaltrack, perioperative nursing cares, difficult airway

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## EP104

### PRE-OPERATIVE COMFORT LEVELS OF PATIENTS UNDERGOING SURGICAL INTERVENTION

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**Aim:** This study was planned to determine the comfort levels of patients regarding the pre-operative period in operating room.

**Method:** Population of this descriptive-type study consisted of 56 patients who hospitalized in the clinics of the Department of General Surgery, Cerrahpasa Faculty of Medicine of Istanbul University in July-September-2016 on post-operative days 1-2 and accepted to attend the study. Data collected through "Perianesthesia Comfort Scale"<sup>1,2</sup> and "Descriptive Characteristics Information Form" was evaluated with percent, mean and the Mann-Whitney-U test.

**Results:** The average age of the patients was 50.98±12.09 and 66.1% of them were female. 82.1% of the participants were married. Within the pre-operative period, 98.2% of the patients were informed about the surgical intervention to be performed, 50% about operating room, and 76.8% about the method for anesthesia to be performed during the operation. 71.4% of the patients experienced surgery before and experiences of 65% of these patients about surgery were positive. Score average of the Perianesthesia Comfort Scale is 4.74±0.59. No significant relationship was found between the genders of the patients, the surgical intervention to be performed within the pre-operative period, anesthesia type to be performed, their status of information about the operating room environment and their perianesthesia comfort status (p>0.05).

**Conclusion:** The comfort levels of the patients regarding the pre-operative period in operating room was found high in this study. It was observed that the comfort levels of the patients who were male, single and those with previous experience of surgery were high, however, that these characteristics did not affect the scale score.

**Implications:** Patients who will undergo care and surgery planned in a way that include the four dimensions of comfort through a holistic approach can feel themselves relieved, comfortable and strong enough to overcome the problems.

**Key Words:** Preoperative, Comfort, Surgery

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## PRE-OPERATIVE PATIENTS EDUCATION IN TURKEY: LITERATURE REVIEW

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Patient education is a major concern for perioperative nurses in surgery setting. It has proven difficult to develop formal preoperative teaching programs in this environment, but research has shown that preoperative education can improve patient outcomes and satisfaction with the surgical experience.

**Aim;** The objective of this review to investigate the research conducted by nurses in Turkey relating to patient education in the pre-operative period.

**Material and Methods:** Database searching on ULAKBIM ([Turkish Academic Network and Information Center](#)), PubMed, EBSCO, Web of Science and the articles were selected as full text by searching with 'preoperative', 'patient's education', 'nursing' key words and they were carried out in Turkey (2006-2016).

**Results:** Total five studies of these articles that meet the research's criteria have the sample of the review. Findings indicate that preoperative education was variously. According to the findings of the studies, patients education was given to in preoperative period and there was a correlation between patients' learning needs and anxiety levels and patient education reduced fear and worry and contributed to healing.

**Conclusion:** It is recommended that patient training programs and materials are developed and preoperative planned patient trainings are conducted and experimental studies with a high level of proof should be conducted on the preoperative education of patients.

**Key words:** preoperative, patient's education, nursing.

### Biography

Burçak ŞAHİN KÖZE is a PhD student at Ege University from Turkey in Izmir. She is also research assistant at the same university in Surgical Nursing Department since 2009.

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## EP106

### READINESS STATUS FOR PATIENT CARE AND CARE BURDEN OF THE CARDIOVASCULAR SURGERY PATIENTS' FAMILIES

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**Background:** This study was conducted to determine readiness status for patient care and care burden of the cardiovascular surgery patients' families.

**Methods:** This study cross-sectional study was conducted among 31 family caregivers who wanted to contribute, in cardiovascular surgery clinic at an university hospital in Turkey. Data were collected with using a questionnaire, "Burden Interview" and "Preparedness for Caregiving Scale". The research was carried out in January-June 2016. The data were analyzed with SPSS.15 using frequency, percent and non-parametric tests.

**Results:** Mean age of the participants was 51±1240 (min:20, max: 71). 64.5% of participant were woman and 48.4% were the patient's wife. 61.3% of them were primary school graduate and 67.7% were not working and had got children living with them. income and expenses status of 64.5% of participant was equal and 61.3% of them were getting support from relatives for patient care. Participants received 3,00±0,85 (min:0- max:4,00) points from Preparedness for Caregiving Scale and 56.7% of them said they are ready to provide care and 90.3% stated that they didn't want to prepare a special issue about giving care. When the mean total scores of Preparedness for Caregiving Scale between working and not working participants was analyzed, results were found to be statistically significantly different (p<0,05). Participants' mean total scores of Burden Interview was 18,29±13,21 (min: 2,0, max:54,0). Burden interview was be affected from education level, age and employment situation.

**Conclusion:** According to the results, family caregivers were ready to care of relatives to provide care to patients. Also their burden of care were found low but it was affected by demographic characteristics.

**Keywords:** Caregivers, Care Burden, Patients Care, Cardiovascular Surgery Patients', Turkey.

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## RISK FACTORS FOR POSTOPERATIVE URINARY RETENTION

**EP107**

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### Background

The urinary retention, which is a frequently observed complication in the postoperative period, may be concluded with damage in the bladder, chronic nephropathy, urinary system infection and sepsis. All of these might increase the time the patient spent in the hospital and decrease the quality of life (1,2,3,4,5,6).

### Results

There are various risk factors that play a role in the development of PUR. National Association of Orthopaedic Nurses (NAON) (7) categorize the risk factors in two groups as; predisposing factors, which composed of individual attributes, and precipitating factors, which composed of the attributes rise during and after the operation. When individual attributes are investigated; being an old patient ( $\geq 50$ ), being a male due to many pathologies such as benign prostatic hyperplasia (BPH), experiencing retention before, having sicknesses such as renal diseases, cystocele, diabetes mellitus (DM), using excessive alcohol, an increase in serum creatinin values, having a history of chronic urinary system infections carry some risks in the development of PUR. When surgery and anesthesia related factors are investigated; extension in the operation time, exposure to cold, usage of drugs such as opiate, pain, stillness, supine position, the amount of given liquid in anesthesia and perioperative being excessive may trigger the development of PUR. Besides these risk factors that NAON identified, operation type (pelvic, anorectal and orthopedic) and anesthesia (general, spinal, epidural) type, some medicine which used in perioperative period (anticholinergic, antihistaminic, antiparkinson), trauma (pelvic injuries), fear, anxiety, having a concern for pain while urinating, embarrassment, multiple sclerosis, neural diseases such as Parkinson may cause for the development of PUR (3,7,8,9,10,11,12).

### Implications

The continuation of the patients excretion function is one of the important responsibilities of the nurses. Nurses might be effective in the prevention and management of PUR with the initiatives they will take.

**Key words:** Postoperative urinary retention, risk factors, nursing

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## EP108

### ROBOTIC EMERGENCIES: ARE YOU READY FOR A DISASTER?

*Carlos Grace*

Memorial Sloan Kettering Cancer Center (MSKCC) performed over 2100 robotic surgeries in 2015, spanning over several surgical services. MSKCC currently maintains a total of 7 robots, six of which are the most current Xi model, and one Si model

The surgical robot is a tool that surgeons use to perform minimally-invasive procedures. Nursing staff plays a vital role in ensuring patient safety with use of robot during surgery. Proficiency in the use of the robot requires extensive and continuous training for the entire surgical team. Because of the complexity of the technology, successful robotic programs must implement initiatives for the prevention and management of robotic emergencies. It can happen anytime, and the staff must be fully aware of the emergency protocols.

This presentation will focus on how to develop a successful robotic program that includes procedures for the prevention and management of emergencies in the Operating Room (OR). It will discuss these processes developed by a multidisciplinary Robotic Executive Committee:

- Emergent Conversion to Open Procedure checklist, which defines each surgical team member's task during an emergency. Incorporation of this checklist during the surgical timeout before each case.
- Robotic Emergency tray that is readily available to convert to an open procedure.
- Sterile robotic wrench to release a robotic instrument in an emergency.
- Stand-by cart containing a set of instruments that is service specific; readily available if there is a need to convert to an open procedure.
- Education and training of nursing and surgical staff on management of robotic emergencies.

Frontline nursing staff will gain knowledge on what to do during robotic emergency. It will assist educators in developing training materials and creating simulation for robotic emergent conversion. Through ongoing simulation, staff will develop and maintain skill and confidence during critical events.



## SHARING KNOWLEDGE USING NEW TECHNOLOGIES IMPROVES THE QUALITY OF PERIOPERATIVE NURSING

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**INTRODUCTION**

Work in the Operating Field uses technologies and techniques that require both a high degree of adaptability and the immediate and specific preparation of the professionals involved. In this respect we seek tools that facilitate this work and that adapt to modern times, giving way to new information technologies.

**GOALS**

To share and transmit knowledge about perioperative nursing using new technologies (Google Drive application), improving the safety of patients and the quality of their medical care.

**MATERIALS AND METHODS**

To create files that are saved and shared over the Drive, we have used personal notes and protocols. We have protocols in Word format and visual guides with photos in PowerPoint format.

**RESULTS**

Since March 2016 a total of 10 visual guides and 15 protocols have been incorporated.

**CONCLUSIONS**

The use of this tool improves the transmission of knowledge between experienced and newly incorporated staff, and contributes to the standardisation of procedures, thus reducing variability between clinical practices.

Combining scientific evidence with the experience of surgical nursing via new information technology platforms is an innovative step forward.

This advance ensures quality medical care, enhanced safety and better results for patients.

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**KEYWORDS**

Quality, Knowledge Sharing, New Technologies, Perioperative Nursing



## EP110

### THE RELATIONSHIP OF SOCIO-DEMOGRAPHIC FACTORS AND ILLNESS PERCEPTION WITH PREOPERATIVE ANXIETY IN PATIENTS BEFORE ARTHROPLASTY

**Krakauskait Edita**

*Key words: anxiety state, preoperative anxiety, illness perception.*

The aim of the study was to assess the relationship of socio-demographic factors and illness perception with preoperative anxiety in patients before Arthroplasty.

The research included 180 patients (men and women). The research took place in Hospital of Lithuanian University of Health Sciences Kauno Klinikos, in Orthopedics and Traumatology section, the day before surgery.

**Research methods:** State–Trait Anxiety Inventory (STAI) Cr.  $\alpha$  – 0,932;

The Illness Perception Questionnaire (IPQ) Cr.  $\alpha$  – 0,809; Sociodemographic questionnaire. Data was analyzed by Student criterion and linear regression with the SPSS package.

**Findings:**

The results of the study showed that that patients' illness perception as more severe (longer duration of the illness) associated with a higher intensity of anxiety before Arthroplasty (in group of women); higher illness outcomes perception associated with a higher intensity of anxiety before Arthroplasty (in women and men groups);

Patients' illness perception as more severe (longer duration of the illness and higher treatment control of the illness) associated with a higher intensity of anxiety before Arthroplasty for older patients;

Patients' illness perception as more understandable associated with higher intensity of anxiety before Arthroplasty in younger patients group;

Patients' illness perception with higher illness outcomes associated with a higher intensity of anxiety before Arthroplasty for older and younger patients.

Socio-demographic factors (gender, age, education and marital status) is not related to the intensity of preoperative anxiety.

**Discussion:**

This study is useful for the treatment, nursing and health psychology practice. The benefits of preoperative evaluation: the possibility to reduce patient's preoperative anxiety, to improve quality of life, well-being and healing after surgery.

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## SPIRITUAL SUPPORT PERCEPTION OF HEALTHCARE PROFESSIONALS

**EP111**

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**Background:** In this study, it is aimed to determine spiritual support perception of nurses and doctors who are health professionals.

**Methods:** The ethical committee approval of this study, which was planned as a descriptive study, was taken from Ethics Committee (01.04.2016: 2016/27). The sample of the study consisted of nurses (n = 208) and doctors (n = 46) working in inpatient treatment clinics of a university hospital. The data of the study were collected via a questionnaire consisting of two parts. The first part of the questionnaire consists of 22 items including demographic information; the second part is Spiritual Support Perception Scale (SSPS) which is developed by Erkan and Nurgül KAVAS in 2014 to determine nurses and doctors' spiritual support perception and is composed of 5 point Likert-type 15 questions. Frequency, percentage, mean and standard deviation were used for the analysis of the data.

**Results:** For the question "what is spiritual care?"; 66% said that "it is holding the patient's hand and listening him/her", 71.9% said „respecting the patient's privacy“, 51% said „making the patient meet with a religious officer“, 59.3% said „making the patient see his/her relatives“, 53.8% said „enabling the patient to pray and read Qur'an“ and 58.9% said „preparing a suitable environment for the patient to pray“. 96.4% of the health professionals stated that they gave importance to patients' need for spiritual care; 69.6% said that they gave spiritual care to their patients and stated that this spiritual care was „listening to patients and enabling them to express themselves“, „being careful about protection of patients' privacy“ and „making them see their relatives“ respectively. The mean SSPS score of the health professionals is  $3.19 \pm 0.58$  while the nurses' average score is  $3.22 \pm 0.57$ . It is found out that the SSPS scores of health professionals who gave importance to the patients' spiritual care needs were significantly higher ( $3.23 \pm 0.54$ ;  $p = 0.00$ ).

**Conclusion:** Our study results show that although health professionals have stated that they know spiritual care, they do not have enough knowledge about it, they are sensitive to patients' spiritual care needs, and their mean SSPS score supports this.

**Key Words:** Spiritual Care, Health Professionals

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## EP112

### SURGICAL MEDICAL NURSE AND MATERIAL REMOVING FOR SONICATION

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Periprosthetic infections represent a serious complication after total joint arthroplasty. It is a serious and heavy burden for the patient and on health insurance. With the aging of population, there is an increasing number of patients with total joint arthroplasty, what consequently increases the number of complications. What is unique about periprosthetic infection, is the formation of a bacterial biofilm, which is a diagnostic and therapeutic obstacle. Introduction of a new diagnostic tool - sonication, enables the release of the bacterial biofilm and improves the sensitivity of the microbiological testing, even in the case of preoperative antibiotic therapy.

The method is especially important in borderline cases, where the typical clinical signs of infection are absent and the results of the microbiological tests are negative. Consequently the distinction between aseptic loosening and periprosthetic infection is difficult.

What is crucial in our work is the correct removal and storage of collected foreign material and dispatching it to the microbiological laboratory.

The diagram of basic operations will be described in details and graphically presented with all its supporting documentation and results.

Key words:

Sonication, biofilm, artificial joint prosthesis, periprosthetic joint infection, surgical nurse





# EP114

## THE EFFECT OF MECHANICAL BOWEL PREPARATION ON POSTOPERATIVE PHYSIOLOGICAL OUTCOMES

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Mechanical bowel preparation is defined as cleaning of bowel lumen by using various preparations (1). Mechanical bowel preparation is applied to prevent infection due to anastomotic leak or iatrogenic injuries and to provide optimal visualization during colonoscopy (2). Oral solutions and enemas can be used, also diet restrictions can be performed for the procedure. As oral solutions; osmotic agents, stimulating laxatives and regimens which contain laxatives and osmotics are used. These solutions provide the cleaning of bowel lumen by absorbing body fluids to bowel lumen. In diet restrictions, it is usually provided clear liquid diet in preoperative 24 hours (3). But in the studies, it is seen that eating low residue meals until the night before operation have more positive results than 24 hours clear liquid diet. In the study of Sipe et al, it was seen that the satisfaction level was high and side effects were seen in low proportion in patients who eat low residue meals. Also it was found that ratio of cancelling the operation was high significantly in group which in the clear liquid diet was applied (4). Shapira et al. stated that sodium phosphate has significant effect on changing the electrolyte level and using it is dangerous in patients who have the risk of renal damage (5). A guideline related to the process of mechanical bowel preparation was published in 2012. According to this guideline; sodium phosphate should not be preferred in patients with the history of heart failure, cirrhosis and hypertension. Instead of sodium phosphate, polyethylene glycol should be chosen. Mechanical bowel preparation should not exceed 24 hours and hypovolemia should be improved before using oral solutions (6). This review was prepared to inform about the effect of mechanical bowel preparation on postoperative physiological outcomes.

**Key Words:** Bowel, effect, mechanical, postoperative outcome, preparation

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## THE EFFECTS OF VOICE LOSS ON THE INDIVIDUAL FOLLOWING TOTAL LARYNGECTOMY

**EP115**

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In many types of larynx cancers, successful results are obtained by current treatment methods (surgery, radiotherapy, chemotherapy). However, larynx cancer leads to some adverse consequences, both due to the disease and applied methods of treatment, such as intolerable physical deformities as well as functional losses (throat dryness, speech loss, etc.). Thus, voice loss ranks first among the adverse consequences caused by laryngectomy, which is the most significant determinant of quality of life following laryngectomy (1,2,3). Because, speech is not only a means of communication, but it is also a part of the personality for an individual. Thus, voice loss can cause adverse psychological effects on the patients and alienate them from the society (4,5). Different methods are practiced to provide speech rehabilitation after laryngectomy. Patients experience some problems until communication is achieved by speech rehabilitation methods. One of these problems is the difficulty in expressing their physical needs. This situation may pose an obstacle in determining and providing of patients' care and treatment needs correctly and also, cause inadequate or incorrect treatment. Besides, there may arise some difficulties in understanding whether the patients approve the procedures or not. Also, problems in communication may increase the patients' stress levels and cause feelings such as anger, despair, fury and anxiety (6,7). As a result of this situation, the patients become more dependent and feel useless, which prevent them from cooperating in treatment process and affect their healing process adversely (8). Even so, the perception of being unable to speak, communication needs and the communication methods utilized in laryngectomy patients are not sufficiently taken into consideration throughout the hospitalization period (9). As a result, patients experience voice loss and consequent communication problems following laryngectomy. Therefore, health professionals should provide help to laryngectomy patients in order to reduce the problems due to voice loss.

**Keywords:** communication, nursing, total laryngectomy, voice loss.

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## EP116 THE RECEPTION OF DISCHARGE EDUCATION BY OTORHINOLARYNGOLOGY SURGERY PATIENTS

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**Background:** Surgery patients often have self-care concerns in their preparation for discharge from the hospital. Unmet discharge needs can contribute to poor patient outcomes and readmission. So, it is critical that identify patients' informational needs and find ways to meet these needs (1).

**Aim:** This is a descriptive study that aimed to determine the reception of discharge education by otorhinolaryngology surgery patients. It was also intended to evaluate the factors related to the reception of this education and opinions about its sufficiency.

**Methodology:** This study was conducted with 126 students who had surgical operations in the otorhinolaryngology clinic of a medical faculty in Konya. The study data were collected using an information form. Data were summarized with percentage, mean and standard deviation. The comparative statistics were analyzed using chi-square test.

**Results:** Of the participants, 88.1% received discharge education, 65.9% received this education from physicians. Of them, 68.3% thought the education provided to them was sufficient. It was found that the rate of receiving discharge education was high among the patients who were given general anesthesia and stayed at the hospital for 48 hours or longer. It was also found that the patients who were given general anesthesia, stayed at the hospital for 48 hours or longer and received discharge education when they were still staying in their beds thought that the discharge education provided to them was sufficient.

**Conclusion:** The study findings indicated that a majority of the patients had received discharge education. Also, the reception of discharge education and finding it sufficient were affected by the type of anesthesia given to the patients, duration of their hospital stay and the place where the discharge education was provided.

**Implications of perioperative nursing:** A well-planned discharge education is important in developing patient outcomes and reducing readmission to hospital.

**Keywords:** Discharge education, otorhinolaryngology surgery, patient.

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## THE USE OF ROBOTIC SURGERY IN GYNECOLOGY AND ROLE OF NURSE

**EP117**

**Associate Prof. Evsen NAZIK, Rsch. Asst. Seda KARACAY YIKAR**

After using laparoscopy in the surgery field during 20. Century, big revolution happened in surgery. Laparoscopic surgery has found wide use in surgical applications in terms of smaller incisions, better imaging, less pain and analgesic requirements, shorter hospital stay, fewer complications and blood loss. However, the new laparoscopic procedures also had its disadvantages, including an unstable camera platform, the limited mobility of straight laparoscopic instruments, two-dimensional imaging, and a poor ergonomic position for the surgeon. Because of these reasons, attentions have now turned to robotic surgery. Robots are already used in health care in surgical procedures for years. The robots in surgery were first used in neurosurgery field in 1985 and the developments in orthopedics and urology were followed. In the gynecology field, Falcone et al. performed tubal reanastomosis in 1999. Then, Diaz and Arrastia performed the hysterectomy series and Advincula et al. performed a series of myomectomy which is another important operation in the gynecology field. Nowadays; gynecological interventions with robotic system covers all aspects of gynecological operations such as tubal reanastomosis, myomectomy, ovarian transposition, Burch colposuspension, colpopexy, hysterectomy, cystectomy, oophorectomy, salpingectomy, tubal ligation, radical hysterectomy, pelvic and paraaortic lymphadenectomy, gynecologic cancer. The use of robotic surgical systems is increasing rapidly in the medical arena. Minimally invasive robotic surgery brings important benefits for patients, such as less blood loss, reduced risk of blood transfusion and a shorter overall recovery time. Robotic surgery is a developing and advancing technology. Robotic assisted laparoscopic surgery has several advantages and disadvantages for the patient, healthcare professionals and the institution. Nurses have important roles in the use of robotic surgery systems. Because of the new technology, robotic surgical systems have also brought new responsibilities to nurses, who are important members of the surgical team. Therefore, nurses must improve their knowledge and skills in this area. Perioperative nursing care in robotic surgery should focus on preparing patients, establish the system, ensure continuity throughout the process. and for shorter hospital stay, with continued support for postoperative recovery following discharge.

**Key words:** gynecological surgery, robot use in surgery, nurse



## EP118

### UNRESTFUL SYMPTOM AFTER SURGICAL INTERVENTION: NAUSEA AND VOMITING AND NURSING CARE

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**Professor Ayla GURSOY, PhD, RN<sup>a</sup>**

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Postoperative nausea and vomiting (PONV) still persist as the most common complaint following anesthesia and surgery. Multiple factors increase the risk of PONV. These are classified into patient, surgical and anaesthetic factors. The main risk factors for increased PONV are female gender, nonsmoker status, use of postoperative opioids and history of PONV. The incidence of PONV is estimated to be 25-30%, and it can be as high as 80% among high-risk patients. Many patients find PONV more distressing than postoperative pain. PONV can lead to delays in discharge and increases the health care costs. Also PONV may be associated with more severe complications such as pulmonary aspiration, bleeding, dehydration, electrolyte abnormalities, wound dehiscence, raised intracranial and intraocular pressure and oesophageal rupture. In recent years, the concept of a multimodal approach to PONV has been used. This combines non-pharmacological and pharmacological antiemetic techniques. Primary types of techniques are pharmacologic methods, aromatherapy, acupuncture, music therapy and hypnosis therapy. Antiemetics can be classified into four main pharmacological subtypes: cholinergic, dopaminergic, serotonergic and histaminergic. Additionally, risk factor assessment tools are often used in the preoperative period to assess the probability that PONV will occur. Despite of substantial advances in the understanding and management of PONV, the condition continues to affect a significant percentage of patients. The goal of this paper is to inform about management and nursing care of nausea and vomiting for surgical procedures.

**Key words:** Postoperative complication, postoperative nausea vomiting, prophylaxis, nursing care.

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## USE OF CALCIUM SULFATE PELLETS IN TREATMENT OF INFECTION

**EP119****Maria Garcia**

**KEY WORDS:** Calcium sulphate has been used as bone void filler in orthopedics for over 10 years. Calcium sulphate pellets STIMULAN™, is a high purity calcium sulphate hemi-hydrate.  $\text{CaSO}_4 \cdot \frac{1}{2} \text{H}_2\text{O} + 1 \frac{1}{2} \text{H}_2\text{O} = \text{CaSO}_4 \cdot 2\text{H}_2\text{O}$  Calcium sulphate hemihydrate + water = Calcium sulphate dihydrate

The material is known as being high biocompatible. The product is being used clinically, easily mixed with liquid, powder and heat –sensitive antibiotics (Gentamicin, Tobramycin, Vancomycin and Rifampicin) to protect the device from colonization by bacteria. When is placed in a surgical site, any antibiotic combined with the material is released into the local environment through dissolution from the surface of the materials and as a result of the gradual dissolution of the calcium sulphate dehydrate.

The local delivery of antibiotic to a surgical site offers the advantage of providing high local levels of antibiotic to treat infection.

Is cleared for use where infection is present or suspected permits predicable elution profile, truly absorbable at an optimal rate and low levels of drainage.

In additional advantage of using calcium sulphate is highly biocompatible, X-ray visible, it will not support a biofilm and, being fully resorbable, does not constitute a long-term nidus for infection (bacterial activity).

Studies conclude that calcium sulphate leaches the antibiotic for the longest duration. It is indicated to be used in musculoskeletal defects created by surgery, percutaneous procedure, open fractures, a cyst, a tumor, osteomyelitis or traumatic injury, the treatment of patients with diabetic ulcers.

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## EP120

### USE OF EARLY WARNING SCREENING SYSTEM (EUSS) THE POST-OPERATIVE UNITS

*Sevban ARSLAN, Özlem ŞAHİN, Sevgi DENİZ*

Post-operative unit care is a critical process for the patient. The purpose of nursing care in this period; Monitoring of the patient's condition until stability, the current problems that may develop in the patient as a result of anesthesia and surgery, as well as the identification of potential problems and appropriate intervention. Therefore, some systems have been developed to reduce the problems that may arise, especially those that can be prevented. Early warning scores are scores that consist of physiologic parameters that are developed to recognize the patient with the general condition at the earliest stage and to gain time for making the necessary intervention. One of the scoring systems developed for this purpose is the Early Warning Scoring System (EUSS). EUSS is used to determine the patient's condition early and to provide early acceptance to the intensive care unit by evaluating the physiological data (systolic blood pressure, body temperature, pulse rate, respiratory rate, consciousness, blood oxygen saturation) of the patient in surgical clinics and emergency unit in European and North American countries Modified early warning scores were based on expert opinion and clinical experience, validity studies were carried out afterwards. Parameters such as oxygen saturation and urine output were added. In the study of Pazar and Yava, it was found early detection of complication and early intervention that follow-up of patients according to EUSS had a positive effect on patient outcomes in postoperative care units. The use of EUSS by nurses may be considered to provide significant contributions to more closely following patients and complications are recognized and intervened sooner.

**Key words:** postoperative care unit, early warning score system, early diagnosis

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## USE OF SIMULATION IN OPERATING ROOM NURSING: LITERATURE REVIEW

**EP121**

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Simulation has become a significant training tool also for operating room (OR). It can be used in both simple task training and complex scenarios. The challenge for simulation in the OR is how to translate that which is learned, and perceived to be beneficial, into behavioral change and improved patient outcomes. Simulation in the developing world is progressing.

**Aim;** This review will evaluate to studies related to simulation using in operating room nursing.

**Methods:** Database searches were carried out on PubMed, Scopus, Cochrane Library, Science Direct, ULAKBIM ([Turkish Academic Network and Information Center](http://www.turkishacademicnetworkandinformationcenter.org)) using the inclusion criteria of 'simulation', 'operating room', 'operating room nursing', 'nurse'. The articles were selected as full text and they were published in English and Turkish languages.

**Results:** Total 13 studies of these articles that meet the research's criteria have the sample of the review. Literature review of the studies that evaluated simulation in operating room nursing have been identified to be effective education and patient safety after training with simulation and critical thinking, multidisciplinary communication.

**Conclusion:** There is a limited study of simulation in operating room nursing. It is recommended that experimental studies with a high level of proof should be conducted of simulation in operating room nursing. Today's nurses face an ever changing technologic environment, where they can continuously adapt their education, processes, and research about simulation OR. Review of these studies will show us an ideal method of simulation about we can chose for our practices for future.

**Key words:** simulation, operating room nursing, nurse.

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## EP122

### VALIDITY AND RELIABILITY OF THE TURKISH VERSION OF REVISED AMERICAN PAIN SOCIETY PATIENT OUTCOME QUESTIONNAIRE IN SURGICAL PATIENTS

***Sevilay Erden, Mevlüde Karadağ, Sevil Güler Demir, Melek Balcı, Semra Atasayar, Burcu Opak Yücel, Nevra Demir, Zuhale Erdoğan, Ali Ay***

**Background:** Pain management quality measurement is essential to determine factors that contribute to poor treatment outcomes. Using developed and tested instruments provide support for measure, compare, and improve the quality of pain management. The aim of this methodological study was to investigate the validity and reliability of the Turkish “Revised American Pain Society Patient Outcome Questionnaire (APS-POQ-R)”, a measure of the quality of postoperative pain management used internationally.

**Material and Methods:** The sample of this study consisted of 250 surgical patients. The data collection procedure included a demographic questionnaire prepared by the researchers, and the Revised American Pain Society Patient Outcome Questionnaire developed by Gordon et al. During the study, language equivalence, content validity, reliability and construct validity of the scale was performed. The data was assessed by using mean, standard deviation, Kendall’s coefficient of concordance, Cronbach Alpha, and confirmatory factor analysis.

**Results:** In the study, Pearson correlation coefficient of the scale for parallel test reliability was 0.362 and the Cronbach’s Alpha value was determined as, 0.88 in the Turkish APS-POQ-R. According to fit indexes of confirmatory factor analysis [ $\chi^2/SD=362.53/125=2.90$ ; RMSEA= 0.087 (%90 CI 0.077– 0.098); CFI= 0.95; IFI= 0.95; NNFI= 0.94], it was found that three factors were appropriate for the Turkish APS-POQ-R.

**Conclusion:** The adaptation of translated “Revised American Pain Society Patient Outcome Questionnaire” in Turkey is found to be reliable and valid to measure and evaluate of the quality of postoperative pain management for the Turkish population.

**The implications for perioperative nursing:** This article presents the valid and reliable measurement for postoperative pain quality improvement purposes of hospitalized adult surgical patients. The Turkish APS-POQ-R can be used to assess nursing interventions aimed at decreasing pain and efficacy of the treatment.

**Keywords:** postoperative pain, validity and reliability, pain management, APS-POQ-R.

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## WHERE DO THE NURSES STAND IN WOUND BED PREPARATION?

**EP123**

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Wound healing takes place through a series of processes, interrelated to each other. These are the phases of inflammation, proliferation and maturation. In the past, these phases were thought to be valid for chronic wounds as well, but chronic wound healing is different from acute wound healing. Wound healing in chronic wounds gets stuck in between inflammation and proliferation phases, causing delayed wound closure (1, 2, 3). For this reason, a good preparation for the wound bed is required in order to ensure an optimal healing in chronic wounds, (4,5). Wound bed preparation is a systematic approach that eliminates the factors affecting the wound's natural healing process and aims to increase the effects of advanced therapy methods (6,7). Wound bed preparation increases the efficacy of the products used in wound healing by eliminating the barriers that prevent wound healing, systematizes chronic pain management and gives insights about the factors preventing healing. Nurses frequently encounter patients with wounds in clinical environments. Thus, all the nurses participating in wound care are supposed to describe wound bed preparation, know its principles ("TIME" concept: removing dead Tissue, protection from Infections, preventing Moisture instability and providing smooth wound Edge) and learn how to practice them in clinic and how patients benefit from them (8). For example, a nurse implementing debridement method should be equipped with relevant knowledge and skills adequately; and should be able to distinguish between fibrin, tendon, ligament and fatty tissue (9). As a result, an optimal wound healing process can be ensured by implementing a good wound bed preparation. Nurses engaged in wound healing may notice the problems in wound bed and take appropriate actions so they may provide better wound management by taking advantage of "TIME" practices.

**Keywords:** care, nursing, wound, wound bed preparation.

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## EP124

### WHICH COMPLEMENTARY AND ALTERNATIVE THERAPIES COULD BE USED FOR POSTOPERATIVE NAUSEA AND VOMITING?

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#### Background

Postoperative nausea and vomiting (PONV) is a complication affecting between 20 and 40% of all surgery patients, with high-risk patients experiencing rates of up to 80% (1). PONV is a complex problem and even with the advances in new drugs and techniques, further progress is required to reduce this common and unwanted complication for patients following surgery. PONV affects patient satisfaction, delays discharge, causes readmission to hospital, leads to dehydration and metabolic disturbances. Patient assessment pre and postoperatively is paramount (2).

This literature review sets out to investigate the usability of complementary and alternative therapies in preventing and managing postoperative nausea and vomiting (PONV).

#### Results

Complementary and alternative medicine (CAM) is any medical and health care systems, practices, or products that are not thought of as standard medical care. National Cancer Institute (NCI) (3) and National Center for Complementary and Integrative Health (NCCIH) (4) describe like that. Standard treatments are based on scientific evidence from research studies. Complementary medicine refers to treatments that are used together with standard medical treatments, like using acupuncture to help with side effects of cancer treatment. Alternative medicine refers to treatments that are used instead of standard medical treatments.

Acupressure (5, 6), acupuncture (5, 6, 7), electrostimulation (5,6), laser (5,6), aromatherapy (essential oils; peppermint, ginger) (8) may have potential benefits in alleviating nausea and vomiting in postoperative period. Despite the positive results obtained in the studies, it was difficult to draw clear conclusions due to methodological limitations in existing studies, and further research followed.

#### Implications

Alternative therapies offer attractive methods for managing PONV. In order to expand alternative, complementary therapy in the clinical setting, more prospective clinical trials need to be conducted. Complementary and alternative therapies should be used in addition to medical therapies for PONV (1).

**Key words:** Complementary and alternative medicine, postoperative complication, postoperative nausea and vomiting.

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## WOUND HEALING TIME IN DIABETIC FOOT PATIENT UNDERGOING VACUUM-ASSISTED CLOSURE VERSUS CONVENTIONAL DRESSINGS

**EP125**

**Kuo Yu-Yen**

**Purpose:** TO compare the effect of the negative pressure wound therapy (NPWT), such as vacuum-assisted closure(VAC) versus conventional dressings on the healing of the diabetic foot wounds to promote wound healing time.

**Background:** In Taiwan, Diabetes Mellitus (DM) is the most common endocrine disease worldwide. One of the most important chronic complications of this disease is the development of diabetic foot. The incidence of diabetic foot infection every year about 3%(Chen, Huang, Chen, Lu, Cheng, Lin, 2003), many patients have prolonged treatment and hospitalization due to poor healing in the wound, and is associated with an increased risk of amputation. Therefore, many wound dressings have been used in wound treatment recently, in which the concept of negative pressure wound treatment(NPWT) is often used clinically, such as vacuum-assisted closure(VAC) and benefits to improve the quality of wound care.

**Key word:** negative pressure wound therapy (NPWT), vacuum-assisted closure(VAC), conventional dressings, diabetic foot, wound healing time.

**Methods:** From pubmed, Cochrane Library, VAC, conventional dressings, diabetic foot, healing time were entered and randomly searched for the clinical trials from 2010 to 2016, excluding the articles of RCTs. There are three subject papers adopted as the Commentary.

**Results:** The first article showed healing time in the VAC group was significantly reduced ( $p < 0.05$ ); the second article showed 100% granulation was achieved in 21 (77.78%) patients in the VAC group as compared to only 10 (40%) patients by that time in the conventional dressings. However; the third one reduced time to complete closure of the wound was found with VAC Therapy ( $65 \pm 16$  days in the VAC group vs  $98 \pm 45$  days in semi-occlusive silver dressing,  $p = 0.005$ ).

**Conclusion:** VAC appears to provide the wound healing process and stimulates the granulation time, be more effective, compared to conventional dressings for the treatment of diabetic foot wounds.

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## EP126

### A QUALITY IMPROVEMENT PROJECT ON THE IMPLEMENTATION OF THE NICE GUIDELINES FOR THE PREVENTION OF INADVERTENT HYPOTHERMIA IN ADULT PATIENT'S IN THE OPERATING THEATRE DEPARTMENT

**McGuire Claire**

#### **Background and Rationale**

During review of departmental policies, it was identified that although inadvertent hypothermia is a known problem for patients in the perioperative area, no policy for standardised practices existed for its prevention. Berger and Fitzpatrick (2009) described the area of temperature management as becoming an increasing focus for surgical personnel. Wagner *et al* (2006) described its prevention as beneficial both to patients and to the finances of healthcare institutions. High risk surgical patients with a core temperature of less than 35°C have a two to three fold increased incidence of early postoperative cardiac ischemia, independent of age and anaesthetic technique. Patients who are aggressively warmed during surgery have been shown to experience a decreased incidence of postoperative cardiac morbidity. Consequences of inadvertent hypothermia; Increased bleeding, delayed wound healing, increase rates of surgical wound infection and therefore longer recovery time and increase length of hospital stay. The change in clinical practice is to implement the NICE Guidelines of management of perioperative hypothermia in the department (<http://www.nice.org.uk/CG065>), to reduce the incidence of inadvertent hypothermia. Four audits were conducted during the course of the project, a procedure for IH prevention and a new nursing care plan was developed to enhance patient safety in the theatre department.

#### **Method**

Prior to developing the procedure a quasi-experimental research study using evaluation research as a method was conducted. Bryman (2008) described this as a method often used in social research, when the research question is "has the intervention e.g. policy initiative or organizational change achieved its anticipated goals".

As there is no data available of the incidence of inadvertent hypothermia in the department, the study will begin with a survey of patients in the department measuring their temperatures at identified stages during their perioperative period. Rosswurm and Larrabee (1999) model will be used to guide the author through the process of change to clinical based practice. This will allow the author, post implementation of the NICE Guidelines of management of perioperative hypothermia, to identify if the implementation of this change in practice has achieved the anticipated goal of reducing the incidence of inadvertent hypothermia.

#### **Results**

This information will allow the integration and maintenance of the policy initiative by allowing stakeholders to see the positive results of change. As this study is currently in progress the results will be presented at the EORNA Congress in May 2017.



## DEVELOPING TIMELINESS AND ACCURACY OF PATIENT-TRACKING DASHBOARD IN OPERATION SUITE

**EP127**

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The patient-tracking dashboard is the system that can show the current location of patients, such as operation room, recovery room or intensive care unit, during the operation day. The dashboard can provide real-time information regarding current status of the surgical patients to families, surgeries and anesthetist in order to prepare and communication with others. The subject hospital is a large medical center in Tainan, Taiwan. There are 30 operating rooms and the average number of surgeries per month is 3000. Due to the large amount of surgeries, the patient-tracking dashboard was not able to show the real-time status all the time. Families, surgeries and anesthetist reported low satisfaction and complained of incorrect or not real time information on the dashboard. The purpose of this project is to improve the timeliness and accuracy of information about status and location of patients on patient-tracking dashboard. The improving strategies, including: Using of Information Technology (especially computers and telecommunications) for storing, retrieving, and sending information. Establishing standard operating procedures for "surgical patients Trends" patient flow in the perioperative period, auditing accuracy of dashboard and reviewing the auditing results on a regular basis, were implemented. This project successfully improves the timeliness of information displayed on the patient-tracking dashboard and increases families, surgeries and anesthetist' satisfaction.



## EP128

### EVALUATION OF NUTRITIONAL STATUS OF PATIENTS IN SURGICAL CLINICS

**Damar Hale**

**Savcı A, Vural F, Turhan Damar H, Andıç Çömez S, Durmaz Edeer**

*Dokuz Eylül University, Faculty of Nursing, Department of Surgical Nursing*

**Introduction:** Assessing the nutritional status of patients in surgical clinics is important in preventing complications and accelerating healing.

**Objective:** To evaluate the nutritional status of patients in surgical clinics.

**Method:** This is a descriptive cross-sectional study. Dokuz Eylül University Hospital, General Surgery, Cardiovascular and Thoracic Surgery, Neurosurgery, Orthopedics and Traumatology Clinics were in operation between September 2015 and January 2016. 110 patients who accepted to participate in the study were included in the study. The Patient Identification Form and the Nutritional Risk Scale (NRS) were used as data collection tools in the study. Ethical committee, institutional permission and written informed consent were obtained from the patients.

**Results:** The mean age of the patients participating in the study is 60.02 ( $\pm$  16.34). 64.5% (n: 71) of the participants were in the General Surgery Clinic and 53.6% (n: 59) had an additional disease. 72.72% of the patients (n: 80) had surgery; 55% (n: 44) major surgery was performed. The hospital stay of patients who underwent surgery was 114.25 ( $\pm$  153.49) hours before surgery; postoperatively 146.0 ( $\pm$  163.86) hours. The mean duration of fasting was 52.02 ( $\pm$  86.96); Postoperatively 52.25 ( $\pm$  58.57) hours. The preoperative albumin values were 3.41 ( $\pm$  0.55); The rate of patients with NRS score  $\geq$ 3 was 5.1% (n: 4); The postoperative albumin levels were 2.99 ( $\pm$  0.48) and the NRS score  $\geq$ 3 was 8.8% (n: 7). 15.9% (n: 7) preoperatively and 22.7% postoperatively (n: 10) of the patients undergoing major surgery receive nutritional support. It was determined that no tools were used to evaluate the nutrition of the patients in the clinics.

**Discussion:** Patients were found to have a long hospital stay and fasting period. The duration of hunger increases the effect of surgical stress and consequently weight loss and deterioration of physiological functions cause complications and mortality increase. It is also thought that the fact that nutrition is not routinely assessed prevents the identification of patients who should receive nutritional supplements. The European Society for Clinical Nutrition and Metabolism suggests that if the NRS score is  $\geq$ 3, patients are at risk of nutrition and that a nutritional plan should be initiated. If the NRS score  $<$ 3, patients are screened weekly for nutrition and a nutritional plan should be developed if there is a major surgical plan. However, in our study very few of the patients are receiving nutritional support.

**Conclusion:** Patients in surgical clinics are at risk for nutritional deficiencies and should be evaluated routinely. In particular, it is recommended that weekly repetition of evaluations of major surgical plans / patients and development of an appropriate nutrition plan. The routine evaluation of perioperative nutrition in the light of evidence-based practices by a team of nurses and the provision of nutritional supplements that are needed will speed up the healing process.

**Key words:** Nutritional deficiencies, Surgery, Nursing, Nutritional Risk Assessment



## GETTING TO ZERO: REDUCING SURGICAL SITE INFECTION

**EP129*****Lopez Judith Judith***

SSIs result in increased healthcare utilization and represent a major driver of healthcare costs. SSI prevention has become a major priority as systematic surveillance and prevention programs are mandated to publicly report at the state and federal levels.

Surgical Site Infection in MSK reached a significantly high rate in 2012 and 2013 compared to the NYS benchmark. The development of a multidisciplinary project team was designed to focus on getting our SSI down to 30%. Colon and rectal surgery is a consistent outlier for SSI given the area of the anatomy involved. The intraoperative portion of the initiative was the introduction of the wound closure tray. The closing process requires the surgical team to change the sterile drapes, gloves, accessories and a completely separate set of instrumentation. Additional interventions included appropriate antibiotic timing and re-dosing, intra-op glycemic control and new wound materials and devices. The majority of the intervention were implemented in October 2013. There was immediate drop in SSI starting in November and December of 2013; 5% and 6% respectively. The project was so successful that it is being rolled out to a second surgical service (GYN).



## EP130

### IMPACT OF SPINE SURGERY CHANGES ON PERIOPERATIVE NURSES OCCUPATIONAL HAZARDS

*Liegeois Marie*

Key words: spine surgery - technologies - protection

Back pains are a current scourge, more and more spinal pathology are being identified and new surgical treatments are being discovered.

Spine surgery is indeed in constant evolution. Surgeons are presented with many possibilities to treat their patients. First off, the routes are getting more diverse, virtually giving access to all the parts of the spine. Incisions are minimalist or minimized. Instrumentation is also a part of the progress, being adapted to the patient's anatomy and lesions. The use of effective tools allows for technical prowess.

#### **THEORETICAL FRAMEWORK**

Evolution gives us different approaches to spine surgery according to the involved technologies with their pros and cons.

First of all, the author analyses the technical means necessary for the operating procedures like radiation, robotization, endoscopy, navigation systems or handling.

Later on, he links those technologies with their constraints and occupational hazards to define various means of protection and incidents prevention.

Finally, the operating theater staff is pointed to a policy brief about the importance of usual safety regulations compliance to ensure everybody's security and welfare.

#### **FOCUS OF INTEREST**

The author proposes a comparative study of the different technical means necessary for the current spine surgery.

He links the different practices encountered in literature and his professional everyday life to identify the perioperative nurses occupational hazards. These hazards are then analysed, together with usual caution.

#### **CONCLUSIONS**

The evolution in spine surgery requires technologies putting perioperative nurses at risk. To be informed of those risks as well as of the necessary precautions allows to better protect themselves.

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#### **SHORT BIOGRAPHY**

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## MAY COMPASSION SCALE BE APPLIED TO SURGERY NURSING?

**EP131****Fadime Çınar<sup>1</sup>, Fatma Eti Aslan<sup>2</sup>***Beykent University<sup>1</sup>, Bahçeşehir University<sup>2</sup>***Keywords:** Nursing, care, compassion, validity, reliability.

### Background

In general definition, compassion term is described as instinct to help an individual needing to help and empathy with that individual. In nursing occupation, needs to help of patients during nursing process increases importance of compassion. For this reason, in order to define factors affecting compassion and managing these factors, compassion levels must be measured.

### Purpose

The purpose of this research is to examine validity of Compassion Scale which is used to measure compassion to others with six factors for surgery nurses in perspective of reliability and validity processes.

### Methodology

This methodological research was conducted between April-May 2016 time period. In the research, Compassion Scale developed by Pomier (2011) and validated in Turkish language by Akdeniz and Akdeniz (2016) on university students, ability to measure compassion to others via six factors was applied to 236 nurses working at different hospitals in the West Side of Istanbul City. Scale is a five likert structure having 24 items and six subscales (self-kindness, negligence, share awareness, isolation, mindfulness and disengagement). In the research test-retest, Cronbach Alpha internal consistency and Spearman-Brown (Split Half) coefficients were used to analyze reliability of the scale. Principal Component Analysis and Lawshe (1975) methods were used to analyze validity of the scale. KGO levels of all items were evaluated using Lawshe method. In the KGO evaluation period, 6 field professions and 5 academicians were asked to evaluate each items in the scale. In the Principle Component Analysis, factor weight of each item, KMO and Barlett's Test of Sphericity were used.

### Results

According to results of the study, test-retest correlation analysis results showed that all items in the scale have high reliability. Cronbach Alpha level of the scale was found 0,821. Spearman-Brown coefficient was higher than 0,813. according to Principal Component Analysis, factor weights of all items in the scale were found to be higher than 0,40 level accepted in the literature. KMO level was found 0,764 and Barlett's Test of Sphericity was found statistically significant ( $p < 0,05$ ). According to Lawshe method, KGO levels of all items were between 0,64-1,00 range, and higher than 0,59 level accepted by method for 11 surveys.

### Conclusion

According to results of the study, Compassion Scale was found an effective and validate scale for measuring compassion levels of surgery nurses.

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## EP132 MICROSURGICAL VARICOCELECTOMY IN CHILDREN: INITIAL EXPERIENCE IN "AGHIA SOPHIA" CHILDREN'S HOSPITAL, ATHENS, GREECE

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**CHILDREN'S HOSPITAL "AGIA SOFIA", ATHENS, GREECE**

**Background:** Microsurgical varicocelectomy has become the gold standard technique. It is associated with better postoperative outcome in comparison with the classic open and laparoscopic varicocelectomy (0% risk of postoperative hydrocele and 1% risk of recurrence versus 7-30% hydrocele and 5-12% recurrence in open techniques and 5-25% and 5-15% in laparoscopic techniques) [1, 2]. Microsurgical varicocelectomy is, however, performed in very few centers worldwide due to limited expertise in microsurgical techniques among pediatric surgeons.

**Aim:** To present our initial experience from application of varicocelectomy under surgical microscope in our operating theatre and discuss relevant implications in operative nursing.

**Patients and Methods:** A 14 year-old boy with bilateral grade III varicocele underwent microsurgical varicocelectomy. Positioning, prepping and draping of the patient were as usual for procedures in the groin. A Carl Zeiss VARIO OPMI surgical microscope and microsurgical instruments were used (see Figure). All spermatic vessels and collaterals responsible for recurrences were ligated (Prolene 5/0), while lymphatics and nerves were preserved eliminating the risk of postoperative hydrocele and inguinodynia respectively.

### **Results and intraoperative nursing implications**

Time for draping of the microscope, standardization of the setup and operating room conditions was approximately 30 minutes. Operative time was 2 hours. There were no intraoperative or postoperative complications. Given that the procedure was performed in our theatre for the first time, co-operation between the surgeon and the nursing team was very important in order to facilitate optimal performance of the entire team.

### **Conclusions**

Microsurgical varicocelectomy—gold standard for varicocelectomy—can be safely and effectively performed in our center. Setup and operative time can be reduced with increased expertise of the team. Theatre staff should be open to new techniques associated with a better postoperative outcome, despite the effort and time required to get familiarized with the needs of a novel technique.

**Key words**

Microsurgical varicocelectomy; surgical microscope; microsurgical instruments; novel technique; clinical improvement; innovation

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**MUSCULOSKELETAL PAIN EXPERIENCED BY OPERATING ROOM NURSES****EP133**

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**Background:** Musculoskeletal disorders are closely associated with the working conditions and are a common social and economic problem with increasing importance. Operating theaters affect nurses' workload and standing times negatively. Pushing and pulling the stretchers, beds or other equipment, bringing patients to the operating table or to a stretcher, positioning, supporting a limb for a long time during preparation processes, poor posture, standing for a long time standing at the same place may cause to musculoskeletal pains especially low back pain (1,3,4,5,6,7).

**Focus of interest:** The aim of this study is to determine musculoskeletal pain experienced by operating room nurses.

**Methods:** The study was conducted in descriptive type between June-October 2015 on 162 nurses. Data was gathered using Extended Nordic Musculoskeletal Survey and individual characteristics form. Descriptive statistics, Mann Whitney-U and Kruskal-Wallis tests were used in the data analysis.

**Results:** It was found that musculoskeletal pain observed in participant operating room nurses was frequently in the back (56.8%), lumbar (51.9%) and cervical (49.4%) regions and these followed by shoulder (43.2%), foot/ankle (38.3%) and knee (31.5%) regions. It was found that back pain was the pain experienced most common within last one year (88.0%), within last one month (79.3%) and within last one week (57.6%). It was found that musculoskeletal pain was observed more frequently in the nurses who were employed in the operation room for 1 to 5 years, whose weekly working time was 30 to 40 hours, whose frequency of change in working order did not associated with a certain order and who were on call for 24 hours ( $p < 0.05$ ).

**Conclusions and Implications for Perioperative Nursing:** The frequently musculoskeletal pain in the operating room nurses was found in back, lumbar and cervical regions respectively. It was found that working conditions have effect in experiencing musculoskeletal pain by operating room nurses. Thus, it is suggested to establish workplace health units, to provide training to health care employees about prevention of the musculoskeletal problems and to organize working programs of nurses in order to protect and develop occupational health of the employees.

**Keywords:** Pain, musculoskeletal pain, operating room nurse

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## EP134

### MYTHS AND TRUTHS ON HOSPITAL INFECTION CONTROL: KNOWLEDGE OF PERIOPERATIVE NURSING OF A TERTIARY HOSPITAL

*Aryanne Fernandes Farias dos Santos, Jacqueline Ramos de Andrade Antunes Gomes*

**Introduction:** Preventive actions and control of infections are proven effective, however, Semmelweis's challenge remains on making them routine practices in health institutions. When knowledge is not applied to work actions, myths and rituals come up. **Objective:** To diagnose the knowledge of perioperative nursing about the myths and truths of hospital infection control in the Surgical center environment of a tertiary hospital at Distrito Federal. **Material and Method:** This is a cross-sectional, analytical and observational study, making use of a questionnaire consisting of 28 statements (15 truths and 13 falses) concerning infection control in the surgical environment with a three-point scale (I agree, I doubt and I disagree). It covers issues related to the patient, to surgical team, to the environment and to perioperative procedures. **Results and Discussion:** We obtained 67% of appropriate responses and 32% inadequates. This indicates how unsatisfactory the level of knowledge of perioperative nursing on infection control is. The myths and rituals are detectable by the high percentage of inappropriate answers in the following areas: use of surgical shoe covers, wedding band and personal items considered as a pathogen, surgical brushing of hands, humid gown and surgical area, infected surgery and cleaning routine, specification of the use of gloves, surgical site infection and time postoperative.

**Key words:** Perioperative nursing; Surgical centers; Hospital Infection.



## NURSING STAFF ALLOCATION IN AMBULATORY SURGERY UNITS

**EP135**

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**Presenter: Rauta, Satu. RN, MNsc, Clinical Nurse Specialist, Helsinki University Hospital and PhD-student, University of Turku**

In operating rooms (ORs) the main focus is to assure patient safety (1). Imbalance in staffing has been identified as the main threat to patient safety in ORs (2). Workload and patients' acuity may increase stress among anesthesia personnel and cause near misses (3, 4). Higher nurse staffing levels in postoperative units indicate lower risk for in-hospital mortality and unplanned readmissions to Intensive Care Unit or OR (5). The perioperative nurse managers should optimize the nursing staff allocation in perioperative environments.

This literature review is being conducted to find out on what basis the nursing staff allocation is made in Ambulatory Surgery Units (ASUs). The research question is: On what basis and based on what principles the staffing in ASUs is ultimately executed?

Relevant studies are currently searched from PubMed, Medline, CINAHL, Cochrane Database of Systematic Reviews and Medic. The searches are limited to years from 2002 to 2016. Manual search is executed to find citing articles and grey literature. The quality of the publications will be evaluated using QualSyst-tool. Eligible publications will be retrieved and put under analysis.

The results will be published by March 2017. This literature review is assumed to emerge tools or principles to allocate nursing staff based on evidence rather than intuition or historical metrics describing the performance, for example the number of operations made last year.

Tentatively, it can be stated that research concerning nursing staff allocation in perioperative environment is scant. A few guidelines and recommendations exist. They are based on education levels and different nursing roles in ORs besides surgical specialties.

**Keywords:** perioperative nursing management, nursing staff allocation, staffing, ambulatory

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## EP136

### OPTIMIZING THE ELECTIVE HAND SURGICAL PATIENT. FAST TRACK.

*Lillian Kj, Jensen Nina*

#### **Introduction:**

We are a day surgery unit consisting of Receiving-Operation-Awakening units. We receive and operate daily about 15-20 hand-surgery patients, of which about 7-10 are surgeon-anesthetized (Local infiltration and Intravenous Regional Anesthesia without anesthesia assistance).

We wanted to focus on the quality of patient information upon discovering that some patients were informed twice and there was a general confusion as to who said what and when. In addition, we also desired to simplify the ongoing patient progression.

During the autumn of 2015, when attending a course in management of patient care, we thus decided to work with the ongoing hand surgical patient progression as a project. Initially we found a very large set-up, even for minor hand surgery (such as carpal tunnel syndrome, trigger finger, ganglion and fasciotomy).

**Purpose:** The future patient progress we see as being more simplified as well as more efficient without compromising the same high quality of patient care. Outpatient process similar to going to the dentist, a quick in and out process.

We achieve a much better utilization of nursing resources in the receiving unit likewise improving coordination and coherent patient progress.

**Method:** Upon arrival the PACU unit, the patient will be briefed of the day's events. All patient information will take place in the operating room. The staff here will thus complete the patient progress. Finally after completion of surgery and information the patient leaves the unit.

The criteria for inclusion in this project depend on the postoperative pain package. If there is a prescribed pain packet containing morphine, the patient will be rejected.

**Result:** A much faster and more coherent patient care and with fewer staff contacts. A better utilization of nursing resources in the PACU. Consequently these resources can be released for other and more complicated purposes.

With upgraded professional skills the operating nurse now handles information concerning post-operative recovery.

**Conclusion:** The project was implemented in the spring of 2016 and is now a part of daily practice.

**Keywords:** Hand surgery, fast track, information

**References:** M, Attrup et al.: Power in projects and portfolio: Djøf's Publishing, 2nd edition, 2008; Chapter 3, page 87-110





## EP138

### POSTOPERATIVE NORMOTHERMIA AND EXTUBATION TIMES OF PATIENTS OPERATED ON WITH ON-PUMP AND OFF-PUMP CORONARY ARTERY BYPASS GRAFT TECHNIQUES AND HEATED WITH FORCED AIR WARMING METHOD

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**Background:** In this study, coronary artery by-pass graft was performed on patients by two different methods (On-Pump and Off-Pump) and post-operative comparison was made using heating and forced air prewarming methods to evaluate the regain of normothermia and extubation time.

**Methods:** This descriptive study was performed in the Cardiovascular surgery sections of a university hospital and a private hospital in Afyonkarahisar. A total of 109 patients (74 male; 35 female; mean age  $64.59 \pm 10.12$  years; ranging from 36 to 84) were included in the study. 65 patients (47 male; 18 female; mean age  $63.64 \pm 10.22$  years; ranging from 36 to 82) underwent coronary artery by pass graft with On-Pump and 44 patients (27 male; 17 female; mean age  $65.98 \pm 9.91$  years; ranging from 48 to 84) underwent coronary artery by pass graft with Off-Pump. Pre-operative and post-operative data were collected with the Patient Identification Form and the Patient Tracking Form. Patient Identification Form was completed by patients themselves, whereas the data related to medical conditions of patients were obtained from patient history files.

**Results:** The Off-Pump patient group had a lower incubation time compared to the On-Pump group. However, there was no statistically significant difference ( $p = 0.399$ ). Normothermia regain time of the Off-Pump group was lower ( $p = 0.000$ ) compared to the On-Pump group on a statistically significant level. Age was found to have a weak yet positive and significant ( $p = 0.013$  and  $p = 0.040$  respectively) correlation with the extubation time ( $r = 0.197$ ) and normothermia achieving time ( $r = 0.237$ ).

**Conclusion:** This study concluded that forced air prewarming method is a quite effective technique to minimize the time to regain normothermia among patients, operated with the On and Off-Pump coronary artery by pass graft.

**Key words:** Extubation time; forced air prewarming; hypothermia; coronary artery bypass graft; normothermia time.

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## QUALITY OF LIFE FROM THE PERSPECTIVE OF NURSES WORKING IN A SURGICAL CENTER OF A PUBLIC HOSPITAL IN DISTRITO FEDERAL/ BRAZIL

**EP139**

***Daniela Aires Cardoso, Jacqueline Ramos de Andrade Antunes Gomes.***

**Introduction:** The nurse of Surgical Center (SC) is the professional qualified to manage needs that involve the anesthetic-surgical act. Knowing that factors that interfere in Quality of Life (QOL) can compromise care, it is understood that the worker needs to have QOL to develop adequate work.

**Objective:** To identify perceptions of nurses working in the Surgical Center of a public hospital in Distrito Federal regarding QOL.

**Material and Method:** Qualitative, descriptive research, with data collection through a semi-structured interview to nursing assistants of SC

**Results and Discussion:** The sample was predominantly female, aged between 29 and 67 years, working time in the research headquarters between 1 and 5 years, with a workload of 40 hours per week and 16 or more years of training. They admitted QOL as a polysemous term, and the relationship between work and QOL preponderates. QV was associated with good interpersonal relationships and the idea of doing good to others, influenced by living with loved ones. Pleasure in the profession was cited as a necessary factor for the good development of the work, consequently contributing to a good QOL. Participants highlighted salary as a factor that provides QOL because it allows benefits such as comfort and leisure activities. Poor working conditions cause overload, and the unavailability of enough human and material resources was cited as a detrimental factor to QOL, and ends up reducing the quality of care. Overloading leads to increased exposure to occupational hazards, as well as reducing time spent in healthy habits to spend time at rest. There were reports of coexistence with symptoms of motor impairment caused by work, such as motor wear, muscle pain and stress.

**Final Considerations:** The findings of this study support the formulation of strategies to improve working conditions and QOL of SC nurses. Such strategies can have a positive impact on patient health as they contribute directly to the promotion of a safer and more effective care environment.

**Key Words:** quality of life; Worker's health; Surgical Center.



# EP140

## SURGICAL TIME OUT- ARE WE DOING IT CORRECT?

*Liby Koshy*

**The proposed project:** Implement the checklist for time out to guide the team members and empower the team to participate actively in time out process by educating. **Organizational context:** The time out is done all over the organization before any procedure. Most of the time is not correctly done or surgical pause not occur as everybody is rushing and team concentrate on starting the procedure than surgical time out. But the writer wants to implement the checklist and re education in Operating rooms first and then implement all over the organization.

**Rationale for selecting the project:** The writer works as at theatre coordinator in a hospital. Surgical time out are not always get done properly due to different reasons including leadership tolerance example surgeon and anesthetist talking while time out. In 2003, the Joint Commission made the elimination of wrong site surgeries a National Patient Safety Goal and the following year required compliance with a Universal Protocol. The Universal Protocol requires three separate steps: the proper preoperative identification of the patient by the three members of the team (surgeon, anesthesiologist, nurse), marking of the operative site, and a final “time out” just prior to the surgery or procedure regardless of where it is being performed. Despite the spirit of these guidelines, controversy surrounds the Universal Protocol, and in particular the time out portion of it, since there continues to be little scientific evidence of its ability to eliminate wrong site surgery. From a practical perspective, the exact manner in which the time out is conducted varies considerably from institution to institution—in timing, content, and documentation. The time out portion of the Joint Commission Universal Protocol requires an “active communication among all members of the surgical/procedure team, consistently initiated by a designated member of the team, conducted in a ‘fail-safe’ mode,” so that the planned procedure is not started if a member of the team has concerns. In some institutions, the time out occurs just prior to induction, since it is at that time that the anesthesia team is most attuned to that patient’s particular needs. Unfortunately, in many teaching facilities, the surgical attending may not yet be physically present, and performing the time out at induction leaves potential for error between induction and incision. For this reason, New York State now requires that the time out take place immediately prior to the incision, a practice performed in many other institutions across the country as well. In this scenario, the entire surgical team is present, but the anesthesia attending, who may be “double covering” more than one operating suite, may be in an adjacent room supervising the induction of another patient. This creates two problematic issues. The first is a delay waiting for the anesthesiologist to arrive, potentially pushing the busy surgeon to begin without the attending (as in the case presented). Second, when the anesthesiologist does arrive, s/he is hurried and potentially thinking more about the patient who s/he just intubated rather than the patient in question.

Finally, documentation of time outs also poses difficulties, particularly given the wide number of variations on the theme. If the time out occurs at the time of incision, the surgeon is already scrubbed in, leaving only the anesthesiologist and nursing staff available to document that the time out has taken place. This places responsibility for the time out in the hands of the designated documenter, who may later be blamed if a subsequent retrospective chart review discovers that one was not performed. The intent of the time out is for the team to collectively discuss the case, but, given the requirements to ensure it occurs, best practices must also address the issue of who documents the communication—the individual responsible for having it (e.g., a surgeon) or the one already documenting other aspects of the case. Are Time Outs Actually Happening?

Time outs are mandated by the Joint Commission, and hospitals have an obligation to ensure they are being performed. The simplest way to ensure this is through retrospective chart review. Most hospital charts contain a special form, which includes all components of the Universal Protocol with the final time out signed-off on by a member of the team. Unfortunately, complying with the letter of the law can be radically different than complying with its spirit. Furthermore, in hospitals where time outs occur regularly



and with meaning, it is the attending surgeon who initiates the process with the active involvement of the anesthesia and nursing staff. It is likely that the traditional culture found in surgical settings does little to enable the kind of communication that the Universal Protocol and time out encourage. There are three cultural barriers to effective time outs, including that the members of the OR team are used to working independently, that they embrace individual excellence, and that they are “overwhelmed by chronic staff shortages, educational duties, and economic pressures.” Others suggest that the need for respect amongst the members of the team is a crucial determinant of the success of time outs; without it, the ability of people lower on the totem pole to speak up may be lost. All healthcare institutions across all specialties (not just surgical disciplines) should commit to adherence to the Universal Protocol as a standardized quality assurance tool. Current limitations, such as tolerated differences in site marking modalities across institutions, should be addressed by a more “universal” standardization of the process. The ultimate determinant of the success of this system is the entire team’s commitment to make it work, and to abort the process to start over if any objections or inconsistencies are encountered. Patients must be involved in the site marking process and educated to inquire of their surgeons whether a formal “time out” procedure will occur in the surgical suite. Our long-term aim must be directed towards educating ourselves, the next generation of health care providers, and our patients, to strive for an enduring and unflinching patient safety culture. Role of the student in the process

The student will be doing an audit of current practice and analyze the result. Find out the constraints in doing a time out effectively. Educate the staff the correct practice and make them understand the importance of team member in surgical time out and empower them to raise the concerns. Implement a laminated checklist in each theatre so the staff can use that as a guide line to do a correct time out. Organizational impact and expected outcomes. The surgical time out is a universal protocol and doing it correct is very important patient safety measure. Implementing the checklist will help to do it correct every single time regardless of the team member doing the time out. After re educating the team members the expected outcome is team member feels empowered to raise concerns rather than tolerating individual behaviors. Potential threats to Implementation Surgeons might say we are already known about it. Nurses may say another piece of checklist or paper to look to. Proposed method of evaluation Continuous monitoring /auditing use the auditing tool for time out so we can gather the information of where it is actually failing. Requirements of ethical approval within the organization. Quality team is informed about the project and auditing is part of continuous internal assessment so there is no need for ethical approval.



## EP141

### THE ANXIETY LEVELS AND INFORMATION REQUIREMENTS OF DAY SURGERY PATIENTS BEFORE SURGERY

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**Purpose of the study:** The study was descriptively done in order to determine before surgery anxiety levels and knowledge needs of day surgery patients.

**Material and Method:** The study was conducted with 151 patients who would receive day surgery at surgical clinics of a university hospital in Trabzon, Turkey. The data were gathered with Patient Information Form designed by the researcher and State-Trait Anxiety Inventory. For the data assessment; percentages, arithmetical means, standard deviation, t test-Mann-Whitney U test, Oneway ANOVA test and Kruskal Wallis Variance Analyses were employed.

**Results:** It was found out that most of the patients obtained information about day surgery but the rate to receive information on some topics was low and patients obtained information about surgical process from physicians. Three fourth of the participant patients found information received on surgical process satisfactory and more than two third of the patients wanted detailed information. It was noted that three fourth of the significant others of the participant patients were informed. Although most of the patients stated that they did not have any anxiety about surgery and anesthesia; it was seen that their mean scores of state anxiety and trait anxiety were higher. It was noted that there was statistically significant difference between mean scores of state anxiety and trait anxiety of the patients who were anxious about anesthesia and surgery.

**Conclusion:** As a results of the study, it was determined that the patients obtained information about day surgery before surgery but received information was insufficient.

**The implications for perioperative nursing:** The study results may be used as a guide in order to provide patients and their significant others with sufficient information about day surgery process and to decrease their anxiety on surgery and anesthesia during before surgery period.

**Key Words:** Anxiety, day surgery, day surgery nurse, patient

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## THE CAUSES OF SORE THROAT IN THE EXTUBATED PATIENTS IN POSTOPERATIVE PERIOD AND NURSING APPROACHES

**EP142**

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The aim of this study is to explain the nursing approaches to the causes of sore throat in the extubated patients in postoperative period.

It is known that intubation is essential in the patients undergoing surgery under general anesthesia. It has been reported that patients experience post-extubation sore throat in the postoperative period. Postoperative sore throat was identified as the eighth most important problem of clinical anesthesiology by ASA. Sore throat and hoarseness are the most important reasons disrupting patient comfort in the postoperative period. It has been reported in the literature that the incidence of sore throat seen in the postoperative period in endotracheal intubation varies between 14% and 74% and that it develops more in females. Trauma is accepted as the main cause of the sore throat. It is emphasized that trauma causing pain may have occurred during intubation with laryngoscope. Besides, vocal cord injury and mucosal injury within the trachea may occur. The factors affecting these injuries are gender of female, ETT size, difficulty level of intubation, and the duration of the operation. Other causes of sore throat are excessive friction between the tube and the back wall of the pharynx and larynx, trachea area coming into contact with the tube cuff, dry gases, the effects of surgery in the area, and excessive aspiration.

Various pharmacological and non-pharmacological methods are used to reduce postoperative sore throat. Pharmacological methods involve the use of beclomethasone inhalation, ketamine mouthwash, lidocaine and betamethasone gel. Among non-pharmacologic methods, use of small ETT during intubation, complete post-relaxation intubation, gentle oropharyngeal aspiration, minimized cuff pressure are recommended. Among the postoperative nursing approaches, non-pharmacological methods such as warm fluid intake, not taking solid food, absorption of ice pieces, use of lozenge, and steam application are recommended to the patients having throat complaints to reduce the complaints.



## EP143

### THE EFFECT OF VIDEO AND WRITTEN EDUCATION ON PATIENTS WHO UNDERGO CORONARY ANGIOGRAPHY

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Coronary angiography (CAG) is an important intervention for the diagnosis of heart diseases and it may increase anxiety of patients. This study was planned as a three groups, quasi-experimental model to investigate the effect of video and written education on anxiety of patients before coronary angiography. Study group consisted of patients, who would undergo CAG at Cukurova University Medical Faculty Department of Cardiology between October 2015 and May 2016; and samples were selected in the same time slot by using block randomization. Thirty patients in written education group, 30 patients in video education group and 30 patients in control group were included in the study and a total of 90 patients were appropriate for criteria. Personal information form (PIF) was used to collect the patients' demographic data and State Triat Anxiety Inventory (STAI) was used to evaluate the grade of anxiety. The state anxiety scale was applied again after the training and after the CAG procedure. In addition, physiological parameters (systolic and diastolic blood pressure, pulse, respiratory) of the patients were measured before education, after education and after the procedure. Finally, Visuel Analogue Scale (VAS) was performed after the procedure for patient satisfaction. IBM SPSS Statistics Version 20.0 was used for statistical analysis.

A statistically significant difference was found between the control group and the education groups (video education and written education) in terms of post-training state anxiety, satisfaction and average scores of physiological parameters ( $p < 0.005$ ). ). Compared to the written education group ( $44,23 \pm 3,97$ ), the average state anxiety score of the video training group was found to be lower ( $41,67 \pm 4,73$ ).

As a result; it has been determined that the video and written education given by the nurses prior to planned CAG procedure, reduced the anxiety of patients, affected the physiological parameters positively and increased the patient satisfaction.

**Key Words:** Anxiety, Coronary Angiography, Video Education, Written Education



## THE EFFECTS OF PROGRESSIVE RELAXATION METHOD ON THE PATIENTS APPLIED TOTAL KNEE REPLACEMENT

**EP144**

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The aim of this quasi-experimental study is to depict the effects of progressive relaxation method on the patients who were applied total knee prothesis.

The findings of the study were obtained from the patients who applied to Adnan Menderes University Research and Practice Hospital, Clinic of Orthopedics and Traumatology with the diagnosis of gonarthros in October 2014 – February 2015. Sample of the study was consisted of 80 patients; 40 in experimental group and 40 in control group. The study findings were collected via patient information forms which showed the patients' introductive information, and via Visual Analogue Scale in which independent variables of stable ongoing anxiety inventory were investigated. In the process of data evaluation, percentage calculation, mean, standard deviation, Mann Whitney U, Chi Square, Wilcoxon Test and Spearman Coorelation Analysis were used.

According to the results, experimental group patients' age mean was analyzed as  $X=62.27\pm7.98$ , and control group patients'  $X=62.35\pm9.80$ . 70% of the experimental group patients were female, and 75% of the control group patients were female, 47.5% of the experimental group patients and 55% of the control group patients were primary school graduates. 50% of the patients in the experimental group were found to have any chronicle illness; 62.5% of them had operation experience in the past; 60% used adjuvant tools; 62.5% used their own techniques to overcome the pain when emerged; and body-mass index mean was  $X=27.62\pm3.75$ . 67.5% of the patients in the control group were found to have any chronicle illness; 60% of them had operation experience in the past; 76.2% used adjuvant tools; 72.5% used their own techniques to overcome the pain when emerged; and body-mass index mean was  $X=29.57\pm5.10$ . It is considered that progressive relaxation method which was applied to patients, has a positive effect on decreasing the post-operative pain and anxiety.

**Key Words:** Total Knee Replacement, Progressive Relaxation, Pain, Anxiety



## EP145

### THE INVESTIGATION OF EARLY STAGE HYPOTHERMIA INCIDENCES IN PATIENTS AFTER SURGERY

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The purpose of the study is to determine the frequency of hypothermia incidence and the related factors with the hypothermia incidences after the surgery period.

The patients that are waiting to have an operation (longer than 30 minutes) in preop unit, and patients that are waiting in postop unit after the operation have been included into the study. Patients' demographic data, types of attempts, durations and body temperature are measured by tympanic membrane thermometer before and after operation and recorded. Also, shaking, emperpling and cold sensation has been asked to patients and findings are determined and saved by the researcher observing the patients. Ambient temperatures has been measured by electronic thermometer.

51% (55 person) of patients are male. The average patients' body temperature before surgery is  $36,37 \pm 0,50$ , the average patients' body temperature after surgery is  $35,79 \pm 0,64$ . It is identified that any kind of heating method hasn't been applied to 99% (107 people) of the patients. Whereas 12% (13 people) of the patient answered yes to do you get cold in preop period question, this percentage specified as 34% (37 people) in postop period. Hypothermia incidence is 14,8% (16 people) in preop period. it is estimated to be 52,8% (57 people) in postop period. Before operation, 3,7% (4 people) of the patients cyanosis, 12% (13 people) cold, after operation 15,7% (17 people) shaking, 14,8% (16 people) cyanosis, 34,3% (37 people) cold findings are determined.

In this study, it is seen that patients show hypothermia symptoms. Therefore, precautions that keep and balance the body temperature of the patients in surgery process. Also, in order to raise the awareness of the nurses, training programs can be arranged on hypothermia and its complications.

**Keywords:** Hypothermia, post operation, surgery.



## THE INVESTIGATION OF THE NURSES' IDEAS WHO WORK IN INTENSIVE CARE CLINICS RELATED TO NOISE

**EP146**

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The purpose of the study is to investigate the nurses' ideas who work in intensive care clinics related to noise.

The study has been conducted in a university and the universe of study consists of 183 nurses who work in intensive care units.

The average age of participants of the survey is  $25,07 \pm 5,52$ , the time spent in the profession is  $49,7 \pm 55,03$  months, in the institution in which the survey is conducted is 32,3 months and 90,04% of the participants are women.

42,3% of the nurses have estimated the level of noise in which they worked as disturbing. To the question of "What are the sources for disturbing noise in clinic?" 39,4% of nurses have indicated that infusion pump, 33,7% that perfusion injector is disturbing, 40,4% that the announcements, 36,5% that personnel dialogues, 35,6% that the monitor sounds, 34,6% that electrical devices in the intensive care, 32,7% that the sound of falling objects, 27,9% that the noise of patients are a little bit disturbing.

To the question of "Choose the appropriate complaints that you think arise from the noise in the clinic." 79,8% of nurses have indicated discomfort, 76% that headache, 67,3% that stress, 66,4% that attention deficit, 61,5% that distress, 49% that sleep disorder are the causes; 51,6% pointed out that there is no reason to worry about.

For the question of "Do you take precautions aimed at noise?", 85,6% of nurses have indicated that they take precautions about preventing the doors and windows hits, 82,7% that they take care of closing the doors and windows slowly, 76% that they wear noise-free shoes/slippers.

In order to define the sources of noise and sweep disturbing sources of noise the awareness, administrative rules that all personnel must follow and institution's taking precautions to lower the noise are needed.

**Keywords:** Noise, nurse, intensive care



## EP147

### URINARY RETENTION - OUR RESPONSIBILITY!

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#### Background

The Post- operative Unit at the University Hospital of North Norway has over time treated several deviations from normal urinary retention in surgical patients. Contact with other hospitals shows similar challenges. In one 14-day period, 82 patients were studied according to specific criteria. Findings showed that 17% had >400 ml of urine in the bladder, including some with almost 1000 ml. This revealed a need for a critical review of perioperative care, to develop an evidence-based clinical procedure to prevent perioperative urinary retention.

#### Method

The Unit advocated further work by a multidisciplinary project group with management support. The improvement model in the patient safety programme was chosen as a tool. The Norwegian Knowledge Centre template for the design of clinical procedures was utilised.

#### Results

Using a literature review and consensus among local professionals, the risk factors and definition of urinary retention were defined. A local procedure covering the entire perioperative period was designed and implemented, which would apply to the whole University Hospital Trust. The procedure was reported to the National Network for Clinical Procedures.

#### Discussion

The literature review revealed variation from 400 to 600 ml in the definition of a full bladder. The local consensus set a 500 ml limit for indicated catheterisation. An adjusted limit for intervention and updated knowledge of risk factors required changes in practice. The procedure defines responsibilities and control to prevent full bladder in surgical patients. A bladder scanner is a key aspect.

The preparation of the procedure presented challenges in implementation. Safe implementation requires good planning, information, education and monitoring. The teaching focused on the background and objective.

#### Conclusion

A procedure focusing on care pathways ensures that the surgical patient suffers no negative effects of urinary retention. To implement a general procedure at the organisational level requires a systematic and structured approach.



## USING OF EPIDURAL ANALGESIA IN THE VAGINAL BIRTH AND ITS EFFECTS ON THE HEALTH OF MOTHER AND BABY

**EP148**

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Epidural analgesia is one the pharmacological methods used for the control of birth pain. In America and Canada, epidural analgesia is used in approximately 60% of vaginal deliveries. But, international literature contains important information on the effect of epidural analgesia on mother and baby health. Nurses working in surgical clinics offered the obstetric care services are might aware the adverse effects of this practice widely used on maternal and infant health and safety and maintain to the patient safety. Epidural analgesia during delivery is performed commonly in the form of lumbar epidural and combined spinal-epidural analgesia. In a Cochrane systematic made by Simmons et al (2012), it was reported that there is no difference between the compilations of epidural and combined spinal-epidural techniques in point of outcomes included birth type, post dural puncture headache, urinary retention, nausea / vomiting, hypotension, umbilical cord blood PH, Apgar score and in acceptance of newborn neonatal unit.

In Turkey, when it is labored to reduce the rate of optional caesarean related to the anxiety of birth pain, on the other hand, another aggressive intervention method such as epidural analgesia is brought to the agenda. Epidural analgesia can provide very good analgesia to the delivering woman. However, epidural analgesia may cause some obstetric problems and breastfeeding difficulties negatively affected the health of maternal and infant. The American College of Obstetricians and Gynecologist (2014) reports the risks of epidural analgesia included hypotension, fever, head and back pain. The American College of Obstetricians and Gynecologist (2014) also reports that analgesic agents very rarely can be injected into one of the veins in the epidural space might result in palpitation, alteration of taste in the mouth, numbness around the mouth and dizziness. If the anaesthetics mix with the spinal fluid, respiratory muscles can be affected and breathing difficulty may develop. In this study prepared on the basis of literature, it has been intended to share current information about epidural analgesia applied during labour and its effects on the health of maternal and infant.

**Keywords:** Birth, vaginal, analgesia, epidural, mother, baby, health, care

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## EP149

### WHAT ARE SURGICAL TEAM MEMBERS ATTITUDES TOWARDS THE SURGICAL SAFETY CULTURE IN THE OPERATING THEATRE AND THE WHO SURGICAL SAFETY CHECKLIST?

*O'Byrne Katie*

**Background:** Safety culture is the mutual values, attitudes, perceptions, and patterns of behaviour within a group with the aim of minimising patient harm (Profit et al. 2012). The literature search identified the following themes: 1) communication and teamwork, 2) safety climate v's safety culture and 3) patient safety and checklists. Multiple studies worldwide identified the effect of the WHO surgical safety checklist since its introduction in 2008. Little research was found on the measurement of attitudes towards safety culture and towards the WHO Surgical Safety Checklist in Ireland.

**Aim:** To examine anaesthetists, surgeons and nurses attitudes towards the safety culture and the WHO Surgical Safety Checklist within Irish operating theatres.

**Method:** A total of 173 participants consisting of 133 nurses, 37 doctors (anaesthetists and surgeons) and 3 unidentified. A descriptive quantitative approach was used. Questionnaires were distributed to four hospitals in Ireland. Data collected was coded and entered into SPSS version 23. Data was analysed using descriptive statistics, independent sample t-tests and chi-square tests were used to compare attitudes between nurses and doctors. Ethical approval was granted by each hospital and by the Faculty of Health Sciences Research Ethics Committee of Trinity College.

**Results:** Doctors rated their level of communication with other team members higher than nurses. Respondents generally displayed positive attitudes towards the safety culture and the WHO checklist. Doctors showed more positive attitudes than nurses for all domains of the safety culture. When compared against an international benchmark, scores were lower in four of the five safety culture domains. Attitudes to the WHO checklist were similar from both doctors and nurses.

**Findings:** Overall positive attitudes towards the safety culture were identified. Issues regarding communication, teamwork, management and checklist implementation and their effect on the level of safety in theatre were highlighted.

**Conclusion:** Emphasis was placed on the need for improved levels of communication and teamwork within theatre. This study highlighted the need for a culture change in the operating theatre, towards a more open and just culture. The researcher places importance on the need for continual measuring of the safety culture.

## EFFECT OF AROMATHERAPY ON PREOPERATIVE ANXIETY LEVELS OF PATIENS BEFORE MASTECTOMY

# EP150

**Ayşe BEYLİKLİOĞLU, Sevban ARSLAN**

**Background:** This study has been done to evaluate the effective of inhalation aromatherapy on preoperative anxiety levels of patients scheduled for mastectomy; With a control group pre test-post test quasi-experimental model. The research was conducted between 20.10.2015 and -01.06.2016 in General Surgery Clinics of Balçalı Hospital of Çukurova University Medicine Faculty. This study has been carried out with experiment (40) and control (40) groups totaling 80 patients who accepted to attend this study and were suitable for this study.

**Method:** The data collection was used to 'Personel Information Form, State-Trait Anxiety Inventory. Assessment of data, percentage, Shaphiro Wilk test, mean, standard deviation, chi-square test ( $X^2$ ), independent samples student-test, paired samples t test were used. For the assessment of the data; SPSS 24.0 was used.  $p < 0.05$  was accepted to be significant.

**Result:** The average age of the patients attended the study is 49,74±12,32. The state anxiety post-test point averages of the patients were determined as 37,28±9,93 in the experimental group and 42,43±11,48 in the control group, and the difference between the groups was found to be statistically significant (p=0,003). It was detected that score average of state anxiety pretest in experimental group was 43,00±11,48, and that post test one was 37,28±9,93 and distinction between the groups was found to be statistically significant (p<0,005).

**Conclusion:** As a result of, it was determined that aromatherapy effects patients the anxiety before mastectomy levels of positively. For this reason, nursing practices are recommended to include these initiatives.

**Key Words:** Anxiety, Aromatherapy, Breast Cancer, Nursing.

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## EP151

### IMPLEMENTING THE RIGHT TECHNIQUE IN USE OF SURGICAL STAPLING DEVICE IN GASTRO-ESOPHAGEAL SURGERY: THE ROLE OF SURGICAL NURSE PRACTITIONER

**Bastic Gordana**

**Background:** In many surgical specialty areas, the current role of the surgical nurse practitioner (NP) continues to expand and evolve. Circular staplers are used for end-to-end anastomosis after bowel resection or in esophagogastric surgery. While circular staplers for vascular anastomosis never had yet significant impact, devices for circular end-to-end or side-to-end anastomosis of digestive tract are widely used. This paper is generally based on surgeon's opinion about the role of surgical NP in applying the right technique in use of circular surgical stapling device.

**Methods:** In April 2016, a total of 30 general surgeons were asked to anonymously fill 5-item questionnaire regarding their opinion about the role of Surgical NP in the procedures that include the use of surgical stapling device. Also, we divided the procedure in five different phases, and asked them to rate every phase from 1-5, depending on their opinion about the necessity of NP in every stage.

**Results:** 83.3% of surgeons think that the role of NP in this procedure is irreplaceable, although 50% of them have the opinion that the NP could be replaced in some phases."Preparing the device for use "and "sending the line of resection to patohistological analysis" were rated as most important for NP with 53.3% and 56.7% grading it with highest mark, however "following the whole process" phase was the least important in their opinion, putting it at the bottom of our list in term of the necessity for NP.

**Conclusion:** Our results have shown that the role of surgical NP of „scrub“ nurse evolved to extent, with the emphasis on their continuous education in the field of novel technology usage.

**Key words:** scrub nurse, circular stapler, surgery

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## MICROSURGICAL RESTORATION OF BREAST BY ESCARPMENT DIEP. THE NURSES PART DURING THE SURGERY

**EP152**

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**PURPOSE/OBJECTIVE :** The Microsurgical restoration of the breast by free escarpment Diep is the "golden method" of independent restoration as it combines natural results with no harm to the donor area. The disadvantages of this method are the complexity of the surgery as well as the long duration. In this study it is described the development of the intraoperative structure of the medicine /nursing team and the effect on the surgical time and the cost of the surgery.

**THE STUDY DESIGN :** We have studied in recursion 100 patients who submitted the restoration of breast by escarpment Diep at the General Hospital of Athens from April 2009 to April 2016. All the patients were operated by the same Plastic-Microsurgeon. The patients were divided into two groups. In the first group A the patients included we're treated by a group of nurses that had special interest and education on microsurgery (n=62) and the second group - B were treated by a group of nurses without special interest on Microsurgery (n=38).The surgical time, the total time the patient spend in the operating room, the complications and the cost of the surgery are studied.

**RESULTS:** All the escarpment were successful without an incident of partial necrosis or clinical discoverable necrosis of fat. None of the patients needed reoperation due to anastomic problem or disorder of the blood flow to the escarpment. The average duration of the surgery (including the time took the anesthetist to put to sleep and wake up the patient) was 6,8 hours for the group A and 8,2 hours for the group B ( $p<0,5$ , t-test) The total cost (for a specialised plastic surgeon a specialized anesthetist and three skilled sergions and 3 nurses is 1.522,25 euros for the group A and 2.110,78 euros for group B. ( $p<0.5$ ,t-test. The group of nurses with the special interest statisticly reduced importantly the preoperatively time (catheterization of veins urinary catheter preparation for the surgery as well as the intraoperative time with corresponding reduction of the cost

**CONCLUSION :** It is documented that the perfect knowledge of the surgery and the immediate provision of equipment and surgical tools transform into the surgical time of every surgical decision from 8 seconds (2 seconds for the surgeon to turn to the nurse 1 second to ask for the tool, 2 seconds for the nurse to react 1 second for the surgeon to take the tool 2 seconds for the surgeon to concentrate to the surgical field) 1-2 seconds to take the tool and continue the surgery



## EP153

### OSTEOSARCOMA DURING PREGNANCY - CASE REPORT

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In Poland, sarcomas represent about 1% of all cancer diseases. Every year about 800 new cases are diagnosed. Osteosarcoma is the most frequently recognized primary malignant bone tumor.

Osteosarcomas are diagnosed more frequently in children and adolescent males, whereas in pregnant women they are extremely rare. We present a case of a 29-year-old pregnant woman with a highly diverse osteosarcoma. A patient which was in 23rd week of pregnancy was treated with multiple doses of chemotherapy while fetal health was being monitored.

The plan for a therapeutic process included inducing a pregnancy solution at the moment of the fetus reaching maturity, then continuing oncological treatment.

According to the established protocol of treatment in 34 week pregnancy was completed via cesarean section. The woman gave birth to a daughter in good condition. Surgical treatment was conducted after delivery until complete post-pregnancy healing. There was no reduction of dose or quantity of planned and conducted courses of chemotherapy due to pregnancy.

The paper offers an analysis of diagnosis and therapy of pregnant women with osteosarcoma based on own experience and on the basis of a relevant literature.



## PEDIATRIC LIVER TRANSPLANT: A ROUTE SUITABLE FOR CHILDREN IN AN ADULT HOSPITAL

**Cacciapaglia Alessandra**

EP154

Since 1990, 2961 liver transplants were carried out at the Liver Transplant Center directed by Prof. Mauro Salizzoni within the A.O.U. "Città della Salute e della Scienza di Torino": 2819 of them performed on adults and 142 of them on pediatric patients under the age of 18. Moreover 53 pancreas transplant were performed to date.

From October 14<sup>th</sup> 1999 a pediatric liver transplant program was established thanks to the cooperation between our team and the pediatrician hepatologists specialists of the children's hospital "Regina Margherita" of Turin.

The pediatric waiting list at the Liver Transplant Center includes young patients from neonatal age up to 18 years. After the pediatric transplant performed at the Center, children remain the first days after the surgery until the transfer to "Regina Margherita".

The specificity of the pediatric transplant and the emotional impact of the procedure on the entire family, which is already stressed out because of the chronic illness experience starting from the infant's birth, require a particular and continuous attention to clinical, managerial and psychological aspects.

Despite the fact the our Center primary works with adult transplants, the équipe of the Operating Room nurses provides appropriate care to pediatric patients before, during and after the surgery. When a pediatric transplant must be performed, nurses using specific operative tools turn the operating room, normally organized to receive adult patients, in a room suitable to pediatric patients. In this case the équipe is able to act in a very short time providing specific medical devices and equipment essential for the transplant.

Moreover our Center faces continuously a high nurses turnover, along with the specific knowledge required for the complexity of surgery, age and the small size of the candidates, emerged the necessity to implement a training program on the field that help every new nurse to act independently and in safety. Overall survival of patients undergoing liver transplant was 79,6% after 5 years and 72,6% after 10 years. Pediatric transplants have the best performance with a survival rate after 5 years of 98%.

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**Key words:** liver transplant, pediatric transplant, pediatric nurse

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- **REVISIONE COMPETENZE INFERMIERISTICHE NELL'ASSISTENZA IN SALA OPERATORIA DEL PAZIENTE PEDIATRICO (REVIEW NURSING SKILLS IN CARING IN THE OPERATING ROOM PATIENT PEDIATRIC)** training program at the Liver Transplant Center "Chirurgia Generale 2" within the A.O.U. "Città della Salute e della Scienza di Torino", Italy



## EP155

### PERIOPERATIVE PRESSURE ULCER PREVALENCE AND RISK FACTORS: A RETROSPECTIVE STUDY

**Nurten TAŞDEMiR<sup>1</sup>, Elif DiRİMEŞE<sup>1</sup>, Sevim ÇELİK<sup>1</sup>, Ahu UZUN ARSLANTAŞ<sup>2</sup>**

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**Introduction:** Pressure ulcers are a significant and costly problem in the acute care setting, resulting in increased length of stay, morbidity, and adverse outcomes (2). The risk for pressure ulcers is rarely identified in the perioperative period (1,3).

**Objective:** To determine the prevalence and risk factors associated with Perioperative Pressure Ulcers (PPU).

**Method:** The study designed as retrospective descriptive type. The sample of the study was electronic health records of surgical patients admitted to a University Hospital, from June 2015 to June 2016 in Zonguldak, Turkey. A data collection form designed by researchers and consisted patients characteristics (age, sex, body mass index, history of diabetes, and Braden Scale score at admission) and surgical characteristics (total operating room time, multiple surgeries etc.) and the development of pressure ulcers. Data were analyzed statistically to determine prevalence and risk factors of pressure ulcers. Data gathered from the electronic medical records.

**Results:** The prevalence of perioperative pressure ulcers were 3%. Patients' characteristics and related factors were examined.

**Conclusion:** In this retrospective study prevalence and risk factors associated with Perioperative Pressure Ulcers were examined for one hospital.

**Key Words:** Pressure Ulcers, Perioperative, Nursing

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## TOPIC C. EDUCATION

EP156

**ASSESSMENT OF NURSING IMPLEMENTATIONS PLANNED BY NURSING STUDENTS IN THEIR NURSING CARE PLANS FOR NURSING DIAGNOSIS “PAIN”****Akansel Neriman**

**Introduction.** Assessing patient correctly and choosing the right nursing diagnosis and documentation are part of effective nursing care. Most of the surgery patients face numerous problems during perioperative period. Acute pain is one of those problems yet miserable experiences for most of the surgical patients according to research findings(1). Therefore nurses should be sensitive to patients' pain and should have proper knowledge on treating it. Great emphasize should be given to assessment and treatment of pain during nursing education(2).

**Aim.** The aim of this study was to evaluate nursing care plans prepared by nursing students for pain as a nursing diagnosis and nursing interventions selected for it.

**Material/method.** All of the nursing care plans prepared by nursing students were assessed for pain as a nursing diagnosis. Data were collected by using data collection form prepared by researchers. The form included demographic variables of patients and other features of pain. Nursing interventions planned by nursing students to relieve patients' pain were assessed by researchers according to NANDA(2012-2014) nursing diagnosis criteria under 16 headings (3). SPSS(22.0) was used for statistical analysis. Results were given in numbers and percentages.

**Results.** All of the nursing care plans were evaluated for nursing diagnosis “pain”. Three hundred sixteen nursing care plans which included pain as nursing diagnosis were selected. Sixty point one percent of patients were on post-operative period. Nursing care plans mostly included duration(52.2%), frequency(44%), characteristic (54.3%), intensity(95.3%), and place of the pain (90.2%). Most of the nursing diagnosis included etiology(94.6%). Pain was placed as a first nursing diagnosis among all others. Using pharmacological treatment and teaching non pharmacological pain treatment (77.2 %), administering medications ordered for pain(73.7 %), identifying pain(46.8%), assessing pain by using reliable scale(36.7%), informing patient and his relatives(34.2%) were mostly selected interventions.

**Conclusion.** Nursing students have some lack of knowledge in both evaluating patients' pain and in planning nursing interventions. Importance of relieving patient's pain should be emphasized by faculty to constitute knowledge of nursing students related to pain management.

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## EP157

### EVALUATION OF THE EFFECTIVENESS OF SURGICAL ASEPTIC TECHNIQUE TEACHING GIVEN TO STUDENTS OF OPERATING ROOM SERVICES PROGRAM

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**Objective:** Operating Room Services Program is a staff training program for surgery and central sterilization units. In this study, evaluated the effectiveness of surgical aseptic technique teaching given to students of Operating Room Services Program.

**Methods:** The study was carried out in the 2016-2017 academic year by giving six hours of lessons with surgical aseptic techniques (ppt, video) to Ege University Operating Room Services, Operating Room Technology-I course students (n = 48).

Surgical hand washing, wearing gowns and sterile gloves (closed method) wearing skills, using skills checklists in laboratory, each student was shown and was applied in practice. Then the students were asked to repeat the same skills with their peers in their own and to draw on the skills of self-evaluation. By the instructors in charge of video recordings were evaluated using the standard skill lists. Evaluation of surgical hand washing, wearing gowns and sterile gloves (closed method) were grouped under three main headings as wearing skills.

The steps in the correct sequence for each section (1) point and the steps to the development of zero (0) points giving a total of 100 achievement points score was obtained 30/35/35. The mean score of students who are 60 and over total success skills were considered sufficient and successful. Students were given feedback after assessment.

**Results:** Surgical hand washing (full score 35), surgical dressing (full score 30) and sterile gloving (full score 35) the success skills average scores respectively were  $25.4 \pm 2.02$ ,  $31.7 \pm 2.78$ ,  $31.7 \pm 1.6$ . Overall grade point average of  $89 \pm 4$ .

**Conclusion:** Students found to be successful in terms of surgical aseptic technique skills. The use of demonstrate perform method in practical sections teaching, repeating skills on their own with their peers through the repetition of the missing and correcting errors was considered a positive effect on mean score.

**Keywords:** Surgical aseptic technique teaching, teaching methods.

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## EVALUATION OF HOME CARE LEAFLETS BY FAMILIES

**EP158****Polat Meltem**

**Introduction:** Discharge planning is a process that prepares both children and their families during the medical care at hospital through home care. The patient and the family must be informed about the necessary health care activities during this process. Verbal information given during the discharge can be forgotten very quickly by patients and relatives. Written educational materials should be used to ensure the permanence of the information provided.

**Objective:** This study was designed to let families evaluate home care brochures.

**Materials and Methods:** This descriptive type study took place in pediatric surgery clinic between May - July 2015. The sampling group of the study was picked from families which given home care brochures and allowed to the study (n = 120). Data were collected using a questionnaire prepared by the researcher during the pre-discharge period (34 questions). Data analysis was performed with SPSS for Windows 16.0. Figure, percentage was used in the evaluation of the data.

**Findings:** The mean age of families participating in the study is  $34.72 \pm 6.07$  %. 79.2 % of the parents were the child's mother, and 43.3 % of them were university graduates. 75.0 % of children were without any previous surgery while 55.0% of them had an operation with the diagnosis of circumcision. It is stated that the brochure was given to 38.3 % of the families after surgery, 90.8% told they'd read the brochure, 94.2% found it useful and 48.3% liked most that the brochures were understandable, descriptive and detailed. 9.2% of families desired nutrition and exceptional circumstances to be added to the brochure. With respect to visual material evaluation criteria of families, technique, intelligibility, validity and verbal info criteria were evaluated good by 95.8 % while presentation of a specific topic, content, images, link criteria were evaluated very good by 54.2 %.

**Result:** Home care booklet was evaluated positively by patients' relatives. The use of written materials in the discharge education is important. Study results emphasized the importance and necessity of written materials.

**Keywords:** Discharge, Information, Briefing, Brochures, Nursing Care.



## EP159

### EVIDENCE-BASED PRACTICE IN OPERATING ROOM NURSING. STUDENT PARTICIPATION IN PILOT-PROJECT; HOW DO OR-NURSES ORGANIZE SURGICAL INSTRUMENTS DURING SURGERY?

*Unni Igesund, university lecturer, UiT The Arctic University of Norway*

#### **Background**

Perioperative nurses are challenged by an increasing complexity in the Operating Room (OR) that necessitate continual updates of nursing knowledge and contribution of new research. National policies in Norway requires that clinical practice and education relies on evidence-based practice (EBP). According to a norwegian literature review (Erichsen et al. 2016) nurses in Norway still lack knowledge in applying Evidence-based Practice.

#### **Aim of study**

The national curriculum requires that the education focus on research and development activities related to curriculum, teaching and professional practice in operating room nursing.

A pilot project was designed concerning students learning outcomes related to how OR-nurses organize surgical instruments during surgery. The purpose for the project was to increase students learning outcomes, and use it to improve future projects.

#### **Design**

Project development and implementation was inspired by the EBP process. The project was organized in 5 phases:

write individual learning log (1)

groupseminar exchanging experience and develop empirical knowledge (2)

literature search, critical appraisal and application (3)

participate in focus group interview (4)

participate in evaluation of professional development and project implementation (5)

Student evaluation was conducted with questionnaires and study dialogue, and analyzed by using descriptive statistics and thematic analysis.

#### **Results**

Searching the literature, critical appraisal and application, together with developing practical knowledge were central learning needs for the students. Students reported better functional skills in the scrub nurse role. Using the EBP process, cooperation with other students and tutorship improved students' learning outcomes. The students reported increased preparedness applying Evidence-based Practice.

#### **Discussion/conclusion**

Students' contribution in evidence-based projects can increase knowledge outcomes and provide better understanding of the interaction between theory and practice. EBP as a pedagogical platform can reduce the theory-practice gap. Quality assurance and improvement are in focus.



## GUIDELINES AND RECOMMENDATIONS IN SWEDEN – A DEVELOPMENT PROJECT ON PATIENT SAFETY IN PERIOPERATIVE NURSING CARE BY THE QUALITY COUNCIL OF SEORNA, SWEDISH OPERATING ROOM NURSES ASSOCIATION

**EP160**

### Authors:

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### Background

In 2008, the National Board of Health and Welfare in Sweden decided to withdraw regulations of importance to the operating room nurse practice regarding count procedures and patient identification. Thereby there is a lack of national guidelines for the operating room nurses, regarding patient safety in perioperative nursing care. This was the start of the foundation of a Quality Council within SEORNA, Swedish Operating Room Nurses Association. The vision of the Quality Council is to promote high quality and patient safety in perioperative nursing care. The goal is to cover and share knowledge of significance for the operating room nurses' professional practice in the perioperative environment.

### Aim

The aim was to produce evidence-based national guidelines for high quality and safe perioperative nursing care in Sweden.

### Method

The work process for producing guidelines is based on an evidence-based model of five steps described by The National Board of Health and Welfare. Data was collected through systematic reviews of literature, local routines and standards collected through members in SEORNA, advice from experts in perioperative nursing, published adverse events and risks in the work environment, and reviews of international guidelines.

### Result

The Quality Council has produced evidence based guidelines on patient identification, count procedure and retained surgical items, safe use of tourniquet, protection of surgical smoke and handling of specimen in the operating room.

### Conclusion

Evidence based guidelines were produced to support the Swedish operating room nurses' daily work. The guidelines have been published on the SEORNA website [www.rfop.se](http://www.rfop.se) and have also been distributed in booklets to all members in SEORNA.

### Implication for perioperative nursing

The evidence-based guidelines serve as a foundation to maintain patient safety and high quality perioperative nursing care. Operating room nurses have evidence-based guidelines to rely on in their daily work

**Keywords:** Operating room nurse, patient safety, perioperative nursing care, guidelines

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# EP161

## NURSING STUDENTS' EXPERIENCES RELATED TO THEIR OPERATING ROOM PLACEMENTS

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**Introduction.** Being in operating room (OR) during clinical placements is a unique experience for nursing students in order to learn perioperative nursing practices (1). Studies show that being in OR even as an observer play an important role both in medical and nursing students' education (2). Besides its' positive outcomes being in OR can become as stressful (3, 4) and fearful experience for nursing students (3).

**Aim.** Aim of this study was to evaluate 2<sup>nd</sup> year nursing students' perceptions related to OR environment and OR nursing.

**Methodology.** Fifty six nursing students who were assigned to OR during their clinical practice of Surgical Nursing Course were asked to complete a form designed by researchers related to their operating room practice. The form included 6 open ended questions. Each student completed the form at the end of his/her rotation. Answers given by nursing students were read and classified by researchers. Results were given by numbers and percentages.

**Results.** According to students OR is an organized place (57.1%), requires plenty of attention (67.9%). Low percentage of students reported OR as a terrifying (3.6 %) and stressful environment (5.4%). Nursing students emphasized that patient care is given carefully by working staff (35.7%), patients are supported both physically and psychologically (41.1%). Most of them reported that OR experience reinforced their theoretical knowledge (82.1%) and some of them had an opportunity to do some practice (35.7%). Nurses active working nature, high level of theoretical knowledge requirements were also pointed out by students as an important. Importance of team working was also notified by students. Although operating room is seen as an unfavorable place according to some nursing students (32.1%) majority of them reported willingness to work as an OR nurse in the future.

**Conclusion.** Placements in OR improve nursing students theoretical knowledge and gave an opportunity to observe nursing care. Future studies should focus on improvement of learning experiences of nursing students.

**Key words:** operating room, nursing students

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## OPINION OF NURSING STUDENTS ABOUT SPIRITUAL CARE

**EP162****Türkan ÖZBAYIR**

**Objective:** This study aimed to determine nursing students' thoughts about spiritual care.

**Material and Method:** The sample of the study consisted of 200 intern nursing of Ege University Nursing Faculty.

"Sociodemographic Form" and "Spiritual Support Perception" Scale (SSPS) developed by Erkan Kavas & Nurgül Kavas. Have used for gathering the data. Scale has total 15 questions. Maximum 60 point can be obtained by this scale. Increase in the points taken shows that the Spiritual Support Perception and Attitude have increased. Before study permissions gathered from Ethical Committee (Issue: 2016/123), Nursing Faculty and students. Data evaluated with SPSS 16.0 statistics package programme, number and percentage distribution, mean and standard deviation values are given.

**Findings:** 87.5% of the students were women, 53.0% of them were classic high school graduates and 57.0% of them had no information about spiritual caring, before. 94.97% of the students said that the spiritual support is important and 36% of them said that the nurses in their internship department have showed spiritual caring. Students' spiritual support perception total point average in determined as  $65.55 \pm 9.41$ .

**Result:** As the total point average increases, spiritual support concepts perception level increases as well in the positive way. Students' Spiritual Support Perception is determined as "high". It is known that the patients who are given spiritual care show fast recovery. To give patients spiritual supports in clinical applications it is important to establish integration between theory and applications.



## EP163

### QUIROFORMA : “WHERE AM I? WHERE SHALL I WRITE THIS?”

**C. M. Monedero<sup>1</sup>, M. J. Omeñaca Ruiz<sup>1</sup> M. C. Parejo Aguilera<sup>1,2</sup>,**

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<sup>2</sup>*QUIROforma coordinator.*

**Keywords:** Nursery training, surgery nursing, virtual learning environment, training program.

Learning material for new surgery nurses has been an issue at hospitals, as there is a lack for complete guides adapted to our local environment.

Usage of new technologies would normalize and facilitate surgery nursery training. A new virtual learning environment called “QUIROforma” has been developed to solve this. Its objective is to train students and transfer them necessary knowledge of operating theatre functioning.

This training program represents a complete guide of the operating theatre. In these first two lessons it describes physical and functional structure of the operating theater. It presents as well all material used and the material logistics and rules. Access restrictions are taken also into account, so staff and patient flow and clothing are addressed. Specific parts of the surgery process and their location at the operating theatre are detailed.

Another subject explained is the importance of surgery data, the logbook, the medical record, and other management documents. The organization chart containing with each member of surgery staff and their functions is introduced.

All this material is presented in two lessons, over 14 videos which would take ninety minutes. Training is complemented by questions at the middle and the end of each lesson, assessing the trainee. Two chapters of a paper document QUIROforma 2016 collect these contents and complementary bibliography.

Know the structure, the documentation and the norms, makes the student more permeable to all the knowledge that he must absorb during his practices with us.

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## QUIROFORMA: FROM PACIENT TO PACIENT

**EP164**

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<sup>1</sup> Surgical nurse. Complejo Asistencial de Segovia. Segovia. España

**Keywords.** Nursing students, sterilization, asepsis, operating room, virtual learning environment.

QUIROforma arose from the requirement to train students with homogeneous criteria. Two of his lessons are Sterilization and Asepsis.

An important element of our activity is the infection control. Aseptic technique is the fundamental base of surgery, it means the absence of any infectious agent, and the sterilization plant is very important in this.

With this virtual learning environment, we feed the students with the minimum required lessons to address the nursing work in the operating room in terms of nursing diagnosis expressed in Taxonomy NANDA 00004 RISK OF INFECTION

In 18 videos we describe how the standards and recommendations of the Health Ministry are integrated in our daily practice.

We identify each sterilizing part, the path followed by the surgical instruments from patient to patient; the description of technique, instruments and materials used to eliminate infectious agents, in addition to maintaining and verifying this result.

We develop knowledge about asepsis, the definition and classification of infection of the surgical wound, the factors that influence it; the skin as a vector of pathogens, antiseptics and disinfectants, appropriate techniques to keep asepsis in the surgical area and on the surgical field. This contents and bibliography are written in QUIROforma2016 document.

The goal is for students to gain the minimum knowledge about risk materials, sterilization methods, sterilization controls, sterile material handling and traceability in our hospital.

We are in process of establishing the training program and we prepare to keep it active through student knowledge tests, satisfaction surveys and investigating new applications.

The incorporation of the new technologies into our daily practice facilitates the educational work and makes it more effective.

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## EP165

### QUIROFORMA: ASLEEP AND POSITIONED

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**Keywords:** student, anesthesia, surgical patient, surgical positions, virtual learning environment.

QUIROforma grew out of the need to educate grade of nursing students in their rotation by the surgical block. A time valued the patient, is comes to the anesthesia and subsequent placement in position (*asleep and positioned*)

**Anesthesia precedes any surgical procedure.** This topic will be addressed: anesthetic techniques, general anesthesia, endotracheal intubation of anesthesia, fluid therapy and medication, anesthetic recovery and hypothermia. The incorporation of this knowledge to the daily practice of the student with the diversity of techniques, materials and appliances used guarantee their professional training.

**Position placement is posterior to the anesthesia.** This topic will show: reasons for proper placement in the position of the surgical patient, the surgical table and their accessories, transfer of the patient, surgical different positions, their indications and complications.

The goal is the student to acquire the knowledge and skills necessary for the performance of the profession of nursing in the surgical block minimum based on the taxonomy NNN

Knowledge can be acquired according to the pace of each student, since they are available in the virtual learning environment which we have called QUROforma, of which these two units are part with Thirteen videos explaining over 90 minutes, interspersed questions, two questionnaires for evaluation and bibliography.

The program is currently in phase of implantation aiming so far a more direct approach of students to these technical and care of the patient during this part of the operative process.

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## QUIROFORMA: WHAT IS THIS ....HOW DO YOU MAKE?

**EP166**

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<sup>2</sup> QUIROforma coordinator

**Key words:** Training, Students, Nursing, Operating Theatre, NANDA, NOC, NIC, Learning Management System.

Practice in operating room nursing clinic and the activities that are carried out in it, differ greatly from the rest of the hospital services. Arises the necessity of having a support structured where students in practices can learn the operating room nursing. From the nurse NANDA, NOC, NIC, language, we enumerate the activities carried out by the scrub nurse and circulating nurse working in each of the phases of care to the patient in the operating room. Give students of nursing, knowledge minimum on instrumentation, sutures, drains, tubes and catheters.

Work online and face to face during two years of six nurses. There are two lessons that are part of the QUIROforma 2016 project along with eight other. Available to students during their period of practices at any time, place or device.

One lesson is about instrumental, sutures, drains, tubes and catheters. Another lesson is about the interventions and activities carried out by the scrub nurses and circulating nurses during each of the stages of patient care in the operating room from the language of NANDA, NOC, NIC taxonomy. Eighteen videos with voice, interspersed questions and final two questionnaires have been developed.

Two chapters of the book manual of nursing practice of operating room, collect these contents and bibliography. Have a tool on line and on paper, to be consulted in any time, place and device, facilitates learning specific the operating room nursing.

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## EP167

### QUIROFORMA: WHAT YOU NEED FOR YOUR OPERATING ROOM INTERNSHIP

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**Key words:** Training, Students, Nursing, Operating room, Virtual Learning Environment.

**Abstract:** Since 2010, we have been receiving students whose internship period takes between 4 and 12 weeks long, depending on the University they come from. Minimum contents was a necessity for new nursing students and their work in an operating room. In our effort to provide students with such contents, in June 2014 we started the construction of structured support for their learning and two years later, in June 2016, we launched it. After this two year period, with 70 hours along 26 sharing sessions and adding the 10 Unit nurses' personalized work, QUIROforma arises: an "OnLine" Virtual Learning Environment. QUIROforma has been elaborated with Office packages, Google tools and MoodleCloud; and is available for students during their internship period and Unit nurses, anytime, anywhere and from different devices. Each lesson, from the 10 ones that is divided in, the author addresses a topic in a consultation document with bibliography complemented with videos, interspersed questions and questionnaires. Only one of these lessons ("Nursing Activities") has 6 authors due to its length. A satisfaction survey reports to course administrators the feedback needed to assess the need for change. Having a tool such as QUIROforma facilitates student learning, ensures that the contents designed are treated, standardizes nurses' teaching work and provides information on the performance of each student in each part of the course, increasing the efficiency and quality of practices and learning.

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## PROJECT OF OPERATING ROOM NURSING LABORATORY

**EP168**

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The place where psychomotor skills are learned in nursing education is the vocational skill laboratory. The psychomotor skills education given in the laboratory is very complicated especially in terms of technique, materials and process and it is very important in enabling the environment adaptation of the students who go to practice in units requiring special knowledge and skills. The operating theatre is an environment where high technology materials are used, various operation techniques are practiced in consideration of new knowledge and where teamwork and making right decisions quickly are very important. Education for surgical nursing is given within the scope of the Surgical Diseases Nursing and Surgical Nursing course. However, the education about surgical nursing cannot go beyond theoretical explanation. It is discussed that the student nurses who go to the operating theatre for practice after the surgical nursing education given theoretically can make mistakes or cause mistakes in such a complicated environment which requires special knowledge and skills.

Within the scope of this project, the surgical nursing skill education of the 2nd and 4th year nursing students in Afyon School of Health Service, Department of Nursing was evaluated. It was determined that there was an education guide indicating the operation steps and reasons for all skills. However, it was also determined that the surgical materials used for some skills which the students would practice before going to the operation theatre practice were insufficient and the practices could not be made clearly in the laboratory. In accordance with the results obtained, it was decided to restructure the skill education. Procuring the necessary surgical materials for skill training and the model to practice the skills and preparing a new laboratory environment were planned. The list of materials necessary for the foundation of the operating theatre was determined in accordance with this plan. After these materials were procured, an operating theatre environment was formed and the Surgical Nursing education was actualized before the students did hospital practice.

In conclusion, a skill laboratory infrastructure where students could do practice again and again, where the mistakes could be monitored before going to the operating theatre and where the students could be given feedback was prepared.

**Key Words:** Operating room, laboratory, practical training, nursing education

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## EP169

### SURGICAL NURSING DOCTORATE THESIS IN TURKEY(1991-2015)

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**Presenter: Yelda CANDAN DÖNMEZ**

**Institute:** Ege University Faculty of Nursing, Department of Surgical Nursing, Izmir, Türkiye

**Background:** A Doctoral degree program is usually an eight-semester program if the student is accepted with a Master's diploma leading to the PhD degree in Turkey<sup>1</sup>.

**Aim:** This study aims to determination of surgical nursing doctorate thesis in Turkey between 1991 and 2015.

**Method:** Doctorate thesis that were registered on Council of Higher Education (CoHE) Thessis Center were examined by researchers. 1991-2015 belonging to the year, 89 doctorate thesis were included in the research. The survey form consist of 15 questions prepared in accordance with the concept derived from the data was used in collecting the data.

**Results:** Half of the doctorate thesis were made between 2011 and 2015. Doctorate program was provided at 8 University Institute of Health Sciences. 25,8% of doctorate thesis belong to Ege University Department of Surgical Nursing. 25,8% of doctorate thesis were made in general surgical ward. The sample of 84,3% the doctorate thesis constitute from patients. 78,7% of doctorate thesis found to be accessible to all. 87,6% of doctorate thesis was made while at one stage, 12,4% of doctorate thesis was made while at one more than stage. 31,5% of doctorate thesis was experimental research. 64,1% of doctorate thesis was used the scale as a data collection tool and 19,3% of doctorate thesis has been identified the most commonly used scale was State- Trait Anxiety Inventory. The aim of the thesis examined, 30,3% of doctorate thesis aim was to assess the quality of care.

**Conclusion:** As a result of an increase in the doctorate thesis in the last 10 years, the experimental of the thesis research is in the foreground, in the thesis is determined that aim to improve the quality of care.

**Keywords:** Nursing, PhD Thesis, Surgical Nursing

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## SURGICAL PATIENT EDUCATION IN TURKEY: SYSTEMATIC LITERATURE REVIEW

**EP170**

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**Objective and Aim:** Surgical patient education, being practiced before surgical intervention, makes a significant contribution for a patient to take information about what is going to happen in each stage of surgical intervention, to feel better physically and psychologically and for operation results to be positive. The goals of this education are; to help to the individuals before and after the operations in meeting their care needs; when necessary to facilitate receiving help from the health care team; to enhance rapid recovery process and to return to the normal life as soon as possible. Surgical patient education, which is one of the professional nursing roles, plays a key role to improve the quality of care and relieve the patient. This study intends to draw attention to the importance of the education methods used in thesis and studies that consist of the surgical patient education and in order to make a contribution to the literature in Turkey.

**Methods:** A literature search was performed using YÖKTEZ, ULAKBİM and Google Scholar. The following search terms were used: 'nursing', 'surgery', 'patient education', and 'surgical patient education'. The search was limited to articles in Turkish full articles or abstracts, and the 30 thesis and 15 studies were analyzed by topic, author, year, institution, and education method.

**Results:** Thirty thesis and 15 studies were included in the review. Most educational programs were found to be effective reporting significant positive impacts upon learners, patient outcomes and organizational systems. Outcome measures related to: learners, for example knowledge and performance, systems, including activation and responses of rapid response teams, and patients, including patient length of stay and adverse events.

**Conclusion:** Educational interventions designed to improve the recognition and management of patient deterioration can improve learner outcomes when they incorporate technology by nurses. Outcome measures should include knowledge and skill developments but there are important benefits in understanding patient outcomes.

**Keywords:** 'nursing', 'surgery', 'patient education', 'surgical patient education'.



## EP171

### TELE-NURSING: TURKISH STUDENT NURSES' PERSPECTIVE

#### **Names of Authors:**

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2- Aliye OKGÜN ALCAN\*,

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**Presenter:** Özlem SOYER GEÇKİL

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**Background:** Advances in nursing science and technology influenced development of new service areas such as tele-health and tele-nursing<sup>1</sup>.

**Aim:** The aim of this study was to investigate Turkish student nurses' perspectives of tele-nursing activities.

**Method:** This was a descriptive study. The permission was obtained from ethics committee, the dean of the Faculty and students. The study was conducted between February- June 2016 at a university faculty of nursing in Turkey with 981 nursing students. Data collection was done using a data collection form developed by researchers. The number and percentages were used for data analysis.

**Results:** The mean age of the students was 21.09±1.76, and 84.5% of them were women. It was found that 59.2% of the students did not hear about tele-nursing concept before. 36,8 % of the students stated that they had knowledge about tele-nursing. 20,1% of students had been taken tele-nursing information from the internet. 62,8% of students wanted to take as course on nursing curriculum. It was found that 81.1% of the students expect tele-nursing to be integrated in Turkish health system. Besides 73.1% of the students would prefer to monitor their patients with tele-nursing techniques. 64.8% of the students remain uncertain about credibility of tele-nursing.

**Conclusion:** Related our result students do not know much knowledge about tele-nursing. They wish to be take some courses related tele-nursing.

**Keywords:** Student nurses, tele-nursing, education

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## THE EFFECT OF GIVEN TRAINING ON THE ANXIETY LEVEL OF PATIENTS BEFORE THYROIDECTOMY

**EP172**

***Derya GEZER, Sevban ARSLAN***

**Background:** Anxiety is a disturbing worry and fear feeling that threatens or is perceived as life-threatening. Hospitalization and surgical interventions are crucial situations in that they result in anxiety among patients. The current study was undertaken in order to identify effect of training provided before thyroidectomy through informative brochures for the patients for whom thyroidectomy was planned upon their anxiety levels.

**Methods:** The population of the study, which was designed in quasi-experimental model with pre-test and post-test and control group, was composed of patients who were hospitalized to general surgery clinics of Cukurova University Faculty of Medicine Balçalı Hospital and Numune Research and Training Hospital between the 14<sup>th</sup> of January 2013 and the 10<sup>th</sup> of June 2015 and for whom thyroidectomy was planned. From the population; the sample group was consisted of a total of 62 patients who met the inclusion criteria and volunteered to participate in the study (32 patients allocated to experimental group vs. 30 patients allocated to control group). For the data collection; "Personal Information Form" and "Surgery Specific Anxiety Scale (SSAS)" that assess patients' surgery specific anxiety levels were used. The patients in the control group received routine information about the surgery while the patients in the experimental group received training about the surgery with "Patient Information Brochure about Thyroidectomy". The data were assessed using SPSS, descriptive statistics,  $\chi^2$  and t test. The accepted level of significance for all analyses was  $p < 0.05$ . Before the study was initiated, the ethical suitability of the research was approved by Ethical Council of the Medical Faculty of Cukurova University.

**Result:** Average age of the participant patients in the experimental group was  $45.66 \pm 12.07$  while average age of the participant patients in the control group was  $46.2 \pm 13.24$ . 84.4% of the patients in the experimental group ( $n=27$ ) and 70% of the patients in the control group ( $n=21$ ) were females. Mean SSAS post-test score of participant patients in the experimental group was  $26.90 \pm 8.18$  while it was  $26.73 \pm 7.88$  in the control group and the difference between the groups was found to be statistically insignificant ( $p > 0.05$ ).

**Conclusion:** As a result; it was identified that the training given before the surgery by the nurses to the patients for whom thyroidectomy was planned did not affect surgery specific anxiety levels.

**The implications for perioperative nursing:** The anxiety of the patients evaluated at an early stage can be achieved with appropriate solutions to individual method.

**Key words:** thyroidectomy, anxiety, surgery specific anxiety, nursing training

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## EP173

### THE EFFECT OF INTERACTIVE TEACHING METHODS ON NURSING STUDENTS' ATTITUDES AND SKILLS RELATED TO STOMA CARE

**Figen DIĞIN<sup>1</sup>, Zülfiye BIKMAZ<sup>1</sup>, Özge KARAGÖZ<sup>2</sup>, Asiye ERGÜL<sup>2</sup>**

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**Background:** The aim of this descriptive study was to investigate the effect of interactive teaching methods on nursing students' attitudes and skills about stoma care.

**Methods:** The research was carried out in november 2016. The study sample consisted of 67 nursing students who wanted to contribute this research at School of Health, Kırklareli University. A written permission was taken from the concerned authority. Data were collected with a questionnaire which was developed by the researchers. Pover point presentation and video about stoma care was offered to students in classroom environment. Also Stoma model was used for stoma care training. Questionnaire was answered before stoma care training and after 15 days of training. The data were analyzed with SPSS. 20.0 using descriptive statistics and t test for associated sample.

**Results:** Among the participant students, 71,6% was female and their mean age was 22,13±1,70, Grade point averages of them was 2,60±0,43 (min:1,97, max:3,62). 83,6% of them didn't have training about colostomy care before. 81.8% of the students didn't did stoma care before. 81.7% of the students answered the question “

Do you believe that stoma care training will be permanenté” as ‘yes. When the questionnaire is applied a second time, 85.5%of them answered as “yes” to the same question.

While pre-training correct response rate of informational question was 10,60±5,0, it was 17,04±2,67 post-training. When the mean total scores Pre-test and post-test was analyzed, results were found to be statistically significantly different (t=-11,676).After stoma care training the proportion of students who don't want to do stoma care was decreased.

**Conclusion:** According to the results, using power point presentation, video about stoma care and stoma model was found useful for developing students' attitudes and skills about stoma care. More interactive teaching methods should be used for increasing quality in education of nursing students.

**Keywords:** Nursing Students, Stoma Care, Colostomy, Nursing Education, Turkey.

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## THE EFFECT OF PATIENT INFORMATION ON ANXIETY BEFORE SURGERY

**EP174**

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Some health problems are treated by medical ways while others are required surgical procedures. Patients undergoing surgery may report anxiety caused by anticipation of pain, separation from family, loss of independence, fear of surgical procedures and of the anesthesia, the possibility of changes in body image and of death (1,2). Anxiety causes activation of sympathetic nerve system and endocrine system. As a result of this activation, blood cortisol and adrenalin increase, tachycardia, hypertension and arrhythmia are seen. These problems effect the patient negatively in postoperative period. Due to these problems, wound healing is delayed, analgesic requirement and health costs are increased and also length of hospital stay is prolonged (2,3,4,5,6). To decrease patient anxiety before surgery, anxiolytic drugs are applied. But it was found that these drugs cause delay of oral intake and impairment of motor functions. Therefore, premedications include anxiolytic drugs are not recommended routinely in preoperative period (7). Informing patient can decrease anxiety levels of patient. For this aim, different methods such as video, communication between health profession and patient, animation and pictures can be applied. Tou et al. found that preoperative two dimensional animation information was effective to decrease anxiety in patients undergoing bowel surgery (8). Lin et al. and West et al. stated that preoperative video information about anesthesia decreased anxiety level and increased satisfaction of patient (9,10). In a different study, the effect of information leaflet on anxiety before urodynamic studies was found effective to reduce anxiety (11). Nurses are in the center of healthcare team and interact with the other professions. For this reason, nurses play important role to inform patient. They can use leaflets, videos and animations for informing. By informing patients, the quality of life of patients can be increased and health costs can be decreased.

**Key Words:** Anxiety, effect, patient information, surgery

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## EP175

### THE INVESTIGATION OF PARENTERAL IMPLEMENTATION EXPERIENCES OF FINAL YEAR NURSING STUDENTS

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**Introduction:** Vocational skills development located at formal education in nursery is to be turned into competence in a laboratory and is tried to be consolidated with hospital practices<sup>1-4</sup>. Injection practices which are used during the skill courses are important in terms of occupational risks and medical errors.

**Aim:** The aim of study is to determine skill development situation in parenteral practice, to support nurse about skill development before graduating and to plan training on this subject to the final year nursing students according to the study results.

**Method:** In study which consists of descriptive values, information were taken with the data collection form from intern with face to face meeting. The study sample consisted of 133 final year students who participate as voluntary.

**Results:** 74.6 % of participants were female and the mean age of subjects were 22.25 years. When we investigated the practises which was no done in patients, it was found that 72.3% subjects no installed the catheter, % 73.7 of subject no made total parenteral nutrition, 64.3 of participants no performed blood transfusion. Also, 33.3 % subjects no made intravenous injection, 31.9 % of subjects no implemented intramuscular injection and 39,4 % of subjects no performed subcutaneous injection.

**Conclusion:** We can say that intern nurses graduates from not to be won enough practice skills in the results of study. It is suggested that to provide the safety of patients and staff and to prevent the medical errors, undergraduate and postgraduate application of additional in-company training orientation program can be organized.

**The effects on perioperative care:** In our country, new graduate nurses are usually employed emergency service, intensive care, anesthesia and reanimation clinics. This situation can cause troubles in terms of patient safety in the clinical trial setting.

**Key words:** skill, education, nursery, student

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## THEORY OF COMFORT OF KATHARINE KOLCABA, APPLIED TO | PERI-OPERATIVE NURSING

**EP176**

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**Introduction:** Promote comfort in certain contexts of care continues to be an issue that needs intervention, especially if we consider that comfort is much more than the subjective perception of health, "(...) it's a complex holistic state (...)" and "an essential result of health care (...)"<sup>1</sup>. Considering that in the process of life the person is confronted with "(...) the need to adapt, manage the changes in his life in order to maintain physical, psycho spiritual, social, environmental comfort to feel healthy"<sup>2</sup>, the "comfort" assumes interest in the context of a critical situation for the patient/family and also in the constant search of excellence for nursing practice.

**Purpose:** Analyze a case study, based on the theory of KATHARINE Kolcaba.

**Methods:** An integrative review of the literature by mobilising the descriptor "Comfort" AND "Periooperative nursing " AND Kolcaba, using the school method. Were selected ten databases imaginable, between 1990-2016, included for analysis four articles.

**Results and Discussion:** The promotion of total comfort, mobilizes three types of interventions: "*Interventions of comfort standard*" - monitoring the vital signs and laboratory results with quick response to serious situations. It also includes pain relief, reduction of hypothermia and positions of comfort. These interventions can help the patient to maintain/restore physical function and comfort and prevent complications. "*Coaching*" - mobilizes interventions that decrease the anxiety, provide confidence, promote hope and offer an optimistic plan for the recovery, applied in useful time. "*Comfort food for the soul*" - massages, touch, music therapy and "give a hand". These interventions include the need of transcendence and memorable concepts.

**Conclusion:** In the context of peri-operative nursing, nurses provide care and comfort in **physical contexts**, for pain relief, hygiene, positioning and promoting independence; **psycho-spiritual** by religious assistance, help and psychological support and **socio cultural** through the relationship with the family



and environmental factors.

**Key words :** Comfort; perioperative; nursing

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**EP177**

## **TURKISH STUDENT NURSES' PERCEPTIONS OF E-LEARNING**

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**Background:** E-learning approach encourages critical thinking, self-directed learning and synthesis of knowledge in nursing students<sup>1</sup>. Therefore e-learning activities in nursing education are emphasized<sup>2</sup>.

**Aim:** The aim of this study was to investigate Turkish student nurses' perceptions of e-learning activities.

**Method:** This was a descriptive study. The permission was obtained from ethics committee, the dean of the Faculty and students. The study was conducted between February- June 2016 at a university faculty of nursing in Turkey with 981 nursing students. Data collection was done using a data collection form developed by researchers. The number and percentages were used for data analysis.

**Results:** The mean age of the students was 21.09±1.76, and 84.5% of them were women. It was determined that 34.5% of the student nurses spent 2-4 hours per day online. Rates of internet usage purposes were found as follows: 94.1% social media, 86.2% education and 69.7% entertainment. Besides 62.9% of the students stated that they use the internet for education 45 minutes maximum. Nearly half of the students 45.7% would prefer technology supported learning techniques rather than other learning techniques. It was found that being student based 45.8%, in any place 40.4% and repeat studying until learning 39.3% were the reasons for preferring e-learning techniques. Of students %53,3% e-learning may be delayed due to the fact that would prefer not that indicated.

**Conclusion:** In Turkey the nursing curriculum or nurse education still based on classic interactive learning methods. Related our result three-quarters of the nursing students might not prefer e-learning.



**Keywords:** Student nurses, e-learning, education

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## WHAT ABOUT NON - TECHNICAL SKILLS IN THE OPERATING THEATRE

**EP178**

### **Wevling Astrid**

**BACKGROUND / CHALLENGES:** \_ Non-technical skills (NTS) are basic to patient safety. \_ Adverse events are more frequently linked to NTS than to technical skills. \_ We are skilled on an individual level, but as a team we are challenged.

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**Astrid Wevling, Egil Bekkhus, Cathrine Ålesve, Anne Mette Nygaard, Turid Heiberg**

**Approach / methods** Participants: A total group of students in specialist nursing, comprising perioperative -, anesthetist-, intensive care -, and emergency nursing at baseline responded to a questionnaire before (n op/all=10/40) and after (n op/all=12/27) the first clinical practice. Self-report questionnaire on NTS (Likert scale): their knowledge, the importance, their clinical focus, and the role of NTS in adverse events. Intervention: 4 group sessions (simulation, case, lecture, reflections) for students focusing on NTS between the two data collections.

**Results** Mean response to the questionnaire on NTS Conclusion: Most nurse specialist students value the importance of NTS, and its role in adverse events higher than their knowledge about it and the focus in clinical practice. An increase in rating of their own knowledge and their focus on NTS in clinical practice is seen after their first 6 months of education. There was the same pattern in periop nursing and the whole group



## EP179

### A USEFUL EDUCATIONAL MATERIAL ABOUT HOLISTIC NURSING CARE FOR SURGICAL PATIENTS: CONCEPT MAPS

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With continuous increasing of knowledge and technological developments, health care systems are changing rapidly at present. Different approaches should be created to enhance knowledge and skills of health professionals in this process of changes and developments. New approaches of nursing education are directed towards preventing nursing students from being passive learners and enabling them to become active learners who can access appropriate sources of knowledge throughout their life and professionals who can solve problems. Different learning methods are recommended so that students can take the responsibility for their own learning, can learn and transfer what they have learned. Concept maps are considered effective learning methods in that they offer visualization of the hierarchical relations between knowledge and concepts and concrete data to students. Directed towards improvement of critical thinking and problem solving skills of students, they include flow charts to shape main concepts and help to understand relations between them. The aim of using concept maps is to achieve meaningful learning in which students integrate new knowledge to what they already know. Educators have to define key concepts and relations and enable students to make accurate and reasonable associations and to recognize missing information.

In this study, the concept maps created by the third year nursing students at Dokuz Eylül University during their practice in the surgical clinics and their opinions about these maps were described. The students commented that the concept maps helped them to integrate their theoretical learning and patient care, quickened learning during their practice and were useful. When used in clinical practices, concept maps can play a role in nursing students' putting their theoretical knowledge into practice by providing them with a holistic approach in collection of data about patients, determination of nursing diagnosis and decision making for appropriate nursing interventions.

**Key Words:** Surgery, Nursing Education and Concept Maps

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## AN EXAMINATION OF THE LITERATURE ON THE PRE-OPERATIVE EDUCATION OF PATIENTS IN TURKEY

**EP180**

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**Aim;** The objective of this examination of the literature was to investigate the research conducted in Turkey relating to patient education in the pre-operative period, and thereby to determine the results of studies and the needs of research in this field.

**Material and Methods:** Database searching on ULAKBIM ([Turkish Academic Network and Information Center](#)), PubMed, EBSCO, Web of Science and the articles were selected as full text by searching with 'preoperative', 'patients education', 'nursing' key words and they were carried out in Turkey (2006-2016).

**Results:** According to the findings of the study, there was a correlation between patients' learning needs and anxiety levels. The mean state anxiety score of the experimental group (with extra planned patient education in addition to the standard education) was found to be higher than that of the control group (with standard patient education), and education given to patients in the pre-operative period reduced fear and worry, while the number of patients per nurse affected the education given.

**Conclusion:** It is recommended that experimental studies with a high level of proof should be conducted on the pre-operative education of patients.

**Key words:** preoperative, patients education, nursing.

### Biography

Burçak ŞAHİN KÖZE is a PhD student at Ege University from Turkey in Izmir. She is also research assistant at the same university in Surgical Nursing Department since 2009.

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Category: Poster presentation



## EP181

### EFFECT OF EDUCATION BASED ON HEALTH BELIEF MODEL ON BREAST CANCER KNOWLEDGE AND AWARENESS IN A GROUP OF WOMEN LIVING IN TURKEY

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**Background:**The Health Belief Model (HBM) is one of the models, used widely in understanding and explaining attitudes and behaviors of people toward early detection for cancer(1,2).

**Purpose of the study:**This research was conducted to determine the effect of education on breast cancer knowledge and awareness of a group of women living in a city of Turkey.

**Method:**This study was conducted with 92 women, participating in vocational training courses in Eskisehir, a city of Turkey, between 1-31 December 2015. Data was collected by a questionnaire consisted of questions to determine socio-demographic characteristics and level of breast cancer knowledge of women, Breast Cancer Risk Assessment Form and HBM Scale. HBM scale consist of susceptibility, seriousness, efficacy, barriers, confidence and health motivation subscales. After forms were applied, women were trained with an education based on HBM. Two weeks after education, HBM scale was applied to women again.

**Results:**The mean age of women was 39.57±9.66 years and 94.6% of them had a low level of breast cancer risk with 117.33±51.63 mean score. Before education it was found that 50.0% of women had breast self-examination while only 29.3% of them had mammogram. After education breast self-examination rates increased to 60.9% while mammogram rates increased to 31.5%. It was found that women's mean scores received from seriousness subscale were significantly increased after training (p=0.011). The mean scores received from barriers subscale decreased after training but there was found no significant difference (p=0.987). The mean confidence subscale scores of the women who had information about breast cancer was found significantly higher (p=0.004).

**Implications for perioperative nursing:**The rates of breast self-examination and mammograms could be increased with individualized. More structured trainings about breast cancer should be planned for women.

**Key words:** breast cancer, health belief, cancer awareness

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## EVALUATION OF ELECTROSURGERY DEVICES' KNOWLEDGE OF NURSES EMPLOYED IN GREEK HOSPITALS

**EP182**

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Keywords: Electrosurgical Devices, Nurses, Safety Procedures, Nursing Education, Clinical Engineering

### Introduction

Clinical staff should have a good understanding and knowledge status about electrosurgery devices operating procedures as well as of their tissue effects. Many incidents are recorded describing harmful applications of these devices for both patients and staff. Purpose of this study was to evaluate Greek registered nurses' knowledge on electrosurgical devices.

### Material and Method

For data collection, anonymous self-administered questionnaire was used, constructed and validated for the purpose of the study. Study's sample consisted of 62 Greek clinical nurses who participated within relative interactive workshops.

### Results

Quantitative variables are expressed as mean values (SD) or as median values (interquartile range=IQR). Qualitative variables are expressed as absolute and relative frequencies. For the comparison of the proportions of the correct answers before and after the intervention, Mc Nemar tests were used. Also paired Student's t-tests were used for the comparison of the knowledge score before and after the intervention. All reported p values are two-tailed. Statistical significance was set at  $p < 0.05$  and analyses were conducted using the statistical program SPSS v.19.0 (SPSS Inc., Chicago, IL.) A significant increase in the proportion of correct answers was after the intervention for all questions except for 5, 6, 10, 13, 15 and 21. The mean knowledge score increased significantly from 61.2% to 80.7% after the intervention.

### Conclusions and Suggestions

Identification of knowledge deficits concerning electrosurgery and implementation of continuing education programs (lectures, hands-on training workshops and video presentations) is expected to positively contribute to the promotion of knowledge obtained from basic education and clinical experience.

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### Introduction

Basic understanding of electricity principles and its current modulation types is needed in order to understand and safely apply electrosurgical technology into patient care (1-4). The clinical staff should have a good understanding and knowledge status about the operating procedures as well as of the tissue effects so as to avoid any possible complications that might occur during surgical operations (5-6). Also, in the literature there are many incidents describing harmful applications of these devices for both patients and staff. Malfunction or misapplication of these devices can endanger the well-being of both



the patient and the operator (7-10).

Nowadays, it is a common sense that educational programs should be periodically held to provide new aspects and knowledge on the safe use of the electrosurgical devices leading to better perioperative patient care (11-12). In this direction, along with the clinical engineers, major groups have joined forces to provide directives for perioperative patient safety correlated with the use of electrosurgery devices (13-16).

### **Purpose**

The purpose of this study was to evaluate nurses' knowledge on electrosurgical devices employed in Greek hospitals, before and after a relative interactive educational intervention.

### **Material and Method**

Anonymous self-administered questionnaire was used to collect the data, which was constructed and validated for the purpose of the study and consisted of two parts: the first contained demographical questions and the second part consisted of twenty two questions investigating nurses' knowledge on the basic electrosurgical principles and on the safe use of these devices.

Before conducting the specific study, permission from the Hellenic Data Protection Authority was requested and obtained. In the application form, the names of researchers who will take part in the survey, the purpose and form of the study and how the output data will be used were mentioned ensuring the anonymity of participants and the confidentiality of results. This study followed all the fundamental principles of research. Specifically, all the information about the participants was completely anonymous and confidential. Commitment given that the information and the extracted data will be used solely for the purposes of this study.

### **Statistical analysis**

Quantitative variables are expressed as mean values (SD) or as median values (interquartile range=IQR). Qualitative variables are expressed as absolute and relative frequencies. For the comparison of the proportions of the correct answers before and after the intervention, Mc Nemar tests were used. A knowledge score was computed for every participant from all correct answers and converted to a scale from 0 to 100 (0 = none correct answer and 100 = all answers were correct). Paired Student's t-tests were used for the comparison of the knowledge score before and after the intervention. All reported p values are two-tailed. Statistical significance was set at  $p < 0.05$  and analyses were conducted using the statistical program SPSS v.19.0 (SPSS Inc., Chicago, IL.)

### **Results**

Study's sample consisted of 62 Greek clinical nurses (9 men and 53 women) all working in Greek major capital and regional hospitals who participated within relative interactive workshops. The sample characteristics (percentages) regarding sex, age, degree in English and total working experience, are presented in table 1. From the total sample, 24.2% was Master's Degree holder and 1.6% was PhD's degree holder, while 21% had a nurse speciality. The 72.6% was working in major capital cities (Athens, Thessaloniki) and the rest 27.4% was working in other Greek regional cities. As for the duties distribution, 71% was clinical nurses and 29% was head of Nursing Departments.

The proportion of correct answers before and after the intervention, along with the knowledge score is shown in table 2. A significant increase in the proportion of correct answers was after the intervention for all questions except for 5, 6, 10, 13, 15 and 21. The mean knowledge score (figure 1) increased significantly from 61.2% to 80.7% after the intervention.



**Table 1.** Sample characteristics

	N (%)
Sex	
Men	9 (14.5)
Women	53 (85.5)
Age	
20-29	5 (8.1)
30-39	24 (38.7)
40-49	27 (43.5)
50-59	6 (9.7)
Degree in English	62 (100.0)
Total Working Experience	
0-4 years	1 (1.6)
5-9 years	8 (12.9)
10-14 years	17 (27.4)
15-19 years	13 (21.0)
> 20 years	23 (37.1)

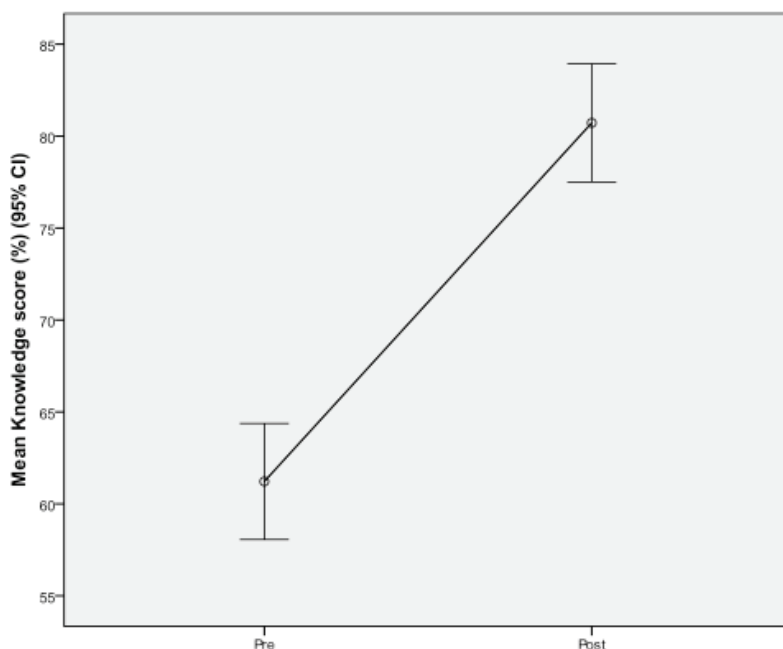
**Table 2.** Proportion of correct answers before and after the intervention

Question	Correct answers		P Mc Nemar test
	Before N (%)	After N (%)	
1	46 (74.2)	59 (95.2)	0.002
2	32 (51.6)	50 (80.6)	0.001
3	26 (41.9)	54 (87.1)	<b>&lt;0.001</b>
4	20 (32.3)	44 (71.0)	<b>&lt;0.001</b>
5	36 (58.1)	42 (67.7)	0.307
6	38 (61.3)	44 (71.0)	0.345
7	23 (37.1)	37 (59.7)	<b>0.014</b>
8	35 (56.5)	49 (79.0)	<b>0.014</b>
9	36 (58.1)	47 (75.8)	<b>0.019</b>
10	47 (75.8)	55 (88.7)	0.096
11	34 (54.8)	50 (80.6)	<b>0.002</b>
12	43 (69.4)	54 (87.1)	<b>0.007</b>
13	41 (66.1)	48 (77.4)	0.143
14	36 (58.1)	56 (90.3)	<b>&lt;0.001</b>
15	48 (77.4)	52 (83.9)	0.424
16	41 (66.1)	53 (85.5)	<b>0.023</b>
17	41 (66.1)	58 (93.5)	<b>&lt;0.001</b>
18	28 (45.2)	51 (82.3)	<b>&lt;0.001</b>
19	43 (69.4)	49 (79.0)	<b>0.263</b>
20	45 (72.6)	35 (56.5)	<b>0.050</b>
21	56 (90.3)	58 (93.5)	0.727
22	40 (64.5)	56 (90.3)	<b>&lt;0.001</b>
Knowledge score (%), mean (SD)	61.2 (12.4)	80.7 (12.7)	<b>&lt;0.001*</b>

\*Paired t-test



**Figure 1.** Mean knowledge score before and after the intervention



### Conclusions and Suggestions

Electrosurgical devices' knowledge of clinical nurses as well as knowledge of the biophysics' principles and electricity mechanisms mainly based on experience, aim at the avoidance of adverse events, similar to those reported by other relative international studies. Identification of knowledge deficits concerning electrosurgery must be researchers' primary goal, and these were mainly associated with principles of electrosurgical devices functions and safe use of perioperative procedures. Implementation of continuing education programs (lectures, hands-on training workshops and video presentations) is expected to positively contribute to the promotion of knowledge obtained from basic education and clinical experience.

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## EXAMINING OPENNESS TO CHANGE LEVELS OF SURGERY NURSES

**EP183**

**Fadime Çınar<sup>1</sup>, Fatma Eti Aslan<sup>2</sup>, Hayat Yalın<sup>2</sup>**  
**Beykent University<sup>1</sup>, Bahçeşehir University<sup>2</sup>**

**Keywords:** Nursing, care, compassion, demographic properties.

### Background

Nurses are working in the workplace having many individuals need to care and compassion. For this reason, it is required to measure compassion levels in order to define and to manage factors affecting compassion of surgery nurses.

### Purpose

In the research, it was aimed to examine change of compassion levels of surgery nurses and their differences based on demographic properties, and evaluate in which demographic properties compassion levels are higher.

### Methodology

The research is a methodological research, and performed during April-May 2016 time period. In the research, Compassion Scale developed by Pommier (2011) and validated to Turkish language on university students by Akdeniz and Deniz (2016) was applied to 236 nurses working at different hospitals in the West Side of Istanbul City. Scale has 24 items and six subscales (self-kindness, negligence, share awareness, isolation, mindfulness and disengagement) with five likert type structure.

### Results

Most of participants of the research were female, under 30 age, high school and university graduated, and single nurses (69,5%). According to gender, self-kindness, share awareness, mindfulness, disengagement and total compassion levels were higher in male participants, whereas negligence and isolation were higher in female participants. According to gender, only self-kindness level differences of participants were statistically significant ( $p < 0,05$ ). According to marital status, negligence levels were higher in married participants, and all other factors were higher in single participants. All factors have no statistical significant differences based on marital status ( $p > 0,05$ ). For age, self-kindness, share awareness and mindfulness levels were higher in the 41-50 aged group; isolation was higher in the 50 and over aged group. Self-kindness, share awareness and mindfulness share level differences were statistically significant ( $p < 0,05$ ). Based on education, self-kindness was higher in high school graduates; mindfulness was higher in doctorate graduates and other factors were higher in the university graduates. Only share awareness factor difference was significant based on education levels ( $p < 0,05$ ).



## Conclusion

According to results of the study, compassion levels of nurses differ based on age, and do not change based on other demographic parameters of the research.

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**Keywords:** Nursing, care, change, demographic properties.

## Background

Surgery nursing is a continuously changing occupation in parallel to developments in medicine area with new technologies and equipments. In addition, social norms and ethic rules are also changing, and change and openness to change concepts become more important in surgery nursing.

## Purpose

In this research, openness to change level of surgery nurses and surgery units were evaluated in views of surgery nurses, and differences in views based on demographic properties were examined.

## Methodology

In the research Openness to Change Scale developed by Smith and Hoy (2007) and translated and validated to Turkish language by Demirtaş (2012) was applied to 173 surgery nurses working in the West Side of Istanbul between April-May 2016. Principal Component Analysis and Lawshe method were used to validate the scale on surgery nurses. Cronbach Alpha level of the scale was 0,804. For normality test of variables, Kolmogorov Smirnov test was used. Mann Whitney-U test was used for two group differences; Kruskal Wallis Test was used for more than two group differences.

## Results

Most of the research sample were female (59,0%), under 30 age (54,9%) and married (58,4%) nurse. Female participants based on gender, 41-50 aged participants based on age, doctorate graduates based on education and single participants based on marital status were thought that their organization, management and occupational shares were openness to change. According to gender, management and environment openness to change levels differences were statistically significant ( $p < 0,05$ ). According to age and marital status, openness to change levels of nurses and environment levels were statistically significant ( $p < 0,05$ ). According to education, all sub scale level differences were statistically significant



( $p < 0,05$ ). In general, it was found that surgery nurses were open to change.

### Conclusion

Results of the research showed that perceiving of openness to change levels of surgery nurses were changing depend on their demographic properties. Especially openness to change levels of organization was found to be different for all demographic parameters in the research.

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## USE OF SIMULATION IN OPERATING ROOM NURSING; LITERATURE REVIEW

**EP184**

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*Department of Surgical Nursing, Ege University Faculty of Nursing, Izmir, Turkey*

**Aim;** To evaluate the studies related to use of simulation in operating room nursing and thereby to determine the results of studies and the needs of research in this field.

**Methods:** Database searches were carried out on PubMed, Scopus, Cochrane Library, Sinece Direct, ULAKBIM ([Turkish Academic Network and Information Center](#)) using the inclusion criteria of 'simulation', 'operating room', 'operating room nursing', 'nurse'. The articles were selected as full text and they were published in English and Turkish languages. Total 13 studies of these articles that meet the research's criteria have occurred the sample of the review.

**Results:** Literature review of the studies that evaluated simulation in operating room nursing have been identified to be effective education and patient safety after training with simulation and critical thinking, multidisciplinary communication.

**Conclusion:** There is a limited study of simulation in operating room nursing. It is recommended that experimental studies with a high level of proof should be conducted of simulation in operating room nursing.

**Key words:** simulation, operating room nursing, nurse.

### Biography

Burbank ŞAHİN KÖZE is a PhD student at Ege University from Turkey in Izmir. She is also research assistant at the same university in Surgical Nursing Department since 2009.

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## EP185

### EFFECTIVENESS OF EDUCATIONAL INTERVENTION ON KNOWLEDGE REGARDING CHRONIC KIDNEY DISEASE AMONG THE NURSES WORKING AT BPKIHS

**Koirala P, Mehta R S, Parjuli P, Mandal GN**

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**Introduction:** Chronic kidney disease (CKD) is a significant burden and is increasing every day in Nepal. Untreated chronic kidney disease can result in end stage renal disease and necessitate renal replacement therapy. Nurses have a significant role to help patient to understand CKD and care before and after renal replacement therapies.

**Abstract:** The objectives of the study are to assess the effectiveness of educational intervention on knowledge regarding chronic kidney disease among the nurses working at BPKIHS.

**Design & Methodology:** Pre-experimental one group pre-test post-test research design was adopted among twenty six nurses from 22<sup>nd</sup> December 2013 to 18<sup>th</sup> January 2014 for the study. Complete enumeration was done among the nurses. A self developed semi-structured questionnaire was used for collection of data. A validated educational package was used for educational interventions. Data were analyzed by using descriptive and inferential statistics.

**Result:** Among the respondents 42.30% were age group 22-23 years. More than one third (34.60%) of nurses had 19-24 months of work experience in nursing field. The overall mean knowledge score on pre-test was 67.65% and in post-test was 84.09%. The difference is found to be significant on knowledge regarding Anatomy and Physiology of kidney ( $P = 0.001$ ), Clinical Features ( $p = 0.001$ ), Diagnostic Investigations ( $p = 0.001$ ), Complications ( $P = 0.001$ ), and Nursing Management ( $p = 0.001$ ) of CKD. There was significant difference in the knowledge found on Hepatitis C, common infection in haemodialysis ( $P = 0.001$ ), Blood Pressure, monitored during erythropoietin therapy ( $P = 0.001$ ) and Constipation, side effect of Phosphate binding agent ( $P = 0.001$ ). There is also found significant difference on overall mean knowledge score ( $p = 0.001$ ) at 0.05 level of significance.

**Conclusion:** The study showed that educational intervention program increase the nurses' knowledge regarding CKD. Socio-demographic variables are not associated with gained knowledge score after educational intervention.

**Key Words:** Chronic Kidney Disease, Educational Intervention, Knowledge, Nurses

#### Biography

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Chief, College of Nursing

B.P. Koirala Institute of Health Sciences

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Biography:

At Present I am involved in teaching Certificate Nursing, B.Sc. Nursing and M. Sc Nursing students along with B.Sc. Radiology, B.Sc. in Laboratory Technology and B.Sc. OT at B.P. Koirala Institute of Health Sciences. At present I am the Coordinator of Post Graduate Nursing Programme (M.Sc. Nursing) and Head, Medical-Surgical Nursing Department

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## PLAY IT AGAIN! THE USE OF INNOVATIVE TEACHING IN THE OR TO FACILITATE EDUCATION

**EP186**

**Vikki Sheeran, Deng Passion, Ann Clarke, Geraldine Curran**  
*General Theatre, Sligo University Hospital*

Healthcare is complex and continually changing with new developments in the care we provide. This combined with a professional obligation to ensure evidence based practice leads us to look at ways of ensuring we are competent practitioners. We all work in environments where staff work different hours, rotating to different areas and a continuous throughput of new and learner staff sometimes mean staff may not be familiar with certain clinical situations or may have forgotten pathways in particular circumstances. When one considers that short term memory may last for 30 seconds and long term memory can last for just a matter of days it is difficult for practitioner to recall the many changes in healthcare they face daily. Therefore we considered different ways we could establish ways staff could access information regarding aspects of practice that they may need a reminder of to ensure best practice. We turned to technology and simulation.

Our world is increasingly a digital one. Digital technologies infiltrate every aspect of our lives, affecting how we communicate, the locating and providing of information, develop relationships, buy and sell goods and how we learn and teach. The majority of the world's population engage in some form of digital media. The use of the internet, mobile telephones, emailing, texting, tweeting and blogging in our careers, relationships and even our family lives is now the status quo. Younger learners grow up using mobile devices, games consoles and other electronic equipment for communication and entertainment. Meanwhile mature learners are likely to have internet access at home and to use technology at work. Therefore we decided that we must develop learning and teaching tactics that incorporates technology. In the operating department we are consistently faced with complex clinical situations and they are expected to respond with correct clinical decisions. Therefore it is imperative to ensure that what we learn is transferrable and can be applied in clinical practice.

The benefits of simulation is well recognised. Simulation was devised to encourage hands on participation in the learning process while allowing students to develop knowledge and acquire suitable psychomotor skills in a safe environment. Teamwork, peer learning, questioning and feedback are all reported positive features of simulation. Learners and educators suggest that simulation improves clinical performance.

Informal discussion highlighted aspects of care that practitioners would most like ongoing education on. We also had a limited budget and limited Information Technology (IT) resources. Following the pooling of ideas it was decided that the recording of scenarios being simulated and weekly teaching sessions on different topics and situations would be an effective tool for all staff to learn or refresh. We identified various personnel who were willing to teach and carry out scenarios using simulation. All staff were invited to attend the different teaching sessions with some taking part in the simulation. We found this to have double the benefit as well as video recording staff were also exposed to situations in a controlled environment. Topics covered using simulation include anaesthetic emergencies such as what to do for malignant hyperthermia, difficult airway, failure to intubate and inserting a tracheostomy tube. Other examples include local scrub up policy, safe site surgery and how to clean an endoscope correctly. Our plan for the future is to develop our own website for the Operating Department where staff can access information easily. In the meantime this simple collaborate approach has proven very effective in ensuring our work force is up to date thus ensuring the best care for our patients.



## EP187

### PLAY IT AGAIN! THE USE OF INNOVATIVE TEACHING IN THE OR TO FACILITATE EDUCATION.

**Vikki Sheeran, Deng Passion, Ann Clarke, Geraldine Curran**  
*General Theatre, Sligo University Hospital*

Healthcare is complex and continually changing with new developments in the care we provide. This combined with a professional obligation to ensure evidence based practice leads us to look at ways of ensuring we are competent practitioners. We all work in environments where staff work different hours, rotating to different areas and a continuous throughput of new and learner staff sometimes mean staff may not be familiar with certain clinical situations or may have forgotten pathways in particular circumstances. When one considers that short term memory may last for 30 seconds and long term memory can last for just a matter of days it is difficult for practitioner to recall the many changes in healthcare they face daily. Therefore we considered different ways we could establish ways staff could access information regarding aspects of practice that they may need a reminder of to ensure best practice. We turned to technology and simulation.

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## QUIROFORMA: YOUR SECURITY. MY RISK

**EP188**

**Uñón García. MJ<sup>1</sup> Parejo Aguilera.MC<sup>2</sup>**

<sup>1</sup> Operating Room Supervisor. Segovia's Healthcare Complex. Spain.

<sup>2</sup> Operating Room Nurse. QUIROforma coordinator Segovia's Healthcare Complex. Spain.

**Key words:** Students, nursery, operating room, learning virtual environment, patient safety, occupational risks.

In the need of giving our students proper training during their operating room scholarships, in relation to patient's and self security, we have elaborated two lessons as a part of the learning virtual environment we call QUIROforma.

Safe surgery saves lives, that's why the surgical verification listing, surgical instruments safety measures, radiological protection, unequivocal identification and blood transfusion are discussed in patient's security lesson aiming to reduce complications related with surgical procedures, encourage teamwork, safe anaesthetization, infection prevention and the right procedure in the right location and patient.

If you know it, you can prevent it. For best detailing we take a tour of occupational risks surgical team is exposed to in this specific environment all along a professional career. We focus on risks origins, damage they deal and preventive measures to minimize each one: work-related accidents, exposition to physical, chemical or biological agents and other risks leading to mental or physical fatigue. Knowing the individual protection teams and occupational health protocols will make the work life of our students safe.

The contents are explained in 16 videos with a 3 hours total duration. Inserted questions and two final tests evaluate pupils. Two chapters from Quiroforma2016 book describe these contents and bibliography. Available on paper and online, for students and for teaching nurses.

To raise Students awareness on operating room nursing responsibility on patient's and self safety is the pursued achievement, giving the proper knowledge to make it possible.

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# EP189

## RETROSPECTIVE OF THE EDUCATION OF OPERATING ROOM NURSES IN SLOVENIA

**Brdnik Bla**

**Introduction:** Parallel to the developments in the surgical field and the increasing importance of antisepsis and asepsis in the world, in the second half of the 1880s the need arose in operating rooms for appropriately qualified and educated nurses. Nurses, who would master the principles of asepsis and aseptic techniques, as well as take on other responsibilities in the operating room, such as the preparation of the patient, the operating room and the instruments etc. (1,2,3,4). Thus in the early 1880s the teaching contents of perioperative nursing became part of the basic education of nurses in the United States of America (5), while nursing students also started to more actively participate in the operating room (6). In 1889, perioperative nursing was recognized as the first special area of nursing at the John Hopkins Hospital (3,4). Thus operating room nurses were recognized as the first specialists in the area of nursing care (7).

**Aim:** The aim of this article is to describe the history of perioperative nursing in Slovenia, with the focus on the education of operating room nurses.

**Methods:** A descriptive method of work was used with a systematic review of Slovenian and foreign literature on the topic of education of operating room nurses. The articles were found with the help of electronic databases (Pubmed, ScienceDirect). A systematic review of the documentation from the archive of the Slovenian Operating Room Nurses Association was also completed, as well as an interview with the first formally educated Slovenian operating room nurses.

**Key words:** Perioperative nursing, History, Slovenia

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Preferred type of presentation: POSTER PRESENTATION

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## THE TRIPLE A FOLDER! ANAESTHETIC ALGORITHM ALERT

**EP190****Mc Neely Bernie***Bernie Mc Neely SSN General Theatre, Sligo University Hospital**Alma Judge Anaesthetic Registrar, Sligo University Hospital*

Anaesthetic emergencies are potentially life threatening and require skilled and knowledgeable practitioners to deal with promptly in order to ensure the safety and quality patient care. Even the most experienced clinicians can forget important steps in treatment pathways and the easily accessibility of an emergency manual (EM), like the quick reference handbook in an aircraft cockpit and its placement in all anaesthetising locations may improve performance, provide welcome support and promote crew resource management principles.

An audit was conducted among the doctors and nurses in the Operating department to collate information regarding anesthetic crisis guidelines. Questions the audit focused on included:

Have you knowledge of the anaesthetic emergency guidelines?

Do you think you would need the guidelines in an emergency?

Have you been in a situation where guidelines would have benefited the patient?

Where do you access the guidelines currently?

Preferred options for accessing the anaesthetic emergency guidelines

Guidelines staff would like to see included in an emergency folder

Would you feel confident reading out the guidelines to the team in an emergency?

Would a distinctive easily accessible folder be of benefit to you in accessing guidelines?

Where such a folder should be kept?

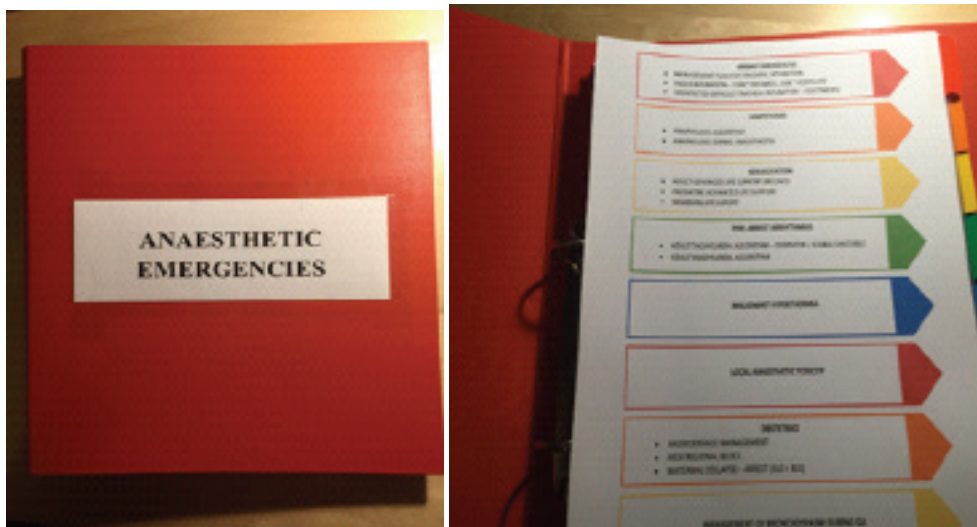
**Results:**

50% of the doctors surveyed and 80% of nurses were not familiar with most recent anaesthetic emergency guidelines. This is understandable given the different levels of training, the constant updating of guidelines and the rarity of many of the anaesthetic emergencies. 60 % of doctors and 65% of nurses were in emergency situations where guidelines would have been of benefit. Most doctors use their memory (secondly internet on phone) to access guidelines whilst the majority of nurses would use Qpulse followed by internet on computer. The majority of staff (90%) wanted a folder as their first choice when considering accessibility to the guidelines "a physical copy is extremely useful during critical events, even if there is an easily accessible electronic copy as well. Guidelines staff would like to see in a folder included major haemorrhage, anaphylaxis, PET, Obstetric haemorrhage, perioperative arrest, fluid requirements, malignant hyperthermia, drug dosages, latex allergy, sux apnoea, BCIS, laryngospasm, bronchospasm, amniotic fluid embolism, standard infusions, O2 supply failure and power supply failure. 98% of respondents said they would feel happy reading out the guidelines in an emergency situation. 100% of those surveyed said they feel it would be beneficial to have a clearly labelled & structured anaesthetic emergency manual with the most recent guidelines available in the bottom drawer of each anaesthetic machine

An emergency manual was designed and placed on each anaesthetic machine. It is clearly distinguishable and easily recognisable containing the latest guidelines for the different anaesthetic emergencies. The folders are bright red and clearly labelled with a detailed colour coded index.



EP



There is a need for standardised anesthetic EM's with ongoing local awareness.

**TOPIC D. LEADERSHIP/MANAGEMENT****EP191****KEYS TO SUCCESS: SCHEDULING BEST PRACTICES*****Kusler Jensen Jane***

Purpose of presentation: Surgeon access to the operating room is governed by the Scheduling and Block Management policies, procedures and guidelines. This access drives revenues, expenses and productivity of staffing. Do you know what does it take to have good access and be successful?

OR Managers are evaluated and charged to insure that access and staff productivity measures are met. This session will provide the OR Manager with critical elements in Scheduling and Block Management practices that represent best practices. It will provide one the understanding and insight into these key elements for managing a successful OR. As well as assisting you to insure that your OR had the resource capacity to "grow" to meet surgeon and patient demand.

Content: This presentation will include a review of best practices found in highly functioning ORs to drive the highly productive department.

**MANAGING PERIOPERATIVE LABOR PRODUCTIVITY****EP192*****Kusler Jensen Jane***

The purpose of this educational session is to review perioperative labor productivity standards and benchmarking with additional discussion on how to manage when executive leadership requests that all surgical cases be accommodated. This session will clarify the process and key assumptions for the budgeting process specific to labor management. The audience will develop an understanding of key financial concepts and how they integrate into daily practice, expand on key concepts, strategies, and leading practices that will enhance ability to manage labor resources. Core staffing patterns at budgeted procedure per activity volume and resulting worked hours per unit of volume (or other metrics as appropriate) will be reviewed.

This educational session materials will be provided through lecture, discussion, PowerPoint/visual tools, and a review of commonly utilized benchmarks.

The target audience will be OR leadership (Vice Presidents, Executives, Directors and Managers).

The insight gained will be a practical approach to balancing surgeon demands for additional operating room time against the perioperative labor budget with additional discussion on how to manage "up" to the "C-Suite".

Objectives:

- 1) Develop an understanding of key financial concepts, the budgeting process and how to integrate into daily practice
- 2) Expand key concepts, strategies, and leading practices that will enhance ability to manage resources
- 3) Share practice solutions and develop innovative approaches for responding to variations in volume / demand



## EP193

### MSC NURSES AS PROFESSIONAL DEVELOPMENT COORDINATORS: AN INGREDIENT IN QUALITY, PROFESSIONAL DEVELOPMENT AND PATIENT SAFETY?

*Hilde-Irén Liland<sup>1</sup>, Sylvin Thomassen<sup>1</sup>, Vigdis Moe<sup>1</sup> and Ranveig Lind<sup>1 2</sup>*

#### **Background**

The University Hospital of North Norway Surgery and Intensive Care Clinic has 380 nurses, including 32 specialist nurses, in three hospitals. The job descriptions and duties of the specialist nurses vary, even within the same field. In 2013, aiming at a more unified professional approach, the Clinic created a position for a Research and teaching nurse (RTN) with a PhD, and MSc nurses as professional development coordinators (PDC) in each field (20% clinical work).

#### **Purpose**

The purpose was to achieve a uniform structure for better coordination of professional development and enhance experience sharing and cross-disciplinary learning.

#### **Design**

RTN and PDC will prepare action plans based on the Clinic's priority areas.

Quality assurance of information flow, division of responsibilities and decision-making processes will be addressed in meetings between RTN, PDC and department heads. A similar meeting structure at section level has been established between PDC, specialist nurses and department nurses.

Evidence-based practice (EBP) is the common platform and working method for the three-year project. An annual plan for training and supervision will be prepared in cooperation with leaders.

#### **Results**

Leaders and specialist nurses attended 1-2 day courses in EBP.

The annual in-service conference for specialised nurses was improved, with a clearer profile, reflecting competence-building needs in different fields.

PDC and the quality advisor implemented a patient safety programme.

New job descriptions for specialist nurses have been created. PDC have conducted surveys resulting in recommendations and gradual implementation of new/changed practices.

#### **Discussion/conclusion**

The Clinic has established a consistent structure for professional development, strengthened by PDC across sections and disciplines. EBP as a common platform enhances the Clinic's profile and reduces the theory-practice gap. Quality assurance and improvement are in focus.

A well-structured system that prioritises professional development will ensure more competent staff and enhance treatment and patient safety.



## SATISFACTION SURVEY CATARACTS IN THE HOSPITAL MALVARROSA. 5 YEARS MANAGEMENT NURSE

**EP194****Key words**

cataracts, survey, perceived satisfaction, quality, management nurse

**Background**

Measuring patient satisfaction is a main indicator of quality of assistance processes as recognized by various health services. In Malvarrosa Hospital cataract surgery represented in 2008 about 40% of the major ambulatory surgery that was performed, being operated on more than 3.000 patients treated per year.

**Focus of interest****Leadership/Management.**

Perioperative/clinical practice

**Theoretical framework**

Until 2009, given the high volume of patients operated cataract it had not been able to undertake the task of measuring the perceived satisfaction of patients operated cataract. From this year, ophthalmologic team Hospital nursing collaboration with the team of ophthalmologists and Hospital Quality department designs a survey to determine the satisfaction of these patients and is responsible for managing all circuit delivery, collection and subsequent analysis of results. In a poster we collect the developments in these 5 years of the survey, its changes and its various utilities.

**Conclusions**

Satisfaction Survey Cataract has been a very useful and versatile instrument. Allows measurement of user satisfaction, is the engine of change for ophthalmology service by introducing proposals for improvement and provides health staff motivation through the quarterly feedback is performed.

**Implications for perioperative nursing**

Ophthalmological team Malvarrosa Hospital nursing is heavily involved in this program, having participated in the implementation of the survey and being the lead manager of its operation and working in one of the main indicators of the quality of cataract surgery.

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## EP195

### SOLVING CENTRAL OPERATING THEATRES STAFF CRISIS IN MASARYK HOSPITAL

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**Keywords:** staff crisis, work environment, education, systematization of job positions, benefits, extracurricular activities

#### **Aims:**

At our workplace - Central operating theatres (COT) - we tried to solve the shortage of nursing staff, which is currently a problem in most medical facilities in the Czech Republic and we also aimed at providing better working environment and conditions for current staff.

#### **Methods:**

We have focused particularly on problem areas of COT personnel management and improving corporate culture. Construction work and layout adjustment created a new room for trainees and students, equipped with anatomical images, scientific publications and records of surgical procedures for study purposes. We support further education of employees, three perioperative nurses are currently studying at universities and three others take part in post-secondary specialized study. We have started cooperation with the Faculty of Medical Studies, University of J.E. Purkyně (FMS UJEP) and the Nursing School (NS), students will have their practical training at COT. In cooperation with our management we have put vending machines and air conditioning units in day rooms for COT staff and thereby increased the comfort of employees. We have also managed to increase personal allowances and provided employees with benefits of rehabilitation (massage, sauna) for free. We organized the first National Conference of COT in May 2016, with the active participation of our perioperative nurses. Moreover, COT staff is organizing extracurricular activities such as benefit run and canoeing.

#### **Results:**

The result of our work is meeting the targets, including the current staff stabilization and fulfilment of systematization of job positions – five new perioperative nurses joined the COT from July 2015 to July 2016.

#### **Conclusions:**

Personnel management, based on the interest and care for current employees, can significantly influence staffing crisis at the workplace. The effort devoted to the systematic training of students of medical schools is equally important, including the organization of practical trainings in the workplace.



## STAFFING FOR PATIENTS IN THE PERIOPERATIVE SETTING-UK MODEL

**EP196**

***Mona Guckian Fisher***

*AfPP- President*

Staffing ratios are crucial to the overriding principles of any organisation to provide quality care, patient safety and staff welfare in the pressured perioperative setting. Investigations in the UK have revealed some unacceptable practices and system failures that have led to patient harm; and responsive and robust staffing ratios and resources feature heavily in recommendations for improvement. (Francis R QC 2013 **The Mid Staffordshire NHS Foundation Trust Public Enquiry**. [www.midstaffspublicinquiry.com](http://www.midstaffspublicinquiry.com)).

The systemic failures that have been highlighted are a constant reminder of how failing to act together in the best interest of the patient has consequences of such magnitude that they are extraordinarily shocking and a betrayal of what are our basic core values. Good governance and a robust risk management strategy should be utilised to support the calculation process and guide the responsibility for a duty of care to patients and staff. This staffing tool supports professionals and individuals to do so appropriately.



## EP197

### SURGICAL CARE THROUGH SOCIAL MEDIA

#### **AUTHORS:**

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*Journalist-Press and Media Advisor*

**Malliarou Maria RN, PhD**

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**Prezerakos Panagiotis, RN, PhD**

**Background:** Patients who have received or about to receive surgical care are definitely sharing, and searching for information on-line. There is a growing need for, and growing expectation of, between patients and care providers at every stage of the surgical care trajectory.

**Focus of interest:** Surgical care and the power of the patient

**Theoretical framework:** It is clear that many millions of people are regularly turning to Web sites for health and medical information. Instead of being a passive recipient in the asymmetrical doctor-patient relationship, the active patient seeks out additional health information. A variety of social forces have begun to shift the focus of surgical care from a practitioner-centered approach to one in which patients are encouraged and expected to play an active role in health decisions.

**Conclusions:** The information is no longer static, but alive and moving-weaving through networks of individuals and communities whether on- or offline. The power of the Internet is the power of the patient, who can now research treatments, compare physicians, and collaborate with doctors.

**Implications for perioperative nursing:** Social media can make all of the difference since patients are encouraged and expected to play an active role which means that care givers must be well-educated in order to provide quality surgical care.

**Key words:** surgical care, social media, operating room, operating suite

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## TEAM WORK IN BREAST SURGERY

**EP198****Glade Lissi***Co-author(s)***Topic:** Teamwork**Keywords:** Teamwork, efficiency, Participation, quality, skills, work environment**Presentation preference:** Oral presentation

Abstract text:

**Problem Description**

Anesthesia and surgery clinic will strengthen cooperation in breast surgery while developing a design that can be transferred to other specialties.

The project has four main areas:

- Efficiency
- Participation
- Quality / skills
- Work environment

**Problem Analysis**

The starting point is the assumption that create efficiencies, employee participation, the quality and working environment if we strengthen cooperation in the team.

The following themes are in play:

- Cooperation
- Team Competencies
- multidisciplinary approach
- physical framework
- Coordination, training development
- permanent teams
- Reduce overtime
- Patient Empowerment
- Resources and resource utilization
- Dynamic and flexible environment

**Troubleshooting**

The following decisions were taken by the project to be tested during the project:

Morning assembly in the wards where the team meets before the first operation. Today's program is reviewed with emphasis on the special needs of the patient. It may be special needs seating, isolation, and similar equipment

Competencies in the living room clarified example teaching the surgical nurse.

There is produced a form of function creep - who can perform specific tasks and what tasks can the whole team perform.

At the end of today's final patient must be for the entire team a feedback session, which will be made feedback on a specific topic that is decided at the morning meeting. It is important that the whole team is present and all involved should be active. Produced is a map where there are three points to be examined in the feedback process.

Every 14 days held board meetings. The team discussed cooperation within the themes of efficiency and planning, quality, teamwork and working environment.

During the project must be completed questionnaire to measure the process.



## EP199

### THE PERFECT RECOVERY ROOM

*Clodagh Clodagh*

The aim of our quality initiative in the recovery room is to achieve the “Perfect Recovery Room” by focusing on improvements and efficiencies and recognising and celebrating what we do well. Our objective was to develop and implement a quality initiative with strategies to:

Identify root cause of bottleneck

Increasing operational efficiencies

maintain high quality care

**Method** After discussions and brainstorming sessions, the recovery room staff and theatre managers identified the following internal and external barriers hindering recovery room processes: Miscommunication

Lack of quantitative data

Lack of understanding of the effect of theatre Holds

Lack of staff/optimal use of staff to meet volume and demand

Difficulty discharging patients to inpatient floors.

The recovery room team identified the recovery room process that were needed to achieve an efficient and effective quality recovery room, “The Perfect Recovery Room”.

The components of the “Perfect Recovery Room” were identified as:

Effective consistent team with appropriate numbers and skill mix.

Well organised recovery room

Timely arrival of the patient to recovery room

Handover from anaesthetist to recovery nurse

Discharge criteria and documentation

Timely arrival of ward nurse

Patient Handover to ward nurse

Each of these elements was examined and strategies for improvement of each were developed.

It was identified that all elements of our perfect recovery room were dependant on communication, collaboration and cooperation with the wider multidisciplinary team.

**Conclusion** As a result of this initiative we have documented marked improvements in the efficiencies of theatres on hold and have eliminated many of the causes of bottleneck of patient flow.



## A PROGRAM OF IMPROVING MANAGEMENT THE MEDICAL MATERIAL SUPPLY IN OPERATING ROOM

**EP200**

**Author:** Hsiao-Fen Huang<sup>1</sup>, Fun-Lan Huang<sup>2</sup>, Hui-lan Chen<sup>3</sup>, Ling-Tien Huang<sup>4</sup>

**Presenter:** Hsiao-Fen Huang

**Organization:**

<sup>1</sup>National Cheng Kung University Hospital, Nursing Department, Associated head nurse, Taiwan

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Medical material of operating room costs, accounting for 30-40 percent of hospital operating costs, and there fore the operating room medical material inventory management is an important issue. Hospital operating room to zoning, is divided into five regions, set up a medical station 2-3 case cart in every area, because medical material operating room used often have special needs to happen, so we It must be set higher than usual volume 2-3 more prepared, inventory management theory generally used in the industry is difficult to be applied to the operating room medical material management. The program of cooperation from the operating room and supply center for the collection and observe medical material and inventory management scenarios used in each district, will return to the operating room medical medical material supply center management, subjects will be phased-style operation by the medical material Supply Center Preparation out gradual cancellation districts case cart, in order to be able to effectively reduce the operating room inventory, reduce hospital costs medical material

## A PROGRAM OF IMPROVING MANAGEMENT THE MEDICAL MATERIAL SUPPLY IN OPERATING ROOM

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## EP201

### DEFINING THE REASONS TOWARD POSTPONEMENT AND DELAYING OF SURGERIES

**Hülya SAĞDIÇ SELÇUK\***, **Celaleddin TURAN\*\***, **Fatma SUSAM ÖZSAYIN\*\*\***, **Zehra GENÇEL EFE \*\*\*\***, **Doğu AHAD KARAKURT\*\*\*\*\***, **Melek ÖZPAZARCIOĞLU\*\*\*\*\***

*\*Izmir Katip Celebi University, Atatürk Training and Research Hospital, the Chief Nurse of the Central Operating Room*

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*\*\*\* Izmir Katip Celebi University, Atatürk Training and Research Hospital, the Head Supervisor Nurse of Healthcare Services*

*\*\*\*\* Izmir Katip Celebi University, Atatürk Training and Research Hospital, the Head of Healthcare Services*

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**Key Concepts:** Patient safety, postponement surgeries, delaying surgeries

**Introduction:** One of the most crucial criteria for patient satisfaction is that operations to be performed on time.

**Objective:** The aim of the research was to define the reasons of postponement of scheduled surgeries, and to take necessary precautions.

**Material and Method:** This research was a descriptive study. The study is being conducted according to data acquired from "Operating Room Daily Checklist" used in operating room unit in IKCUAEAH between the dates January 4, 2016 – June 15, 2016. 12.221 patients, whose surgeries were scheduled between the dates mentioned. The sample of the study was formed 2571 patients. The descriptive statistics will be shown as percentile + average. The Chi-Squared Test ( $X^2$  test) was applied in comparative studies. The necessary permissions were taken.

**Findings:** The rate of the patients whose surgeries were postponed is 22%. The patient-originated reasons of postponement got the highest score 52,8% (n: 1357). 37,8% (n: 973) of the patients did not show up on the surgery day. 1,76% (n: 45) of the reasons were originated from equipment failure. Insufficient time got the first rank with 28,2% (n: 725). Among the surgical clinics, PRC has the first rank with a number of the patients 21,50% (n: 576) whose surgeries were postponed.

**Discussion and Conclusions:** The operating rooms should be used in an efficient and productive way without making any concessions from patient safety. Procedures should be developed, training should be provided, changes should be made if necessary, which all are targeting to prevent case postponements in operating room, in order to ensure patient safety and to increase patient satisfaction.



## EMOTIONAL LEADERSHIP: A STUDY ON EMOTIONAL SKILLS EXPRESSED BY THE NURSING MANAGEMENT IN THE OPERATING ROOM

**EP202**

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### Introduction

The emotional leadership applied to nursing is a new topic in the Italian nursing literature, but of great interest internationally. There is a close correlation between nursing leaders with a well-developed emotional intelligence and nurses working well-being. Especially in the operating room you are required this knowledge to develop an optimum work.

### Aims of study

This study investigates knowledge on the emotional leadership and emotional skill in nurses with the aim of strengthening the capacity and skills of operating room nurses.

### Methodology

The study design was observational descriptive. From September 2015 to December 2015.

The survey was conducted using a questionnaire with closed questions administered to 23 operating room nurses of ASUR Marche area vasta 1. Before starting the study were required authorizations.

### Results

The analysis of data shows a great interest in the subject. 90% of the sample showed that it is essential for nurses, be aware and able to manage their own and others' emotions to generate wellbeing at work. Emotional competencies are considered important as a theoretical, technical and social to effective leadership in nursing.

Conclusion. This study is one of the first Italian study on the importance of the development of emotional intelligence in nursing leadership to improve wellbeing in the surgery room. The poll results should be confirmed by further studies. The emotional skills could be improved and developed in nursing education programs

**Key Words:** Emotional intelligence, nursing leadership, emotional competence, nursing management, nursing, emotion

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## EP203

### UNDERSTAND THE IMPACT OF OPERATING ROOM NURSES USE SURGICAL CARE RECORD INFORMATION SYSTEM OF THE CRITICAL SUCCESS FACTORS

**Chou Hsueh-hui**

**Organization(s):** National Cheng Kung University Hospital, Nursing Department, Head Nurse, Taiwan

The operation care recording work cannot be static, but catching up the world's footsteps. Only constructing an information platform which integrates all kinds of hand-writing recording can make workflow simple and promote care quality and effect, providing an integrated and effective care mode. Hospital expects having an assessment method to measure the information system quality performance after they cost huge funds and resources to construct the information system. Thus, this research is based on the successful information system model by DeLone and McLean(2003), taking quality facets and computer anxiety as variables to measure the effect of operation room nurses satisfaction of operation care recording information system, expecting users explain the reason of the satisfaction differences. Therefore, the main purpose of this paper is to investigate the factors and continuing effects of user satisfaction of operation care recording information system. The research investigated operation room registered nurses by using questionnaire survey. This paper studies a total of 110 questionnaires were issued, recovering valid questionnaires 102 shares and the rate of return was 92.7%. In terms of data analysis, we use SPSS and PLS (Partial least squares, PLS) 1.04 as the statistics software to get the descriptive statistical analysis, credibility, validity and hypothesis test. Use structural equation model to verify the causality of researching model. According to the research, we found 3 points: (1) system, information and service quality have significant positive impact on the system satisfaction; (2) computer anxiety does not have notable impact on the user satisfaction; (3) user satisfaction has positive impact on performance, presenting highly relevant. Therefore, results of the research can provide hospital implementing operation care recording information system to understand which factor may affect the user satisfaction and performance. Besides, we also expect the research can provide medical institution as decision and system function design consultation while promoting the operation care recording information system. This scale can also provide follow-up research scholars as an important reference and have a thoroughly investigation.



## TOPIC E. PATIENT SAFETY

EP204

## DISINFECTION AND STERILIZATION RELATED SITUATIONS IN OPERATION ROOMS POSING RISKS TO PATIENT SAFETY

**Ay Fatma**

Operation rooms are one of the most complex, risky environments where technologically well-advanced equipment are used, where operation techniques and methods established in the light of new and developed information are employed. Hospital infections and sterilized areas related issues in operation rooms are some of the situations posing risk to patient safety. In patients who went through surgical interventions, 14-17% all hospital-acquired infections are comprised of "Surgical Area Infections". Risky behaviors causing microorganisms to infect/spread in operation rooms, complications related to skin antiseptics, inadequacy and malfunctioning of sterilization and decontamination equipment, work overload, inefficiency in registration systems, wrong product choices in temperature-sensitive equipment sterilization/disinfection, lack of knowledge and attention among hospital staff, lack of communication, unsuitability of the architectural structure, utilization of technological products with no proven effectiveness for sterilization/disinfection, are among the situations which pose risks to patient safety in the sterilization and disinfection operation room. In preventing hospital infections determination of appropriate sterilization and disinfection methods, developing infection control procedures, risk management, providing adequate funds and efficient use of resources have great importance. As a result, protecting asepsis in operation rooms and ensuring maximum levels of sterilization is tremendously important for the surgery. Protecting patient safety in operation rooms are believed to; prevent surgical area infections, reduce complications, increase the quality of surgeries, reduce costs, thus contribute in offering quality healthcare services.



## EP205

### INTENSIVE CARE NURSES' LEVELS OF COMPLIANCE WITH ISOLATION PRECAUTIONS

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<sup>2</sup> Assistant Professor, Ph.D, R.N, Selcuk University, Faculty of Health Science, Nursing Department: Surgical Nursing, Konya, Turkey

**Background:** Nosocomial infections (NI) are one of the significant health issues in the world and in Turkey. They extend the duration of hospital stays and increase the costs of morbidity, mortality and treatment. While NI incidence is 5-10% throughout hospitals, this ratio is 20-25% in intensive care units (ICU) (1).

**Aim:** This study was conducted to determine intensive care nurses' levels of compliance with isolation precautions and prognostic factors for them.

**Method:** This descriptive study was carried out with 100 nurses working at a state hospital in Konya. The data were collected using a question form and the Compliance with Isolation Precautions Scale (CIPS). Kruskal Wallis, Mann-Whitney U test, t-test and Pearson correlation analysis were used in comparison of variables.

**Findings:** The mean age of participants in the study was 28.93±5.68. It was determined that of the nurses, 96% had received education on isolation precautions, and 91% thought their knowledge about isolation precautions was adequate. The nurses' mean score on the CIPS was 76.84±9.16. There was no difference between levels of compliance with isolation precautions with some variables (e.g. age, the ICU type, working time in ICU). However, the compliance levels of the nurses with bachelor's degree or higher educations and those whose knowledge of isolation precautions was adequate were higher.

**Conclusion:** The majority of the nurses had received education on isolation precautions, and their compliance levels with isolation precautions are satisfying.

**Implications of perioperative nursing:** ICUs are places where there is high risk of incidence of infections associated with health care. It is quite important for all medical staff to know and practice isolation precautions in order to lower the infection ratios in intensive care units. Evaluating the compliance levels of health care workers with isolation precautions may contribute to the development of educational programs.

**Keywords:** Intensive care unit, infection, isolation precautions, nursing

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## KNOWLEDGE LEVELS OF OPERATING ROOM NURSES ON THE PATIENT SAFETY DURING THE INTRAOPERATIVE PERIOD

**EP206**

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**Background:** This study aims to determine the knowledge level of the operating room nurses on the patient security during intraoperative period.

**Methods:** This descriptive study is implemented to 91 informed and whose verbal assents has been received operating room nurses working at state and public hospitals in the state of Afyonkarahisar. In this study questionnaire technique is used as data collection method, and this questionnaire consists of socio-demographic features form of the nurses and 24 articles in total regarding the statement of operating room nurses' knowledge levels on the patient safety during the intraoperative period. The more correct answers are given to the questions, it is regarded that the nurses have the higher knowledge level. In this study the data is evaluated via the software package SPSS for windows 20.00, also frequency and percentage distributions, arithmetic average and standard deviation values are figured in order to determine the opinions of participants. Besides, t test and variance analysis are utilized in order to reveal correlations among the variables.

**Results:** Among all the participants of the study; 84.7% are women, 49.5% are bachelor, 76.9% have graduated from a nursing department and the age average is  $32.34 \pm 7.02$  (min:19 max:50), more than 66% have been working at the occupation for more than 6 years and 90.1% have been working at the operating rooms. Knowledge level average of the workers on the patient safety during intraoperative period amounts to  $61.83 \pm 5.04$ . It is reached that the knowledge level average of the workers graduated from a nursing department ( $62.24 \pm 5.13$ ;  $p=0.002$ ) and have worked for more than 11 years at the occupation ( $63.03 \pm 5.04$ ;  $p=0.018$ ) is significantly high.

**Conclusion:** In consequence of the study, it is defined that the knowledge levels on the patient safety during the intraoperative period of operating room nurses working at operating rooms in the state of Afyonkarahisar are high and participants' knowledge levels increase along with the raise in the working hours.

**Key words:** operating room nurse, intraoperative period, patient safety

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## EP207

### MAINTAINING OF NORMOTHERMIA IN SURGICAL PATIENT

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Body temperature is regulated by the hypothalamic thermoregulatory centers with physical and chemical system. In normal conditions, thermoregulation is performed at a reaction range of 0.2°C. The hypothalamus, which is suppressed under anesthesia, has a response range of 4°C and can not respond to temperature changes in this range. A healthy person also has a body temperature of 36-37.7°C. These temperature values are accepted normothermic. The temperature in the center is 36.5-37°C, while in the periphery this temperature is lower than 2-4°C.

Maintaining of normothermia in the surgical patient; It contributes to maintaining homeostasis, preventing complications, accelerating healing, and reducing cost. Heating should be performed in surgical patient; one hour before anesthesia, 24 hours after surgery and after surgery, body temperature should be above 36°C. When body temperature 36 °C is reached, active heating must be terminated. If the patient is given intravenous fluid or blood products above 1000 cc, the temperatures should be increased to 37 °C. Washing fluids to be used in the patient should be heated to 38-40 °C. Body temperature should be measured from the lower part of the esophagus, or the tympanic temperature should be monitored every 15 minutes. Operating room temperature should be kept above 21 °C. The most important reason for the hypothermia, which is defined as the body temperature falling below 36 °C, is the disconnection of the thermoregulation system in the body due to anesthesia. Hypothermia can be prevented by active heating, although it causes many adverse effects such as surgical site infections and myocardial complications. Therefore, informing of health professionals about the side effects, prevention of hypothermia, and the heating methods used in maintaining of normothermia may help to increase the safety of the surgical patient.

**Key Words:** Hypothermia, heating, normothermia, perioperative period.

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## OPERATING ROOM NURSE SPECIALIST COMPETENCE IS REQUIRED TO ENSURE PATIENT SAFETY IN THE OPERATING ROOM

**EP208**

*von Vogelsang Ann-Christin*

**Background:** In Sweden, the professional title operating room nurse (OR nurse) is protected and may only be used by registered nurses who also has a postgraduate diploma in specialist OR nursing of 60 credits. This education ensures specific training and the ability to be responsible for OR nursing tasks. In Sweden there is a shortage of OR nurses. This deficiency results in a risk that care providers assign OR nursing tasks to other healthcare professionals, who lack formal education, necessary experience and skills according to Swedish regulations. Thereby the patient's rights to safe perioperative care during surgery are jeopardized.

**Aim:** To formulate a positioning statement to inform care providers of the specialist OR nurse full competence.

**Method:** A literature review of Swedish legal statutes and scientific articles were conducted by SEORNA's scientific committee on behalf of the SEORNA board. The material was deductive analyzed into nursing core competencies formulated by the Swedish Society of Nursing; Safe care; Person-centered care; Informatics; Collaboration in teams; Evidence-based care; Improvement knowledge.

**Results:** OR nurse competence is indispensable in the operating room in order to ensure patient safety during surgery. Safe care is ensured by the OR nurse through for instance infection control, surgical counts and correct handling of surgical specimens. OR nurses are responsible for documenting surgery-specific issues that directly affects patient safety. None of the team members in the surgical team are interchangeable without risking that communication becomes inexplicit and that patient safety is compromised. OR nurses' in-depth knowledge of perioperative nursing care, academic skills and an ethical approach in the perioperative context is needed for systematic improvements and to perform evidence-based perioperative care

**Implications for perioperative nursing:** This statement recognizes OR nurses specialist full competence and support them when their employers force them to train unskilled healthcare professionals in OR nursing tasks.

**Keywords:** Operating room nurse, specialist competence, patient safety



## PATIENT SAFETY AND THE AFFECTING FACTORS

EP209

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Patient safety is defined as prevention of possible errors and side effects that may take place during the delivery of health care services (WHO) or prevention of possible damages to patients (IOM) (1, 2). Patient safety has been a primary focus of health institutions over the world and is a pre-condition for the provision of a quality care. Numerous hidden or evident factors related to the system or individuals may be influencing patient safety (3). Ineffective written communication, heavy work burden, severity of patients' conditions, health status of personnel and problems existing at departments that provide medicines are known to be among the factors that affect patient safety (4).

Literature contains many studies on factors associated with patient safety. In the study of Rogers et al. (2004) on nurses' working-hours and patient safety, it was pointed out that those nurses working over 12 hours a day or 40 hours a week demonstrated a high error rate (5). In the study of Davada et al (2014); significantly higher level of burden was detected among those who worked 51 hours and over in a week. As burden and depersonalization increase; so does possibility to make medical errors and negligence, workers become less patient-centered, they demonstrate poor attention to patients due to fatigue and personal reasons and use of hospital-sources, personal knowledge and experiences by hospital personnel are negatively affected (6). The study of Westbrook et al. (2011) reported that wrong intravenous rate was the most frequently made error and as clinical experiences of nurses increased, error rate and error severity reduced (7).

As a result; design and maintenance of devices and equipments, educational levels and abilities of health care personnel, team work, work-conditions, planning and continuing of care process affect patient safety. These risk factors should be well defined and solved, patient safety practices at the institutions should be regularly assessed and patient safety culture should be established.

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**Key Words:** Patient safety, Risk factors, Nursing

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## PATIENT SAFETY IN INTRA OPERATIVE CURRENT NURSING SKILLS

**EP210****Angelo Sonia**

Patient safety is an issue that has assumed increasing importance, with the World Health Organization, resulting in concern and the adoption of simple measures of universal character.

In the operating room there is a high prevalence of adverse events, and safety of the surgical environment and maintenance functions performed by nurses in the perioperative period. It is considered the circulating nurse, a professional with specific tasks in promoting the safety of the patient and other professionals, defined as objectives: to identify the existence of a safety culture by circulating nurses of operating theater of a hospital; observe the procedures of circulating nurse during surgery; see if the circulating nurse meets the standards issued by the competent authorities for patient safety in the Operating Room; identify procedures or practices carried out by circulating nurses, which can cause damage to the patient; propose strategies on the performance of nurses who seek to make gains in the health of the patient.

We developed a quantitative, descriptive and correlational. Information was obtained through the application of two instruments, a questionnaire and a grid point. The sample, not probabilistic rational choice, was selected from the population of nurses (74) of the operating theater of a hospital; it consisted of 50 circulating nurses.

It was found that participants show an adequate knowledge about the existence of a safety culture in the Operating Room identifying aspects to improve, it was observed that most performed practices comply with the rules issued by the competent authorities; however they were recognized some weaknesses and gaps to change. Find solutions to overcome these weaknesses, adopting practices and procedures that promote improved safety and quality of care to the surgical patient are the commitment of circulating nurses.

**Keywords:** safety culture; Adverse events; operating room; Perioperative nursing; the circulating nurse skills

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## EP211

### PATIENT SAFETY IN SURGICAL CLINICS

*Rsch. Asst. Seda KARACAY YIKAR, Associate Prof. Evsen NAZIK*

Patient safety includes all the measures taken by health care providers and their employees to prevent harm to health care providers and is defined as “prevention or reduction of health care-related mistakes and damages caused by these mistakes”. Providing patient safety and prevention of medical errors at every stage of health care delivery are among the priorities of the health care system. The number of patients who die from medical malpractice is in the eighth reason for death, in front of deaths from traffic accidents, breast cancer and AIDS. The most common medical errors are surgical services and surgical intensive care for patients with surgical procedures. In this context, patients in surgical clinics are at high risk for medical errors and patient safety. Given the medical error rates, surgery followed by gynecology clinics are the areas where medical errors are most frequently detected.

Gynecology is the unit where both surgical area and complex diseases related to gynecological diseases are surgically treated. In developed countries, 50% of medical and technical errors occur in surgical clinics and can be reduced by safe surgical applications. When the adverse effects or negative consequences of health care delivery processes are examined, it is seen that most of the faults that constitute them are in a structure that can be avoided. Nurses are the profession members who hold the widest place in the health care team. Nurses need to quickly identify health problems that may or may not occur in the case of a patient. Due to the fact that unsafe care environments still exist, safe care environments and evidence-based care and effective training must be combined to provide safer care. It is believed that the provision of patient safety in surgical clinics will be possible by establishing appropriate safe conditions, having nurses sufficient knowledge skills in this regard and ensuring proper working conditions.

**Key words:** surgical nursing, patient safety, medical error



## PATIENT SAFETY IN THE OPERATING ROOM: THE IMPORTANCE OF SURGICAL COUNTING

**EP212**

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Operating rooms are surgical units in which adverse events can be occurred due to their complex structure, intensity and changeable conditions momentarily (1). Especially, forgetting tool or sponge in operating zone is one of the surgical errors comes from the first days of surgery to nowadays and takes first place in patient safety (2,3). Forgetting tool or materials in patient is a medical error seen frequently while it is avoidable. Although the incidence is not high, in case of forgetting foreign instruments, it is stated that personnel experienced fear and concern and do not report this as a medical error (5). The most often forgotten instruments in patient are sponge, surgical tools, retractor, needle and compress (3,5,6). Abdomen, pelvis, thorax and vagina are the zones in which tool and materials are forgotten (3,6,7,8). There are many reasons cause forgetting foreign instrument in patient. High body mass index, emergency surgery, lack of communication in surgical team and prolonged operation time are taken part among factors that increase the risk (3,5,8,9). Reoperation of patient to remove instrument (%69-83) causes many complications such as prolonged hospitalization (%30-59), infection or sepsis (%43), perforation, fistula or occlusion of intestine (%10-22) (7,8,10). Nowadays, to avoid forgetting foreign instrument in patient, although barcoding, enumeration or using with X-ray of sponges/compresses sponges/compresses are used, standart procedure is that counting every tool and material when it is taken in sterile field and at the end of the operation (4). This issue is important in terms of nurses because tool and materials are counted by sterile nurse. This article includes counting tool and material in the frame of operating room nurses' role and responsibilities.

**Key Words:** Forgotten foreign instrument, operating room, patient safety, nursing, medical error,

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## EP213

### PREVALENCE OF PRESSURE ULCERS IN PEDIATRIC SURGERY CLINICS: TURKEY SAMPLE

*Islamoglu Aysen*

#### Summary

**Aim:** This descriptive research was designed to determine prevalence of pressure ulcers in pediatric surgery clinics at Turkey

**Material Method:** Research sample was consisted of 141 patients who were inpatient in a training and research 17 May 2016. The data was collected in one day by point prevalence method. The data was collected by examination of skin integrity and of all patients. Newborn Braden Q Scale, Braden Q, Braden Q Scale for Predicting Pressure Ulcer Risk in Pediatric Patients was used for risk assessment. Data analysis was performed with SPSS for Windows 16.0. Statistical analysis was made by number, percentage.

**Results:** 54 of all patients ( n:141, F/M: 84/57 ) included in this study were between 2-5 years. 72.3% cases hospitalized in pediatric surgery unit. Mean hospitalization duration was  $9,84 \pm 1,7$  days . 138 patients went under initial examination and only 3 cases were diagnosed as the first degree of pressure ulcer. In last 24 hours 85,1% patients were examined and 16,3 % were applied therapy to decrease the pressure.

#### Conclusion:

Related 9 institutions results pediatric surgery clinics pressure ulcer prevalence were % 2.1.

In this results shown that one of the nursing sensitive quality criteria of pressure ulcers not big problem in pediatric surgery clinics in Turkey.

**Key words:** Pressure ulcers; point prevalence; nursing; pediatric surgery



## TECHNOLOGY USE TO PREVENT PRESSURE ULCER

**EP214**

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Pressure ulcer is ischemia, cell death and tissue necrosis occurred due to continuous pressure on any part of body. Although the etiology and pathology of pressure ulcers, prevention, early recognition and treatment methods are known, pressure ulcers are currently important problem in surgery (1). It is stated that the incidence of pressure ulcer are ranged between 2.7% and 29%. In intensive care units, it is about 33% (2). International guidelines focus on evidence-based recommendations to prevent ulcers. Repositioning the patient is an essential implementation (3). But the most effective repositioning protocol is not known. Using support surfaces, elevation of heel and preventing from medical devices are other implementations (4). Using technology helps to prevent pressure ulcer. So some technological devices were developed. One of these is pressure mapping technology. This device is used to assist identifying the magnitude of body pressure points. The system consists of a pressure-sensing mat and a control unit that provides digital imaging of pressures. The mat is placed over a mattress and under any standart bed sheet. It has sensors to measure levels of pressure between 0 and 180 mmHg. This mapping system retrieves data from sensors and transfers it to the system control unit. Red signifies high pressures and blue shows low pressures. By using this technology, nurse can understand the pressure regions and rotate the patient (5). It is stated that a pressure ulcer developed in 0.3% of patients in the continuous bedside pressure mapping group while it was 5% in patients without this mapping system. Nurses have an important role to prevent pressure ulcer. But sometimes, detecting the pressure areas may be difficult. To solve this problem, technology should be corporated to nursing care.

**Key Words:** Nurse, pressure, technology, ulcer

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## EP215

### USED SAFE ENDOTRACHEAL TUBE FIXED METHODS IN INTENSIVE CARE UNIT

**Tuğba Çam, Gülay Altun Uğraş**

**Background:** Intensive care units (ICU) are the care centers where interdisciplinary team work is essential. In ICU there are lots of lifesaver technological tools for the purpose of utilizing patients who are living under threat (1). Artificial air way is providing with endotracheal tube (ET) that is a tool orally or nasally inserted to patients who can not do he/her own breathing in ICU (2). In ICU for the ET fixation there are two methods that are commercial and non-commercial. Non-commercial methods include adhesive tapes and gauze bandage; in the commercial method, tube holders can be used to enable ET to move in the mouth (3). Prevention of ET fixation and movement are important nursing practices in intubated patients. Complications and unplanned extubations are fatal and undesirable for critically ill patients (4,5). It is important to choose safe ET detection methods to reduce these conditions.

**Aim:** The aim of this review, together with the methods used to fixed the endotracheal tube to review the advantages and disadvantages of this methods.

**Methodology:** In this review, the effectiveness of adhesive tape and tube holder methods which are used to fixation ET in patients are investigated through electronic databases and researches with full text.

**Results:** In fixation ET in intensive care units, studies comparing the use of adhesive tape with tube holders are located in the literature. According to these studies, tube holders reduce undesired extubation (5,6) and endotracheal tube movement (6,7).

Effect of pressure wound development is also another point in comparison of two methods. The risk of pressure injury in the mouth, lips, tongue, and oral mucosa due to ET is high in long-term intubated patients in ICU (4,8). Compared to the adhesive tape, the ET holder allows the endotracheal tube of patients to be moved safely within the mouth and given a different position without extubation (3,4,9). So, there is no pressure in the tissues under the ET and the risk of pressure injury development decreases (4,9). As well as when adhesive tape is using for ET fixation, it adheres to the skin and leads to damage due to friction during the removal (10,11). It is recommended to use tube holders instead of adhesive tape to protect skin integrity in cellulitis, burns, allergic, bearded patients (12) and junctional epidermolysis in bullied patients (13).

It is also reported that the use of tube holders in endotracheal tube fixation is less likely to cause infection than adhesive tape. It is expressed that the result of contamination with the oral secretions of the adhesive tape prepares an environment for the proliferation of pathogenic microorganisms and increases risk of infection (9).

**Conclusion:** It has been shown that the tube holder used for ET causes less undesirable situations such as unplanned extubation or tube movement, pressure injury and infection compare to adhesive tape in ICU. When selecting a safe fixing method many factors must be taken into consideration like materials existing in ICU, the characteristics of the patient, the possibility of complications, cost of the method used.

**Implications of perioperative nursing:** While intensive care nurses giving care to intubated patients, they have to select fixing method that has less adverse effects considering patient safety.

**KeyWords:** Intensive care unit, fixing endotracheal tube, adhesive tape, tube holder, nurse.

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## AN IMPORTANT DANGER IN THE SAFETY OF PREGNANT PATIENT AND EMPLOYEE; RADIATION EXPOSURE

**EP216**

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The aim of the study is to produce and share the precautions that should be taken to protect pregnant patients and health care workers from exposure to insecure levels of radiation. Many health institutions have indicated measures to be taken in these circumstances. In addition, governments have done some legal arrangements in this regard. The main objective of these measures is to keep at the lowest and reasonable the risks of ionic radiation levels possible.

Radiation exposure of the abdomen and pelvis of women been pregnant or likely to be pregnant compose an increased risk for the fetus and can lead to childhood cancers. Nurses can minimize these risks with some safety precautions. In addition, the nurses should be aware of the risks of exposure to radiation during pregnancy and evaluate the radiation exposure of women during pre-pregnancy care.

Healthcare workers may be exposed to radiological, fluoroscopic procedures as well as radiation from the patient. Pregnant health workers or they have at risk of pregnancy aware of these risks and take the necessary precautions. In this context, it is essential that institutional managers ensure that patient rooms, where potential radiation hazards are present, are fitted with warning signs indicating that there is a potential radiation hazard to enter the operation rooms and the operating rooms where radiological instruments are used. The pregnant health worker must know that the occupational exposure dose which the embryo or fetus may be exposed during pregnancy should not exceed 0.5 REM and take the necessary safety precautions for the baby. The deep dose (lowest) equivalent should be used for the baby of the pregnant healthcare worker. The dosimeter should be worn under the apron shield. Thus, radiation needs to pass the several layers of tissue before reaching the fetus. Therefore, doses read in dosimeters do not reflect the amount of radiation reaching the fetus.

As a result, radiation exposure composes a significant risk for pregnant patients in hospital to benefit from diagnosis and treatment services and especially for health personnel working on radiation and fluoroscopic procedures. For this reason, it is necessary to use glasses with walls, control cabinets, doors, rigid trolleys, transparent barriers, flexible aprons, vests, skirts, thyroid shields, gloves and side shields to ensure patient and employee safety. In addition, managers need to educate health workers in these areas about how to protect themselves. For patient safety, it may be appropriate to use warning signs remarkably and to use additional noticeable warning systems.

**Keywords:** radiation exposure, safety, patient, pregnant



## EP217

### CLEAN AND PRESENT DANGER! ARE YOU CONFIDENT THAT YOUR ENDOSCOPES ARE BEING REPROCESSED ACCORDING TO BEST PRACTICE?

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The poster will outline international and national recommendations to guide practice, the correct cleaning process, testing that should be undertaken to ensure the endoscope is fit for use, training that should be carried out and essential documentation. The overall aim is to ensure the endoscopic patient receives safe and quality care.

Flexible endoscopes become severely contaminated with bioburden (eg, blood, body fluids, and other potentially infectious materials) during use. Within busy clinical areas, the same device may be used multiple times within an eight to 12-hour period. The complexity of these devices with their multiple ports and channels presents a challenge for personnel tasked with cleaning and reprocessing the instruments. Recent evidence highlight the infection risks of endoscopic equipment that is improperly reprocessed. The increase in drug-resistant pathogens, such as carbapenem-resistant Enterobacteriaceae (CRE), further emphasises the importance of ensuring thorough and complete reprocessing. Current standards of practice for endoscope reprocessing are vulnerable to human error, including inadequate, delayed, or incomplete reprocessing. Personnel and administrators should be aware of these challenges and take steps to ensure that all endoscopic instruments are reprocessed according to current standards of practice (Edmiston and Spenser, 2014).

Since 2013 in a two year period reported occurrences of possible CRE cross-contamination involving a total of 144 patients, of which 41 people eventually became culture positive for CRE. Two separate bronchoscopes were implicated in the outbreak, and flushing solution from the channels of each bronchoscope revealed heavy contamination (1,000 colony-forming units per millilitre).

Similarly Bourdon (2015) stated that Inadequate reprocessing of flexible endoscopes remains a major patient safety concern and is among the top 10 health technology hazards for 2015. In recent years, a series of bacterial outbreaks associated with contaminated endoscopes has called attention to the problematic and complex nature of flexible endoscope reprocessing. A general lack of knowledge and familiarity of flexible endoscopes among sterile processing personnel is often to blame for reprocessing failures.

The authors propose that this poster will inform practice.

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## COMPARISON OF THE DEAF POPULATION WHO UNDERWEAR COCHLEAR IMPLANT SURGERY VERSUS THE DEAF POPULATION WITH HEARING AIDS IN TERMS OF ACADEMIC ACHIEVEMENT, SOCIAL BENEFIT AND ECONOMIC EVALUATION

**EP218**

***Bineashvilli Marina***

### **Background/Aim**

Deafness in children is of great significance in all areas of development, including verbal, cognitive, emotional and social. A deaf person will encounter difficulties in his life in these terms. This person, if treated, can get the ability to hear and becomes a different person with a better future. Deafness, which is sensorineural, is treated by hearing aids or cochlear implant.

Many studies around the world have shown that the cochlear implant contributes greatly to the deaf person. In our study we wanted to compare the cochlear implant to the hearing aid from all kind of domains, both in social and personal successes, as well as economic evaluation. This study is the first of its kind in Israel.

### **Methods**

131 subjects divided into two groups, 59 subjects using hearing aids and 72 subjects using cochlear implant. In both groups the subjects got questionnaires to fill out about their self esteem, school, university, work, military, work and personal life.

### **Results**

The overall results from this study showed that all subjects with cochlear implants had better results than the subjects with hearing aids. Also, we can see that the social integration of patients who use cochlear implant is better than that of the participants with hearing aids, as well as integration into the family, the results of which were statistically significant.

We didn't see significant results in terms of work, military or marriage, but the most important result of this study is the way that the subjects estimate their quality of life in terms of hearing. The main question of this study was whether patients with cochlear implant appreciate their hearing quality of life in terms of higher level than patients with hearing aids. This study showed us that the score of the cochlear implant group is significantly higher than the score of the hearing aid group.

The economic evaluation showed us that the Incremental cost utility ratio- ICUR is between 44,416 – 53,069 NIS. These calculations indicate that in order to raise the welfare of a child by one point of quality life analog scale we need 44,416 (none discounted) or 53,069 (discounted) NIS.

### **Conclusions**

The cochlear implant contributes a lot to the state of the person using it, compared to those using hearing aids. We saw the significant results from one group compared to the other. From this study we can say that Israel is no different than the rest of the world, and that more studies should be made on this important subject.

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## EP219

### DISINFECTION AND STERILIZATION RELATED SITUATIONS IN OPERATION ROOMS POSING RISKS TO PATIENT SAFETY

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Since healthcare services offered at hospitals involve complex services possessing likelihood of “causing death or injury”, it is considered being a “High Risk Sector”.<sup>1</sup> When offering healthcare services, most important two issues that should be taken into consideration are “Medical errors” and “Quality”.<sup>1</sup> Patient safety cannot be detached from maintaining quality and sustainability in healthcare institutions. Operation rooms are one of the most complex, risky environments where technologically well-advanced equipment are used, where operation techniques and methods established in the light of new and developed information are employed. It has utmost importance for the patient safety to protect operation rooms from asepsis and ensure maximum level of sterilization.<sup>2-6</sup> Hospital infections and sterilized areas related issues in operation rooms are some of the situations posing risk to patient safety. In patients who went through surgical interventions, 14-17% all hospital-acquired infections are comprised of “Surgical Area Infections”.<sup>7</sup> Risky behaviors causing microorganisms to infect/spread in operation rooms, complications related to skin antiseptics, inadequacy and malfunctioning of sterilization and decontamination equipment, work overload, inefficiency in registration systems, wrong product choices in temperature-sensitive equipment sterilization/disinfection, lack of knowledge and attention among hospital staff, lack of communication, unsuitability of the architectural structure, utilization of technological products with no proven effectiveness for sterilization/disinfection, are among the situations which pose risks to patient safety in the sterilization and disinfection operation room.<sup>2-7</sup> In preventing hospital infections determination of appropriate sterilization and disinfection methods, developing infection control procedures, risk management, providing adequate funds and efficient use of resources have great importance. As a result, protecting asepsis in operation rooms and ensuring maximum levels of sterilization is tremendously important for the surgery. Protecting patient safety in operation rooms are believed to; prevent surgical area infections, reduce complications, increase the quality of surgeries, reduce costs, thus contribute in offering quality healthcare services.

**Key Words:** Lack of knowledge, surgical site infection, skin antiseptic, nanotechnology, medical errors, quality

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**EXAMINATION OF SOURCE OPERATING ROOM MEDICAL ERRORS NEWS PUBLISHED IN NEWSPAPER****EP220****Aylin AYDIN SAYILAN\*, İrem Yağmur TAYLAN\****İletişim/ Correspondence: Aylin AYDIN SAYILAN Adresses: Kırklareli University School of Nursing Department**Telephone: (90) 507 9404527, E-mail: [aylinay\\_85@msn.com](mailto:aylinay_85@msn.com)*

**Objective:** The aim of this study was to evaluate the operating sourced medical errors news published in newspapers.

Research "operating sourced medical errors" as defined by the wrong organ-threatening patient safety, wrong patient, wrong surgery, foreign bodies forgotten, medication errors, health care risks associated infections, falls, surgical procedures and environment due to burns, high risk the relationship between factors such as wounds and determined not to push the operating personnel of the patients were investigated.

**Methods:** Research, January - March 2016 was made retrospectively descriptive. Studies published between 1/1/2014 and 1/1/2016 history, newspaper circulation has been examined 6, which can be accessed via the Internet to over 100,000, and printing. This number of Situated operating sourced medical errors news of the newspaper "operating sourced medical errors," abdominal body in mind "and" wrong-site surgery "and" patient drop in the operating room "was screened using keywords such. This research, which news sources in Turkey and "the operating sourced medical errors" were included 116 related news. Data were collected through a data extraction tool developed to record information about medical errors in the news. Data were evaluated by the number and percent.

**Results:** The number of surveyed newspapers 116 news in the western foreign bodies forgotten surgical environment due to burns, wrong-site surgery - removal of the wrong organ, was referred to the operating room induced medical errors such as lowering the patient on the operating room. 40.91% of the foreign body is located in the western forgotten medical errors in this report, to be on the wrong side of the wrong organs SURGERY 26.4% of the burns depends on the environment of 20,47's%, it is determined that there is a decline of 14.2% . News had occurred in big cities.

The investigations covered by the news; The inadequate number of qualified health professionals, fatigue



and lack of attention, lack of operating factors such as the physical conditions were also found to increase the percentage of error.

**Conclusion:** This study of medical errors published in the newspaper was found to be more related forgetfulness and carelessness. In the planning of the health care protection of patient safety in the operating room and the presentation of this information to be taken into consideration and are thought to contribute to the development.

## EP221 FOR PATIENT'S SAFETY IN OPERATING ROOM - DO YOU KNOW, HOW THESE REALLY COME TRUE IN OUR OPERATING ROOM: SURGICAL HAND PREPARATION AND ANTIBIOTIC PROPHYLAXIS?

**Lauritsalo Maija**

The aim of this paper is to focus the level of surgical hand preparation among surgeons and scrub nurses when using alcohol-based hand rub (ABHR) and the timing of antibiotic prophylaxis in operating room (OR). These two topics are important issues of infection control and prevention as well as a part of the patient safety in OR.

Patient safety improvements demand actions in environmental safety and risk management, including infection control. In Central Hospital of central Finland surgical hand preparation and timing of antibiotic prophylaxis were taken on inspection in OR.

Hand rub must be performed as many times as needed applying more alcohol-based disinfectant to keep hands wet until at least one minute with Dilutus<sup>®</sup> -disinfectant which is commonly used in OR's in Finland. Attention was also paid to right technique: rubbing forearms up to elbows.

WHO Surgical Safety Checklist is used and antibiotic prophylaxis shall be noticed, if needed and given. Surgeons was interested in to know, how did the timing with antibiotic prophylaxis actualize before surgery. Periodically inspection of prophylaxis antibiotic was advocated by infection control nurse from patient's documents. Registered pre-surgery prescription of antibiotic was also searched.

Now surgical hand hygiene compliance is getting better. Monthly continuous observations by OR's own nurses have improved ABHR and been noticed to be an effect method. The OR personnel are forced to pay attention to their own hand hygiene accomplishment and behaviour by getting frequent feedback. The antibiotic prophylaxis has significantly refined the correct timing better. By paying attention to medication time, few developable matters was found and enhanced.

**Keywords:** Surgical hand preparation, observation, antibiotic prophylaxis

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## IMPROVING THE QUALITY OF HANDOVER COMMUNICATION IN A PAEDIATRIC RECOVERY ROOM

**EP222**

**Wogan Clodagh**

Our Recovery room in the Our lady's Children's Hospital is a busy environment with plenty of distractions and has a high turnover of patients. On average 800 patients per month are recovered in our recovery room and many of high acuity. It is an environment that can be conducive to miscommunication.

Recovery room nurses in our recovery room often reported:

- Full attention not been given to the handover report with many interruptions
- Repeat of information occurring regularly
- Not having opportunities to ask questions or clarify details
- Regularly getting incomplete information and/or documentation resulting in inefficiencies from time wasted searching in charts for information, phoning theatres or having to visit theatres.
- On some occasions this could have led to an adverse event

### **Method**

An audit tool was created to collect data to evaluate the current handover state and the quality of current anaesthetic and nurse handover to nurses in the recovery room. In June 2015 data was collected from one hundred handovers. The results of the audit indicated clear areas for improvement whilst also highlighting what is working well.

A communication tool using the ISBARR template was developed. Education sessions with all peri-operative nurses and with anaesthetist working in the theatre department were conducted.

Re-audit of the handover process was carried out over a two-week period to assess improvements.

The communication tool provided a standardized approach to anaesthetist/ nurses handover to the recovery room nurse.

### **Conclusion**

Utilisation of a standard ISBARR handover tool in the paediatric recovery room in Our Lady's Children's hospital improved communication after its implementation.



## EP223

### ISBAR- STRUCTURED POSTOPERATIVE HANDOVER

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#### Background

The postoperative handover occurs in a complex and dynamic context. Frequent interruptions, high activity and time pressure can cause loss of critical information, in a situation where the patient is particularly vulnerable and exposed to complications. Gaps in communication can cause discontinuity of care, inappropriate treatment, and possible patient harm. World Health Organization (WHO) recommends using a standardized communicative framework, like SBAR (Situation-Background-Assessment-Recommendation) for safe and effective communication (1). SBAR is an easy-to-remember, specific tool useful for framing any conversation, especially critical ones, requiring a clinician's immediate attention and action. It provides a predictable structure, and involves clarifying the problem, then giving pertinent background information, followed by an assessment of the situation, and a recommendation for further care and treatment. SBAR and the variant ISBAR (Identification-Situation-Background-Assessment-Recommendation) are widely used internationally.

The Department of Orthopedic and Neurosurgery OR, OUS Rikshospitalet, wanted to improve the postoperative handover as a part of the patient safety program. A multidisciplinary project group composed of OR nurses and nurse anesthetist was established to implement a standard for postoperative handover. We chose ISBAR because of the hospital's focus on patient identification. The project group developed an ISBAR checklist to utilize in handovers and the checklist was design as a pocket card easy-to-use. The content in the card is based on relevant research and clinical expertise on which information that is essential and necessary to provide safe care. Prior to implementation all the nurse anesthetist and OR nurses went through an ISBAR introduction and workshop. The ISBAR tool was implemented in June 2014.

#### Purpose

Implement ISBAR communication tool to ensure that critical and relevant patient information are transferred from the surgical team to the nurse in the recovery unit.

#### Method

This is a quality improvement project, investigating the postoperative handover process before (baseline) and 3, 6 and 12 months after implementation of the ISBAR communication tool. 20 postoperative handovers were observed at each measurement. We used a pre-formulated checklist consisted of 32 points based on the ISBAR checklist. Maximum score was 64, 2 points for reported/not relevant and 0 points by not reported. The same checklist was used in all observations. Data were analyzed using SPC (Statistical Process Control). The study is anonymous, and approved by the hospital authority of Oslo University Hospital with responsibility for privacy protection.

#### Result:

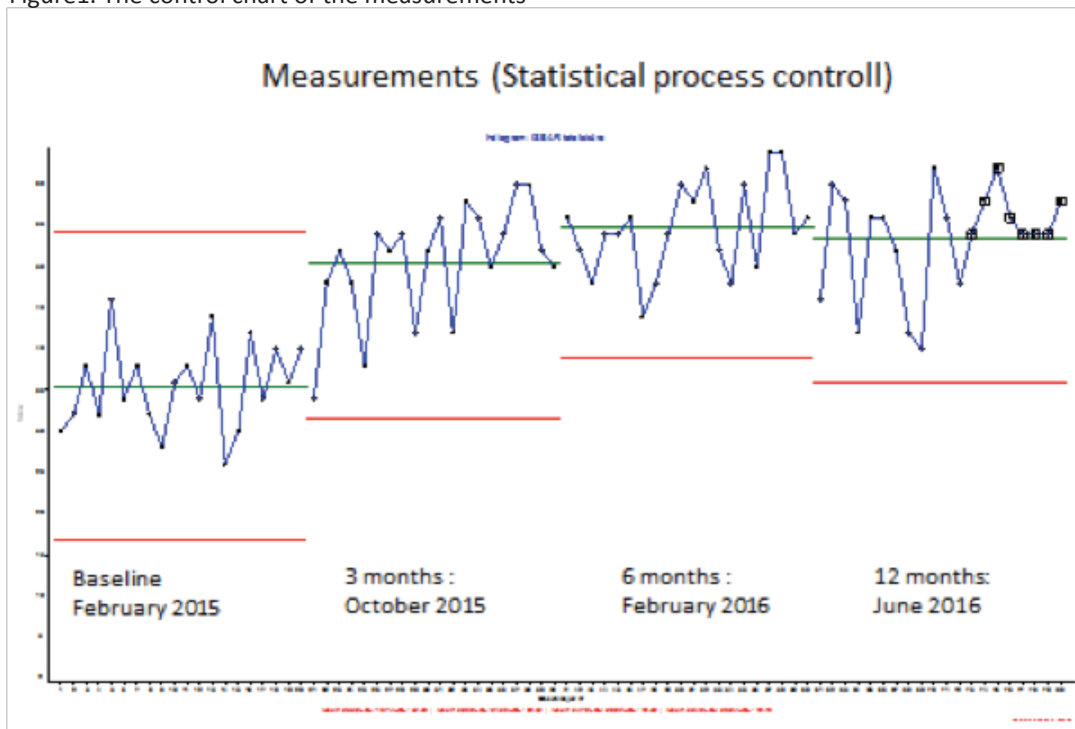
At baseline, before the implementation of the ISBAR tool, there was an average score of 35.5. The control chart below shows that there is an improvement. 3, 6 and 12 months after the implementation, the mean score of measurements were respectively 50.6, 54.7 and 53.4. We found higher scores when ISBAR checklist was used.

#### Conclusion:

Implementing the ISBAR communication tool was associated with improvement in communication between the surgical team and the nurse in the recovery unit in transfer of essential patient information.



Figure1. The control chart of the measurements



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## EP224 NEVER EVENTS & THE XY FACTOR

*Guckian Fisher Mona*

One of the most challenging and dangerous areas of healthcare delivery is the operating theatre. Despite major shifts in focus, improvements in technology and practice, we still make catastrophic errors every day in ORs throughout the world. The UK has its own statistics which support this. The common denominator worldwide are the people, hence the XY factor.

In the UK we have spent millions of pounds on enquiries and investigations into the causes of inadvertent harms to patients in our care after the events have happened. We spend additional millions in litigation and this is increasing, as indeed are the incidents reported to the UK national data base.

There appears to be disproportionate focus and little emphasis placed on the learning that can be achieved from 'near miss' events and general patient complaints or satisfaction data, as a robust strategy to effect safe outcomes for perioperative patients.

We need to explore this whole area in much more detail and gain greater awareness and understanding of the human factors dynamics and the potential through education and awareness to exert major changes in practice which promote patient safety and staff wellbeing.

Mona Guckian Fisher

President-Association for Perioperative Practice (AfPP)-Jan 2015-Jan 2017.

## EP225 PROCESS IMPROVEMENT ACTIVITIES STEREOTACTIC SURGERY

*Asan Medical Center : Sun Kyung Jung*

### 1. overview of the problem

Stereotactic surgery is a minimally invasive form of surgical intervention which makes use of a three-dimensional coordinate system to locate small targets inside the body and to perform on them some action such as ablation, biopsy, lesion, injection, stimulation, implantation, radiosurgery (SRS), etc. Stereotactic brain surgery is performed with a computer system that integrates previous imaging, usually a special MRI or CT performed before the surgery.

During the all process for the surgery, patients are immobile because they may place a frame that attaches to patient's scalp to keep patient from moving during the therapy. Depending on the inspection and conditions, various results can occur. With such a complex system, it can be a long period for the patient resulting in the frame being heavy for the patient. With surgery taking a long time, the patient will feel some pain and become anxious, it will feel long for the staff sometime make it feel like additional personnel is needed sometimes.

### 2. The purpose activities

We shorten the wait time by integrating the management Stereotactic surgery process, and look forward to a safe and efficient patient management system implementation.

- 1) Wait period after MRI before surgery
- 2) variable surgery schedule
- 3) Employee Satisfaction

### 3. Data collection period

Pre improvement activities : 2014. 10. 01 ~ 2015. 03. 24



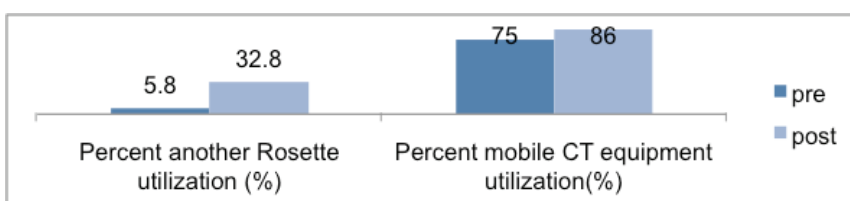
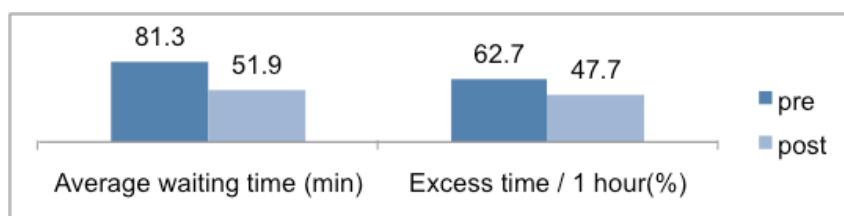
Post improvement activities : 2015. 03.25 ~ 2015. 10. 23

#### 4. Improvement activities

- 1) Fixed frame in a Gamma Knife room
- 2) Arrange MRI recording time for the situation of the OR
- 3) Use a vacancy another Rosette
- 4) In skilled medical personnel(SA) during the other Rosette
- 5) Advantage checklist for the preparing surgery
- 6) Use a mobile CT equipment

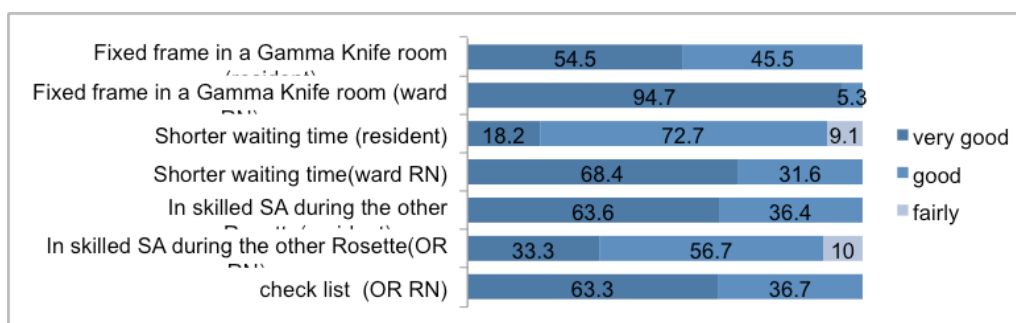
#### 5. Activities effects

- 1) Waiting time for the surgery

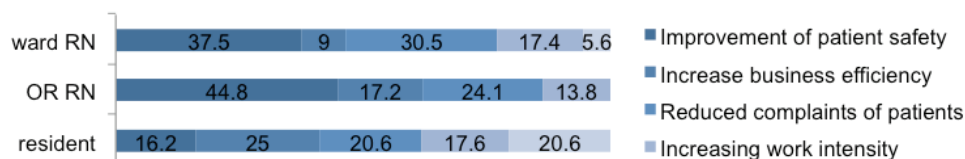


- 2) resource use ratio

- 3) Employee satisfaction



#### 4) Improvement effects felt by medical staff



#### 6. Conclusions and Recommendations

This study was a positive results in improved patient safety, increase operational efficiency, deduce working stress, patients reduce complaints.



## EP226

### REINFORCEMENT OF SAFETY OF PATIENTS THROUGH PERFORMANCE OF OPERATION COUNTING TIME-OUT

**SMG-SMU BRAMAE MEDICAL CENTER**

**RN. Jung Myungin**

#### 1. Necessity of Activity

Operation room is a complicated place that communication is difficult due to the temporary team arrangement needed for multi-disciplinary medical team to proceed operation with invasive treatment procedures, anesthesia, and advanced medical equipment from developed scientific technology. This causes degraded quality and physical loss and damage in hospitals and patients, and safety accident in the operation room is directly connected to lives of patients. Therefore, safety management is very important. Among them, counting error risk factors are difficult to be improved in spite of continuous activities for preventing them that constitute the most frequency. It is currently in need of supplementation of preventive activities for counting error. Hereupon, it was required to establish standardized counting procedures with operation participants in medical office for correct counting and to reinforce preventive activities for counting errors while performing the steps in confirming the count after all the operation team members stopped operating for accurate counting activities.

#### 2. Analysis on Problems and Goals

##### 1) Analysis on Problems

Increase in products due to adoption of new operation equipment and procedures, lack of communication with medical team members, and insufficient recognition of counting due to fast-paced operation from an increase in new nurses, complicated and various operations, and operation frequency.

##### 2) Goals and Core Indices

- (1) Improvement of recognition of counting time-out: 10%
- (2) Performance rate of counting time-out: 70%
- (3) Counting error frequency: 0%

#### 3. Activities for Improvement

##### 1) Data Collection

- (1) Collect data by using survey copies as a tool
- (2) Targets: 32 doctors from department of surgery and 42 nurses in the operation room
- (3) Data collection: Perform the survey before and after the business

##### 2) Analysis and Interpretation

- (1) Select the department with high frequency as a targeted department for counting time-out with empirical analysis in counting error
- (2) Review the instructions on counting
- (3) In need of plans for performing simple but efficient counting time-out through recognition analysis on counting time-out
- (4) Select operation in the targeted department for counting time-out

##### 3) Strategies for Improvement

- (1) Create plans for performing counting time-out
  - Period of counting time-out: Before the operation, before and after closing abdominal cavity, and before the skin closure
  - All the medical team members perform together
  - Count all the objects needed for the operation
- (2) Advertisement of counting time-out: Make the poster and post it in each operation room and corridor
- (3) Request operation with operation managing committee and notify them
- (4) Sterilize poster for performance through effective measures for counting time-out and manufacture/ utilize them in sterilized operating areas
- (5) Perform monitoring for implementation rates and notify them

#### 4. Effect of Activities for Improvement

##### 1) Recognition of Counting Time-Out

- (1) Recognition of counting time-out among nurses in the operation increased from 23% to 66%
- (2) Recognition of counting time-out among doctors in the medical office increased from 10% to 25%



(3) Recognition of total counting time-out increased by 29%

2) Performance Rate of Counting Time-Out Average performance rate in TS, GS, and GY medical departments turned out to be 73%.

3) There was no counting error.

### 5. Conclusion and Suggestions

Counting needs to go through time-out procedures with medical teams that participate in the operation. If medical teams participating in the operation do not follow instructions for the counting, counting error can occur at any time. Medical team members in the TS, GS, and GY operation room that performed time-out turned out to increase a degree of recognition of the counting, and this is expected to decrease the risk of counting error by performing counting time-out in a long term. According to the results of researches that most of the safety accidents in the operation room occurred due to the lack of communication, performance of counting time-out shall be a task for reducing counting error through communication with medical teams, and this shall be applied to all the operations reducing counting error. Especially, counting time-out shall be settled on new nurses, interns, and residents who are not familiar with counting to prevent counting error. In addition, education shall be continuously provided to keep patients safe from counting error.

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## EP227

### “SIGN IN – TIME OUT – SIGN OUT” FOR THE OBSTETRIC WOMAN IN SLIGO

**UNIVERSITY HOSPITAL (SUH)**

**Contact Person: Alison Smith**

**Contact Details: Programme Leader TPOT, Sligo University Hospital, The Mall, Sligo**  
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**Problem statement:** The Safe Site Surgery document which was introduced to Sligo University Hospital in 2013 did not include mother and infant questions for women undergoing trial of instrumental delivery, emergency and elective Caesarean Sections.

**Patient care:** Following a risk analysis, a **specific maternity safe site surgery document was commissioned.**

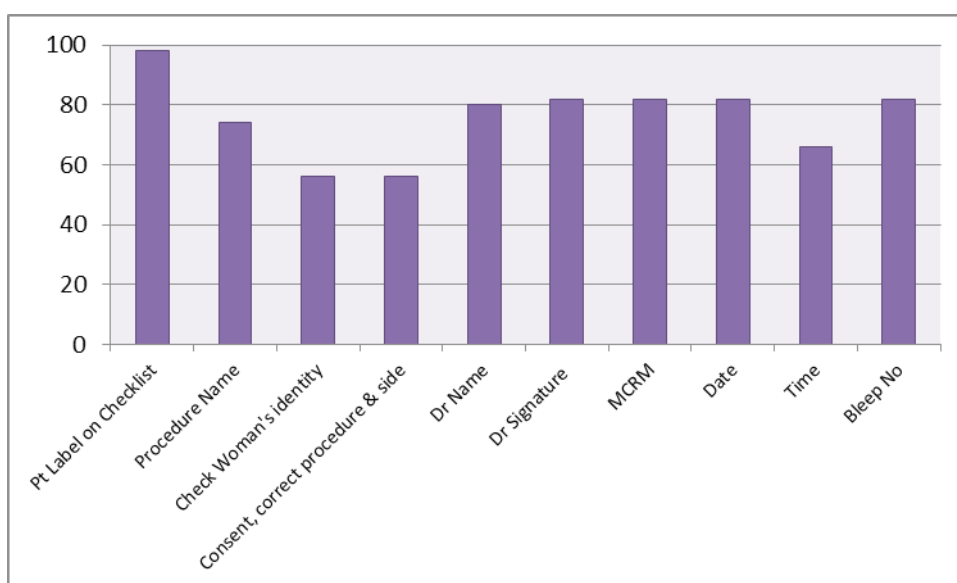
**Staff involved:** The Obstetric/ Gynae specialty requested amending the WHO SSS checklist to incorporate specific mother and infant questions at all stages of the perioperative journey including midwife responsibilities. The TPOT lead liaised with the Lead Consultant Obstetrician, Consultant Anaesthetist, A/DON and CMM3 in Midwifery and Surgery, midwives from fetal assessment, delivery, maternity and theatre staff.

**Initiative taken:** The Royal College of Obstetricians and Gynaecologists adapted WHO SSS checklist for maternity patients was reviewed. The SUH Maternity SSS checklist was drafted and reviewed by the stakeholders and feedback was encouraged. Challenges identified from the Royal College of Surgeons SSS checklist audit highlighted a new improved flow and layout of the document. After several drafts, and education sessions, the trial Maternity Safe Site Surgery checklist was launched. To differentiate between the surgical and the maternity SSS checklists **PURPLE** was the colour designated for the maternity checklist.

**Methodology:** A retrospective audit was carried out on 50 cases under the care of the three consultant obstetricians, undergoing elective, emergency caesarean sections and women undergoing trial of instrumental delivery. The audit was to determine if the checklist was completed in all 4 sections; patient details, sign in, time out and sign out.

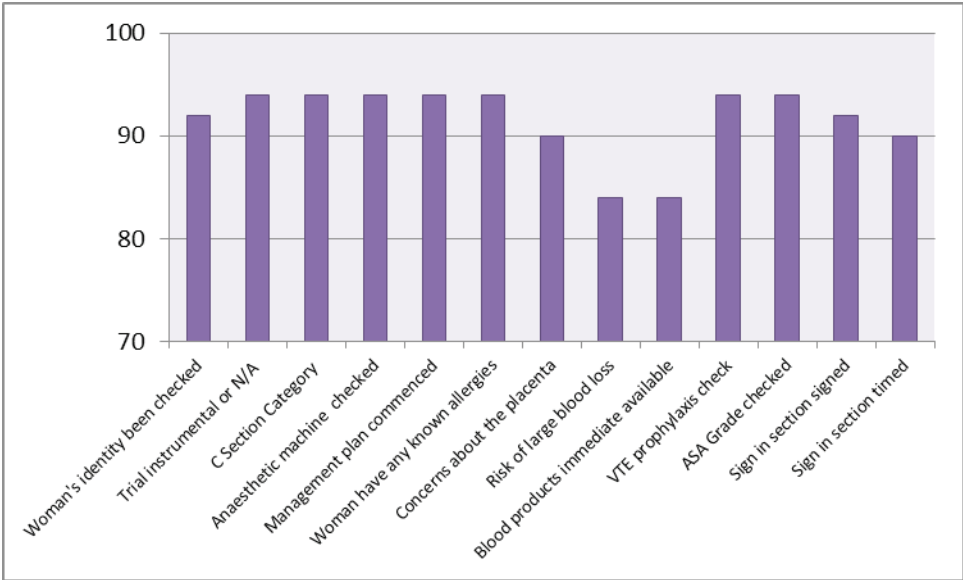
**Results: % complete**

**% Completeness of the Patient details section: N=50**

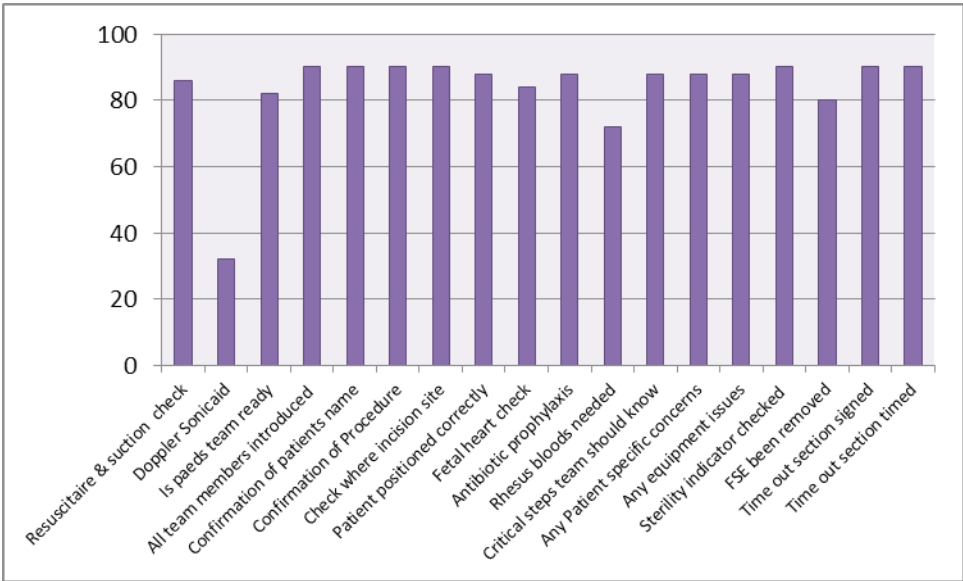




% Completeness of the Sign In Section: N=50

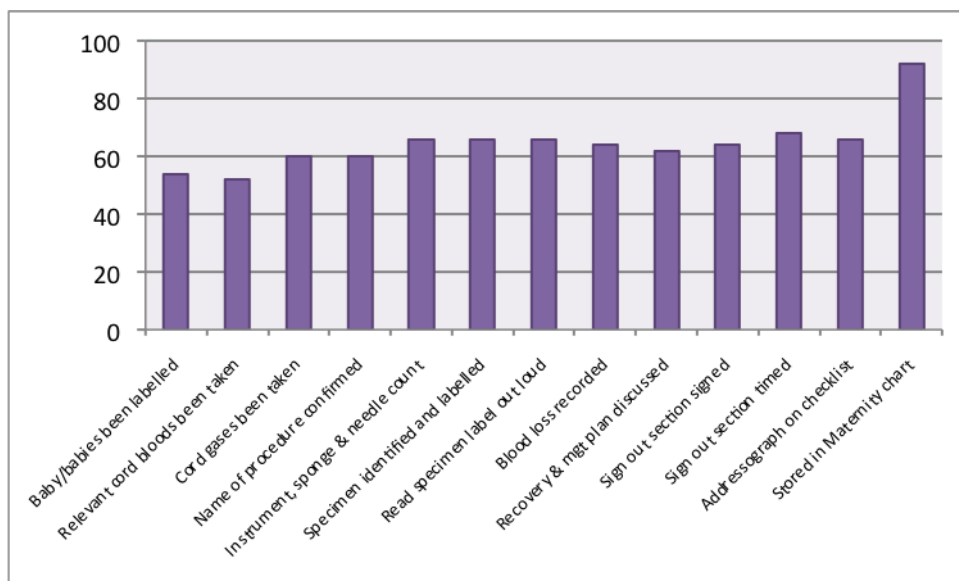


% Completeness of the Time Out Section: N=50





## % Completeness of the Sign Out Section: N=50



**Conclusions:** The 32% or 16/50 cases documenting the Doppler sonicaid check is low however the location of this action on the checklist and the duplication of fetal heart checked also on the time out section have influenced the result.

The low recording of 54% or 27/50 of the baby labelling is a direct result of the location of the action on the checklist and the activity occurring in the theatre at the time. As the baby/babies are being labelled the anaesthetic and circulating nurse are busy with the post-delivery patient including swab and instrument count prior to closure of a cavity.

**What's next;** The findings have been reported to the Obs/Gynae SMT and all the stakeholders involved in developing the document, and the necessary changes required in order to capture the baby labelling compliance will be discussed and implemented. The audit results will be discussed at the September TPOT committee, Theatre Management Organising Team (TMOT) and The Perioperative Directorate (POD). Following the agreed changes to Maternity SSS Document a re-audit will take place following redistribution of amended document and re-education of the users.



## ADULT PATIENT SATISFACTION WITH INPATIENT NURSING CARE AND ASSOCIATED FACTORS IN AN ETHIOPIAN REFERRAL HOSPITAL, NORTHEAST, ETHIOPIA

**EP228**

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**Background:** Patient satisfaction with nursing care is considered as an important factor in explaining patients' perceptions of service quality. Care assessed to be high quality according to clinical, economic or other provider-defined criteria is far from ideal if as a result of that care the patient is unhappy or dissatisfied. Therefore there is, sound rationale for assessing the satisfaction of patients with nursing care.

**Objective:** The aim of this study was to assess adult patients' satisfaction with inpatient nursing care and associated factors in an Ethiopian referral hospital, Northeast Ethiopia, 2013.

**Methods:** Institution based cross-sectional study was conducted among patients admitted in medical, surgical, orthopedics, gynecology and ophthalmology wards of Dessie referral hospital from March 24 – April 30, 2013. All admitted patients who stayed in the study wards for at least two days during the data collection time were interviewed. The data were collected by structured interview using standard questionnaire adapted from Newcastle Satisfaction with Nursing Scale. Data were entered into EPI-Info and exported to SPSS version 20 for analysis. Multiple Logistic regression and odds ratio with 95% confidence interval were used to identify factors associated with patient satisfaction with nursing care.

**Result:** The overall patient satisfaction rate was 52.5 %. Respondents' sex (AOR= 2.20, 95%CI:1.30,3.73), age (AOR=4.77, 95%CI:1.97,11.55), admission ward (AOR= 9.99, 95%CI:3.47,28.79), self reported health status (AOR=2.07, 95%CI:1.27,3.37) and class of admission (AOR=2.56, 95%CI:1.41,4.67) found to be significantly associated with patient satisfaction with nursing care.

### Conclusion and recommendation

The rate of patient satisfaction with nursing care was found to be low in this study. Being female, age group 18 – 30 years old, good self reported current health status, being admitted in ophthalmology ward and first class of admission were significantly associated with patient satisfaction with nursing care. In-service training programs for nurses, with special emphasis on communication skills, are recommended.

### Biography

Mr.Fisseha Zewdu Amdie has completed his Msc at the age of 27 years from Addis Ababa University. He is currently working as an assistant professor at University of Gondar and adjunct staff of clinical instructor of practice at the Ohio State University, College of Nursing, USA. He has been serving as a program coordinator of the office of continuing and distance education programs at college of medicine and health sciences, University of Gondar.



## EP229

### DEVELOPMENT AND EFFECTS OF SAFETY EDUCATION PROGRAM USING STANDARDIZED PATIENT FOR OPERATING ROOM NURSES

*Lee Young*

This study is targeting operating room nurses and the safety education program was created and practiced using standardized patients to know its educational effect. Based on nonequivalent control group pretest-posttest design, the study shows comparison between the training-practiced group and the classroom- lectured group in differences upon importance awareness of safety-control in operating room and safety culture awareness.

The training was built with the basis of ADDIE model and has 4 educational training modules: the concept of Operating room, danger prediction training, pre-operative verification using standardized patients, and counts performance.

From B hospital in S city, 27 OR nurses who understood the purpose of this study and volunteered to participate were selected as the study object.

Whereas for the comparison group, from K hospital in the same city, 22 OR nurses were extracted as convenient sampling.

The collected data was analyzed by Chi-square, Fisher's exact test, Kolmogorov- Smirnov test, Wilcoxon signed-rank test, and Mann-Whitney U test, using real number and percentage.

The study is resulted as follows:

Hypothesis 1. The hypothesis 'the grade for importance awareness of safety- control shall be greater in the experimental group than the comparison group' was rejected( $z=-1.373$ ,  $p=.170$ ).

Hypothesis 2. The hypothesis 'the grade for safety control compliance rate is greater in the experimental group than the comparison group' was supported was supported( $z=-3.963$ ,  $p=.001$ ).

Hypothesis 3. The hypothesis 'the grade for safety culture awareness is greater in the experimental group than the comparison group' was supported ( $z=-2.76$ ,  $p=.006$ ).

In conclusion, it is found that the safety education program in operating room using standardized patients is an effective educational program as it increases safety control compliance rate, safety culture awareness, and brings positive outcome on training satisfaction.



## PICC LINE FOR CHILDREN. IS THERE A NEED FOR A PERSONAL ADJUSTMENT?

**EP230**

*Rozenfeld S, Bitan S, Schwartz Atias I, Katz J, Mor M, Levi I.*

Medical treatment in pediatric population is a great challenge for health providers; it requires high professional standards with sensitivity and creativity towards the ailing child and his family. One of the difficulties that caregivers face is to maintain an open vein for the purpose of giving prolonged intravenous treatment and taking blood samples. The stress and pain that these actions can invoke may have a negative impact on the child's experiences and compliance to treatment. This fact requires an easy and an available vein access. A Peripherally Inserted Central Catheter (PICC) gives an efficient and comfortable answer for children who are in need for a prolonged vein access.

In the last decade there was a significant increase in the usage of a PICC line Catheter but there are reports regarding mechanical and infectious complications. Therefore there isn't a consensus for the type of central catheter that can be used.

**Objective:** Prospective, observational study to identify the common complications related to PICCs and to reveal the risk factors with strong correlations to these complications.

**Method:** In our institution PICCs in children are inserted by anesthesiologist in operating room or Cath lab under general anesthesia. Data about children who were inserted PICCs in Schneider Children Medical Center of Israel was gathered prospectively during a year time (01.10.2014- 31.10.2015). For each child a follow chart was filled in including: demographic data, (gender, age, weight), main reasons of insertion, type of catheter, place of entrance, difficulty of insertion, length of stay in situ (days), reasons of removal, number and type of complications. The rate of complications, cause of premature removal, and risk factors strongly related to the complications of PICC were analyzed using SPSS program.

**Results:** 271 PICC line catheters were inserted to 219 children. The indications for inserting the catheter were 35% giving antibiotics for a long period of time, 29% deferent IV drugs treatment, 23% oncology treatment, 11% for TPN and 2% for blood samples. About third of the catheters were removed because of different complications: 27.5% mechanical and 7.7% infection) PICC-associated bloodstream infection in 12, phlebitis in 5, exit site infection in 2, contamination in 2).

We found that children under 20 kg have more risk to remove the PICC line catheter for any type of complication (pv-0.00). A high level of leucocytes at the time of the insertion of the catheter influences the removal of the catheter as a result of complications (pv-0.048). A normal thrombocytes level was found to protect against complications (pv-0.023). Oncology patients were found to be in 20% higher risk to develop catheter connected complications compared to the rest of the study subjects (pv-0.048).

**Conclusions:** When inserting a PICC line catheter to children these variables need to be consider as predictors for a complication: Level of leucocytes, thrombocytes and weight of the child. In addition there is a need to measure BMI level when choosing the type of central catheter. It was found that the process of insertion and maintenance of the catheter in our medical center is reliable and safe as it was reported in the professional literature. Research findings can help in building intervention model and writing an adjusted guideline for children with the purpose of reducing number of complications while most of mechanical complication may cause inconvenience and delay in treatment, infection complication can be a life threatening. therefore, it is necessary to put effort in early detection and preventing them. in this manner improving the quality and safety of the suggested treatment. Further studies are needed which will examine the risk factors that can predict complications when using PICC line catheter in children



## EP231

### WHAT ARE SURGICAL TEAM MEMBERS' ATTITUDES TOWARDS THE SAFETY CULTURE IN THE OPERATING THEATRE AND THE WHO SURGICAL SAFETY CHECKLIST?

**Author:** *Katie O Byrne, Staff Nurse, Theatre, Tallaght Hospital, Dublin 24. Ireland*

**Background:** Safety culture is the mutual values, attitudes, perceptions, and patterns of behaviour within a group with the aim of minimising patient harm (Profit et al. 2012). The literature search identified the following themes: 1) communication and teamwork, 2) safety climate v's safety culture and 3) patient safety and checklists. Multiple studies worldwide identified the effect of the WHO surgical safety checklist since its introduction in 2008. Little research was found on the measurement of attitudes towards safety culture and towards the WHO Surgical Safety Checklist in Ireland.

**Aim:** To examine anaesthetists, surgeons and nurses attitudes towards the safety culture and the WHO Surgical Safety Checklist within Irish operating theatres.

**Method:** Census sampling was used to recruit anaesthetists, surgeons and nurses. A total of 173 participants consisting of 133 nurses, 37 doctors and 3 unidentified. A descriptive quantitative approach was used. Questionnaires were distributed to four hospitals in Ireland. Data collected was coded and entered into SPSS version 23. Data was analysed using descriptive statistics, independent sample t-tests and chi-square tests were used to compare attitudes between nurses and doctors. Ethical approval was granted by each hospital and by the Faculty of Health Sciences Research Ethics Committee of Trinity College.

**Results:** Doctors rated their level of communication with other team members higher than nurses. Respondents generally displayed positive attitudes towards the safety culture and the WHO checklist. Doctors showed more positive attitudes than nurses for all domains of the safety culture. When compared against an international benchmark, scores were lower in four of the five safety culture domains. Attitudes to the WHO checklist were similar from both doctors and nurses.

**Findings:** Overall positive attitudes towards the safety culture were identified. Issues regarding communication, teamwork, management and checklist implementation and their effect on the level of safety in theatre were highlighted.

**Conclusion:** Emphasis was placed on the need for improved levels of communication and teamwork within theatre. This study highlighted the need for a culture change in the operating theatre, towards a more open and just culture. The researcher places importance on the need for continual measuring of the safety culture.



## TOPIC F. HEALTHY WORKPLACES

## BURNOUT IN OPERATING ROOM NURSES AND THE EFFECT OF PERCEIVED SOCIAL SUPPORT

EP232

Aysel Gurkan<sup>1</sup>, Yesim Dikmen Aydin<sup>1</sup><sup>1</sup>Marmara University Health Science Faculty, Nursing Department, Istanbul, Turkey**Keywords:** Burnout; social support; operating room nurses.

**Background:** It is indicated that social support has a effective intervention for coping with burnout. It additionally is indicated that health providers by receiving social support outside of work in terms of their family, friends and coworkers can act positively in the prevention of burnout syndrome (1,2). Several studies have been conducted regarding the assessment of burnout (3-5), but there is lack of studies in Turkey investigating the influence of social support on operating room nurses' burnout.

**Aim:** To examine the impacts of social support on burnout levels in operating room nurses.

**Materials and methods:** This study included 83 operating room nurses working at the four research and training hospital in Istanbul. This study was performed between 7 January and 20 February 2015. Data were collected with socio-demographic characteristics, the Maslach Burnout Inventory (MBI), and the Multidimensional Scale of Perceived Social Support (MSPSS).

**Results:** According to the results obtained from the nurses' social support systems are adequate, but moderate emotional exhaustion was live. In terms of personal achievement, it is concluded their high levels of burnout. The "emotional exhaustion" subscale of the burnout scale appears to be negatively correlated with the "friends" ( $r=-.239$ ;  $p=.000$ ) scale. The "personal accomplishment" subscale of the burnout scale, exhibits, positively correlated with "family" ( $r=.305$ ;  $p=.000$ ).

**Conclusions:** The results indicated that social support has on the positive effect in the level of burnout of operating room nurses. In particular, sub-groups of friend and family support were determined that the most important social supports.

**Implications for perioperative nursing:** Such studies can contribute in the development of health care services and health professionals' management.

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## EP233

### THE PREVALENCE OF MUSCULOSKELETAL DISORDERS IN SURGICAL NURSES IN GREECE

**Bakola Helen<sup>(1)</sup>, Zyga Sofia<sup>(1)</sup>, Stergioulas Apostolos<sup>(2)</sup>, Kipreos George<sup>(2)</sup>, Koutelekos John<sup>(3)</sup>, Panoutsopoulos George<sup>(1)</sup>,**

*Department of Nursing, Faculty of Human Movement and Quality of Life Sciences, University Peloponnese<sup>(1)</sup>- Department of Sports, Organization and Management, University Peloponnese<sup>(2)</sup>- Technological Education Institute of Athens*

**Keywords:** Musculoskeletal problems, perioperative nurses, hospital, symptoms, musculoskeletal disorders

#### Background

Musculoskeletal disorders emerge as the most common problem associated with the work <sup>(1-2)</sup>. Extensive research has been done on the prevalence of musculoskeletal disorders in nurses in different countries such as Italy<sup>(3)</sup>, Turkey<sup>(4)</sup>, China<sup>(5)</sup> and Croatia<sup>(6)</sup>. However, research in surgical nurses remains poor despite the existence of a series of incriminating factors in space. Such factors in the operating room is: the temperature<sup>(7-8)</sup>, the repetitiveness and pace of work, moving loads such as disks tools<sup>(9-10)</sup>, by lifting, pushing, pulling<sup>(11)</sup>, the uncomfortable positions<sup>(9,12)</sup>, prolonged standing<sup>(7,13-15)</sup> in combination with the lack of or poor communication, low perception of support from the administration<sup>(12,16)</sup>, the lack of influence or control of work and lack of time<sup>(17)</sup>. Purpose of this study was to capture the prevalence of musculoskeletal disorders in surgical nurses of Greek hospitals.

#### Materials and Methods

Four hundred and two Greek perioperating nurses working in regional hospitals participated. Anonymous self-administered questionnaire was used to collect the data, which consisted of three parts (investigating musculoskeletal symptoms, description of work, psychometric evaluation). The analysis was done with the statistical program SPSS.19.

#### Ethics

Before conducting the study, permission from the Scientific and Administrative Council in each hospital was requested and obtained. In the form of application, the names of researchers who will take part in the survey, the purpose and form of the study and how the output data will be used were mentioned ensuring the anonymity of participants and the confidentiality of results. This study followed all the fundamental principles of research. Specifically, all the information about the participants was completely anonymous and confidential. Commitment given that the information and the extracted data will be used solely for the purposes of this study, and hospitals will not bear the financial burden.

#### Results

Sample consisted of 402 nurses with mean age 42.3 years old (SD=7.8 years). The majority of the participants were women (78.7%). 88.0% worked as scrub nurses and 88.4% as circulating nurses. Most common reported problems were working in the same position for long time periods (73.8%), moving and lifting heavy objects and equipment (71.0%), keeping working while they are in pain (70.8%), working in weird/uncomfortable position (63.8%) and working for many hours or in shifts (63.3%).

Additionally, 61.0% of the participants reported musculoskeletal disorders in their low back in the last year, 54.6% in their neck, 41.0% in their shoulder, 34.4% in their knee and 33.1% in their wrist/hands. Regarding the last 7 days, 43.0% of the participants reported musculoskeletal disorders in their low back in the last year, 33.3% in their neck, 24.2% in their shoulder, 18.0% in their knee and 17.4% in their upper back. "Environment" and "Personal preferences" subscales had higher values in both ranking and scoring scales, indicating that they were of greater importance, while "Equipment and media" and "Surgery procedures" subscales had lower values, indicating that they were of lower importance. Regarding "Enviroment" subscale, "Temperature" and "Group work" had similar rankings, "Surgery arrangement"



was ranked as the most important and “Administration delay” was ranked as the least important. Regarding “Personal preferences” subscale, “Sitting/ Standing” was ranked as the most important.

### Conclusions

The study captured the prevalence of musculoskeletal disorders in the Greek surgical nurses. It confirmed that the work environment in the operating room and the activities performed by perioperative nurses such as working in the same position for long periods of time, moving and lifting heavy objects and equipment, the inconvenient working position and working of many hours or in shifts, are the major problems that contribute daily in the creation and deterioration of musculoskeletal disorders.

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## EP234

### WORKER SAFETY IN HYBRID OPERATING ROOMS

**Gencturk Nuran**

***Hybrid operating r Assistant Professor, PhD. Nuran TEKE GENCTURK\* Assistant Professor, PhD. Fatma AKCA AY\****

*\*Istanbul University Faculty of Health Science*

Rooms (OR) are treatment centers where; in patients advanced imaging for the purpose of diagnostics, surgery, stent or balloon applications, endovascular interventions, and/or if necessary, various combinations of those are employed and all sorts of interventions are applied on patients in the same environment. For that reason hybrid OR workers, in addition to the same risks other sector employees are faced with, are exposed to more different risks due to the nature of their occupation. Health-threat posing harms and risks to the health of healthcare workers employed in hybrid OR are defined as; biological, physical, chemical, ergonomic and psychological. Adversity in hybrid OR environments and workplace conditions negatively affect workers' physical and mental health, work satisfaction, success and productivity. Therefore, probable harms and risks in hybrid OR should be defined and necessary precautions should be taken, should be inspected periodically and necessary trainings should be given to the healthcare workers.



## DIATHERMY SMOKE EVACUATION PRACTICES, ATTITUDES AND AWARENESS OF THIS HEALTH RISK AMONG PERIOPERATIVE NURSES AND SURGEONS

**EP235**

**O'Byrne -O'Reilly Rachel**

### **Aim**

To examine diathermy smoke evacuation practices, attitudes and awareness of this health risk among perioperative nurses and surgeons.

### **Background**

Surgical smoke presents a potentially serious occupational health hazard, shown to be as mutagenic as cigarette smoke (Barret & Garber 2004). Ablation of one gram of tissue produces a smoke plume with an equivalent mutagenicity of six unfiltered cigarettes (Hill *et al.* 2012). Although the long-term effects for healthcare professionals exposed to surgical smoke is unproven, there is a need to be proactive and prevent any potential harm (Association of Perioperative Practice (AfPP) 2009).

### **Method**

The study was conducted in the theatre department of five hospitals (three public and two private hospitals) using a quantitative descriptive approach. A twenty-three item questionnaire adapted using two previously established questionnaires (Spearman *et al.* 2007, Ball 2010) was the chosen instrument used. The questionnaire was distributed to a total of 280 perioperative nurses and surgeons with a response rate of 41.8%. Data analysis using SPSS (Statistical Package for the Social Sciences) provided descriptive and inferential statistics.

### **Results**

Perioperative nurses and surgeons' compliance with smoke evacuation recommendations was not consistent. The private hospital respondents (89%) reported more frequent use of smoke evacuators than the public hospital respondents (53%). However, the recommendations of always using a smoke evacuator for every surgical procedure using diathermy were not adhered to significantly across both hospital sectors. The majority of participants (95%) believed that diathermy smoke was harmful but unless the healthcare professional had experienced health problems from the smoke they reported not being very concerned that diathermy smoke was a risk to their health. Findings indicated that there was a deficit in knowledge, education and training on the importance of diathermy smoke evacuation, the available devices and the effective methods to remove diathermy smoke from the surgical environment. Few participants (13%) reported the existence of diathermy smoke policies and of those that had policies they did not always follow them. Staff complacency or lack of education (46%) was the greatest reported barrier to best practice of evacuating diathermy smoke.

### **Conclusions and Implications**

It is necessary that a mandatory diathermy smoke education programme incorporating policy development is formulated to include areas of poor compliance and knowledge identified in this study. Perioperative nurses' assertiveness in overcoming the barriers to drive change in clinical practice will increase as a result. Auditing of the implementation of this programme is recommended. Prioritising the health and safety of employees in the surgical environment is advocated through the provision of routine risk assessments, airborne levels monitoring and occupational health checks in relation to diathermy smoke exposure. Replication of this study is suggested to assess the implementation of diathermy smoke evacuators in all surgical settings.



## EP236

### THE WELL ORGANISED RECOVERY ROOM

*Clodagh Wogan, Recovery Room, OLCHC, Dublin*

#### **Background:**

In many areas, items are kept in work areas or in stores that have been there for years, and are being kept just in case. Sorting is about reviewing items and asking the questions: -Do we need them? -What are they used for? -How often will we use or need them? -When did we last use them? -Are they still valid? (In-date and relevant) Cluttered, messy work areas are not just an eyesore, they also create waste: wasted time searching for specific items or materials, ineffective use of space. In some cases, messy work areas can pose a health and safety risks if left.

#### **Method:**

In order to examine the recovery room space and individual bays and see if there was any room for improvement to the work environment we used the 5 S process: SORT, SET, SHINE, STANDARDISE and SUSTAIN. We examined the stock we held in the recovery room. It was realised that some overstocking existed

#### **Results:**

We examined the stock we held in the recovery room. It was realised that some overstocking existed

- ☐ We removed items and they were returned to general stores
- ☐ A maximum stock level was identified
- ☐ Made a new stock list inventory which would be clear to the HCA when stocking up
- ☐ Once a day stocking only would be required to cut down on time required in restocking so free HCA to carry out other tasks as required

As part of this process we also decided on a cost awareness campaign so that we would know the cost of most of our most used items.

It was identified quickly that storage of equipment was a problem to enable better use and flow of the space

With the support of the theatre manager and with help of clinical engineering, the electrician and the carpenter we set about designing work and storage space.

After completing the 4S's we had a well organised and standardised area to be proud of and that in a good condition. Regular auditing and education has helped to sustain the improvement.

#### **Conclusion:**

5S process has helped remove unwanted, materials, stock and equipment, here in the recovery room and has helped us keep the working areas neat, tidy and organised.



## THEATRES GOT TALENT

**Linda Lynch S/SN, General Theatre, Sligo University Hospital**

EP237

Stress has become a worldwide epidemic with illnesses associated with stress increasing according to the World Health Organisation (WHO). The nursing profession has long been associated with stressors which include, extended and unsociable working hours, giving emotional support to patients and families, dealing with situations that may be considered potentially stressful for example staff shortages, poor skill mix and inadequate communication within the Multi-disciplinary team (Gelsema et al, 2006). This is further evidenced by Galbraith and Brown (2010) who state that 40% of hospital nurses suffer from stress. Evidence suggests stress is increasing with 76% of nurses said they were under more pressure than a year ago and 42 % describe themselves as experiencing burnout (Dean, 2012). The prevalence of occupational stress has a negative effect on the individual and can lead to long term physical and psychological illness, role conflict and job dissatisfaction. When one considers that the average person spends 40 years of their life working with this figure set to rise in the future healthcare organisations are going to have to look at ways of implementing stress coping strategies. Healthcare has always been considered stressful and this is unlikely to change dramatically in the future.

In our department we considered ways of bringing everyone together, having fun, relieving stress and getting to know each other in a different environment. Several team building ideas were put forward and eventually we had a light bulb moment! "Theatres Got Talent" was conceived. People were invited to join a committee and finally we had an enthusiastic committee of 9. The work began with each person taking on a task. We decided to split our earnings between our oncology unit and staff education. A venue was secured, a date set and a reasonable admission price of 10 euro per person to include finger food. Our next task was to find talent. We surely found it in abundance in our department.

And so the fun began. Hospital and nursing management were wonderful offering us full support and allowing us a quiet area of the hospital to rehearse. We discovered hidden talents in us all and we had amazing fun. We had Indian dancers, Pilipino dancers, Irish dancers, line dancers Guitar players, Soloists and of course we had to have a couple of comedy sketches. This was our ideal opportunity to exert revenge. Permission was sought from those we wished to skit and all agreed with our clinical director telling us to hit hard and our hospital manager eagerly anticipating her demise.

The tickets were printed and went on sale. Raffle prizes were generously donated. Everybody in the department got involved, either selling tickets, performing or working behind the scenes. The night itself was a tremendous success. We had 12 acts with music and dancing to follow the talent show. 450 people turned up with every department in the hospital represented. Our Director of Nursing, A/DON and our CNM 3 joined one of our dancing groups. We raised over 6000 euro and once our expenses were taken out we have a cheque for 2650 euro to the oncology unit and the remainder funded 2 people to attend a conference in YORK in July. Our talent show was held in April 2015 and the fun and laughter we had has brought us all together and carried us through many stressful events at work, we constantly get asked what we are doing next year so Watch this Space

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## EP238

### OCCUPATIONAL SAFETY AND HEALTH: DOES IT WORK IN HOSPITALS IN TURKEY?

*Filiz Ogce*

**Background:** Occupational safety and health is generally defined as the science of the anticipation, recognition, evaluation and control of hazards arising in or from the workplace that could impair the health and well-being of workers (1), and includes the target of encouraging a safe and healthy work environment.

**Purpose:** The aim of this study is to describe the occupational safety efforts for healthcare providers in the health care settings.

**Methods:** This research was conducted as a descriptive study. Study population was consisted of the participants who attended education seminars of Turkish Surgery and Operation Room Nurses Association and worked different hospitals in three cities of Turkey (Kayseri, Trabzon, and İstanbul; N=220). Study sample was comprised of 211 participants who accepted to attend research. Data was collected in March-April-May, 2015 with a 45-items occupational safety scale (2) and a questionnaire composed of 18 questions regarding demographic characteristics.

**Results:** Participants had a mean age of 33.7 years, were 87% female, and 65% married. Most of participants were working as a nurse (63%), and 45% of participants' education level was bachelor degree. Participants were mainly working in operation room (67%). The most common occupational disease and workplace injury/accident that participants had were skin problems (29%), and soft tissue injuries (50%). Participants' occupational safety scale mean score was 3.3 (SD=1.06; min=1, max=6). According to comparison statistics, there were significant relations between occupational safety scale and sub-scale scores and participants' education level and the work they do ( $p<0.05$ ).

**Conclusion:** The participants scored occupational safety of their workplace as insufficient.

**Implications for perioperative nursing:** This research will increase the knowledge on occupational safety, and also will provide contribution to promote workplace safety.

**Key words:** occupational safety, health care provider

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## WORKLOAD PERCEPTION AND MEDICAL ERROR ATTITUDES OF NURSES WORKING IN SURGICAL CLINICS

**EP240****B. Nurg**

**Aim:** The present study was conducted as a descriptive study in order to determine the workload perception and medical error attitudes of nurses working in surgical clinics. **Material and Method:** We included 76 nurses who were working in surgical clinics of Ordu State Hospital and 24 nurses who were working in Ordu University Training and Research Hospital (ntotal=100). The data were collected by using Self-Description Form and Medical Error Attitudes Scale. SPSS 20.0 (Statistical Package for The Social Sciences) program was used to evaluate the data of the study. Mann Whitney U and Kruskal Wallis-H tests were used for non-parametric variables. In order to compare parametric variables, Z test was used to compare two groups and correlation test was used to determine the relationship between two variables. The data of the study were evaluated with 95% confidence interval and 5% significance level. **Results:** The average age of surgical nurses was  $36.6 \pm 7.6$ . The mean scores of the Individual Workload Perception Scale score and Medical Error Attitudes Scale were respectively  $73.3 \pm 9.0$ , and  $42.2 \pm 4.9$ . In case the total mean scores of these two scales were compared to each other, it was found that there was no statistically significant relationship ( $p > 0.05$ ). It was detected that the most important relationship in case of the subdimension of the Individual Workload Perception Scale was the "support of the manager" ( $r = 0.712$ ). The mean workload perception and medical error attitude scale scores of surgical nurses were at the moderate level. When it is considered that these two scales are directly proportional to each other, it can be concluded that the workload perception will be low when nurses have low levels of workrelated stress and thus the medical error attitudes of nurses will be positive. **Conclusion:** It is believed that the findings of this study will contribute to the similar studies.

**Key Words:** Surgical nurse, nursing care, workload perception, medical errors



## EP241

### IMPLEMENTING THE OPERATING ROOM (OR) HUDDLE BOARD

**Authors:** Karen Ng, RN, BScN, MHI, CPN(C) and Tharshini Kamalachandra, BASc, LSSBB

*Institution: Scarborough and Rouge Hospital*

The OR huddle board was implemented at Scarborough and Rouge Hospital in 2015. The perioperative team has dedicated time to come together as a team to huddle about our success, performance trends and improvement opportunities that affect our patients, staff and organization. The huddle board has distinct features including performance metrics, safety issues, and improvement opportunities that pertain to the unit. One half of the board is the alignment side and it consists of strategic corporate priorities, and the corresponding key performance metrics that we monitor closely. This clear connection of the corporate priorities and the departmental initiatives helps establish buy-in and support from frontline staff. The other half is the engagement side and it consists of improvement opportunities identified by the front-line staff and patients to help make our operating room safer, or more efficient. Front-line staff is encouraged to identify improvement opportunities in their area and also to take a lead in developing potential solutions to fix it. This active involvement from frontline staff helps empower the team and unify their focus on the department's performance. To date, we have improved our performance metric of first case on-time start time from 65% to 80%. Our collaborative problem solving approach has also helped us strengthen our OR Pick Lists and improve our supply utilization rates. In addition, we have solved over 50 improvement opportunities that affect patient and staff safety. The success of the huddle board is best seen in the proactive problem solving culture it has created. Our Daily Stat Sheet sessions coach and foster the frontline staff in proactively identifying problems and developing strategies to mitigate them. The collective knowledge of the team is harnessed to help build an "army of problem solvers".

**Keywords:** teamwork, improvement, key performance metrics, front-line, engagement, patient safety

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## INVESTIGATION OF THE PHYSICAL ERGONOMIC CONDITION OF THE OPERATING ROOMS IN THE PROVINCE OF IZMIR

**EP242**

**Authors:** Kübra Yasak, Fatma Vural

**Presenter:** Kübra Yasak

**Objective:** To examine the physical ergonomic conditions of the operating rooms and to evaluate the risk factors in the hospitals of İzmir.

**Method:** This study was descriptive and cross-sectional design. The research was conducted in a total of 58 operating rooms of a university and eight public hospitals. In the study, the data were collected by using the form of the ergonomic conditions and risk factors in the operating room by the researcher through observation in the operating theater rooms and face to face with the nurses responsible for the operating room. The data of the study were evaluated with the SPSS 20 package program. Descriptive statistical methods (number, percentage, mean) were used for the analysis of data.

**Results:** None of the operating rooms included in the study have a surgical smoke evacuation system (n: 58). At the same time, 5.2% of the operating rooms (n:3) do not have an evacuation system for anesthetic gases. The average hourly air changes of the operating rooms are  $29.27 \pm 4.40$  times, all of which are open air. The average temperature of the operating rooms was found to be  $20.29 \pm 2.09$  °C and the average humidity was found to be  $36.48 \pm 14.40\%$ . The noise level in the operating rooms (n: 58) included in the study was found to be  $54.29 \pm 7.85$  dB (A). During the operation, 29.3% of the operating rooms do not have high stools used for the purpose of allowing the health personnel to rest for a short period of time. At the same time, there is no pressure absorbing mat in any operating room. All operating tables used in operating rooms have the ability to adjust to the position of the patient as well as the height of the healthcare personnel. However, in 5.2% of the operating tables (n:3), the ability to adjust to the size of the health personnel in charge at the tables is not working. No special equipment is available at any hospital for conditions such as transporting / lifting patients in operating rooms.

**Conclusion:** As a result of the study, it has been found that the operating rooms which are evaluated as a result are inadequate in terms of physical and ergonomic conditions, such as surgical and anesthetic gas evacuation system, noise level in the operating room, equipment used for operations such as patient handling / lifting, high stool-pressure absorbing mat. It is considered that hospitals should establish a protocol for physical ergonomic conditions and pass on these protocols to progress positively in terms of employee safety. It is also important to improve the working health of the operating rooms that are inadequate in terms of physical ergonomic conditions.

**Key Words:** Ergonomics, Operating Room, Staff Health and Safety



# EP243

## THE ROMAN EXPERIENCE

*Elaine M Doherty, General Theatre, Sligo University Hospital*

Albert Einstein once said “Knowledge is experience; everything else is information.” With this in mind we set about to share the knowledge we had gained as a team of nurses in the operating department of Sligo Regional Hospital. Working individually and collaboratively through audit and research we acquired valuable information on providing quality and safe patient care.

Audit is actively encouraged with different groups carrying out audits. Recent audits include the surgical count, incidences of inadvertent hypothermia, safe site policy and knowledge and use of Thrombo Embolic Deterrent stockings (TEDS). Staff were encouraged and supported to showcase their work locally, nationally and internationally with as many people as possible encouraged to attend educational conferences. Our work has won prizes nationally and internationally which has been a great boost to staff.

One of our greatest achievements this year was sharing our work on the international stage. The 7th congress of the European Operating Room Nurses Association (EORNA) was recently held in Rome. The theme of the congress was “The Art of Perioperative care: Eternally Evolving”. This theme reflects the changes within theatre nursing. It is a constantly changing patient focused environment requiring evidenced and research-based patient care, with local practice continually evolving to meet the very latest changes in equipment and technology.

The scientific programme offered delegates more than 110 oral presentations selected from over 300 abstracts submitted by 47 different countries around the world. Speakers presented on varied topics including ways to enhance and develop safe perioperative care and apply scientific research to theatre nurses’ daily practice. Presentations ranged across themes related to enhancing patient care, quality and safety initiatives, leadership, teamwork, resource demands, issues managing change and new developments.

Our team consisting of 11 nurses and each having contributed to the work we presented. Three speakers from Sligo Regional Hospital made presentations to the congress. Rosaleen White CNM2 in Pre-Assessment clinic (PAC) – Nurse led Pre-operative assessment. Grainne Hamilton SS/N in Orthopaedic theatre – An exploration of adult-trained perioperative nurses’ practice of family-centred care in an acute Irish regional hospital. Teresa Donnelly CNM2 in General theatre for her presentation ‘Two, four, six, eight.....stop and count before it is too late’ Teresa was voted as having delivered the overall best presentation of the congress. Sligo Regional Hospital was also well represented for the poster programme with a total number of five posters accepted. These included Bernie McNeely with “The Red Zone” last year’s winner of the CEO award for clinical innovation.

Teresa Donnelly presented a poster on improving the surgical count, Alison Smith on the nurse led pre-operative assessment. Margaret Given and Sally Boland presented a poster on the value of anti-embolic stockings in reducing the risk of developing venous thrombi embolism. Margaret Given also designed a poster outlining how the EU directive on safe sharps is adhered to in Sligo Regional Hospital. Her poster presentation aptly named The Safe Sharp Code was selected from several hundred across Europe and awarded overall best European poster as judged by the scientific committee. Other team members included Helen Bohan, Michelle Gilroy, and Vikki Sheeran. Nursing management played an important role in supporting the team with Anna Burke CNM 3 joining the group in Rome. Therese Gallagher A/DON and Marion Ryder DON also promoted and encouraged the work of the group and were able to provide some financial support. This encouragement and support motivated the team to share the knowledge they had gained which they considered valuable in adding to improved patient care.

The team’s hard work paid off and the international stage applauded the work of a group from a small hospital in the North West of Ireland. Out of four top prizes Sligo Regional Hospital came away with two. Teresa Donnelly won best speaker and Margaret Given won best Poster presentation. Margaret’s poster is now the academic property of EORNA with it being used as a exemplar for other hospitals throughout Europe.

Teresa Donnelly has been invited to present her work to the Royal College of Surgeons in September with a further invite to California to present to the American Operating Room Nurses Conference in April 2016. This demonstrated that as little as our work may seem by actually showcasing it we share valuable information to improve the quality of care we give.



## THEATER PREVENTION FOR HIPEC PROCEDURES: PART TWO: PEROPERATIVE SETTINGS

**EP244**

**C. TOLLENAERS, C. DENIS, D. DODION, CH. WECHSELER, M. NELISSEN, L. SCARPONE, J.M. WEERTS, MD**

*THEATER NURSING STAFF, DEPARTMENT OF ONCOLOGICAL SURGERY,  
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**Subject:** Complete debulking surgery followed by HIPEC is a long-lasting procedure and requires cytotoxic agents use combined with hyperthermia, a significant threat for the patient and the theatre personnel. During and after a HIPEC procedure, several measures are taken to minimize the impact of cytotoxic agents, in accordance with our institution Hygiene Committee.

**Method:** Once the debulking is completed, a Coliseum is created, covered with a plastic film (semi-open). A 10cm hole is made at the centre for the surgeon to check the diffusion of the chemotherapy bath. The only persons remaining in the room are the chief surgeon, the anaesthetist and the nurse in charge of the pump. All three are wearing special gowns, microfilter masks and gloves. The surgeon is additionally wearing special glasses and thick gloves covered by a second pair of ordinary gloves, changed every half-hour.

The room is placed under negative pressure and the lights, deemed for the stabilisation of the cytotoxic agents.

During the chemotherapy, a closed perfusion circuit is used to avoid any contact with the agents and at the end, all the fluids are collected within special containers with *jelly* (thickening of the solutions). Special care is taken to prevent spillage during the procedure.

The chemotherapy performed, the abdominal cavity is washed with saline before the rest of the operating team is allowed to join. And the operation ending, all the instruments are first washed with formaldehyde before being send to the sterilization unit.

The cleaning personnel will also be wearing gloves, gowns and masks while washing the room.

**Conclusion:** with 130 cases performed, we feel confident and comfortable in the settings we have been building up to prevent any harm to the people working in theatre when a HIPEC procedure is performed.



## EP245

### THEATER PREVENTION FOR HIPEC SURGERY: PART ONE. PREOPERATIVE SETTINGS

**C. DENIS, D. DODION, Chr. WECHSELER, C. TOLLENAERS, L. SCARPONE, M. NELISSEN, J. M. WEERTS, MD.**

*Theatre Nursing staff*

*Department of Surgical Oncology,*

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**Subject:** Complete debulking surgery followed by HIPEC is a long-lasting procedure and requires cytotoxic agents use combined with hyperthermia, a significant threat for the patient and the theatre personnel. Since 2007, in accordance with our institution Hygiene Committee, we have been applying a protocol for the prevention of deleterious effects on patients and theatre staff.

**Method:** As a start, the protocol has been established by all the personnel involved with the help of pharmacists, head of nursing, members of the Hygiene Committee.

All debulking and HIPEC procedures are performed in a theatre with unidirectional airflow coming from the ceiling with an air renewal of 50 to 60 air volumes per hour. Absorbable sheets are displayed on the floor in case of peroperative spillage of cytotoxic agents.

The patient is lying supine on a foam mattress, with alternative compressing stockings to prevent DVT. Silicone pads are placed under the ankles, the knees and the elbows to prevent soars. Warming blankets are placed over the head and the legs to enable to heat or cool the patient as needed. The patient, under general and epidural anesthesia, is also connected to an entropy monitoring to ensure a proper anesthesia level.

All persons attending the procedure have had a training for the prevention of risks. To optimize standardisation, the same four members of the nursing staff are dedicated to all HIPEC procedures. During the chemotherapy, the theatre room is strictly restricted to the anesthetist, the surgeon and the pump attender. Each of them is wearing special gown, gloves, masks and glasses.

**Conclusion:** By these means, we feel we are promoting maximal safety for the patient and the persons attending a debulking procedure with HIPEC.



## WORK-RELATED STRESS AND MEDICAL ERROR ATTITUDES OF NURSES WORKING IN SURGICAL CLINICS

**EP246****Yasemin Yasemin**

**Aim:** The present study was conducted as a descriptive study in order to determine the workload perception, work-related stress and medical error attitudes of nurses working in surgical clinics.

**Material and Method:** We included 76 nurses who were working in surgical clinics of Ordu State Hospital and 24 nurses who were working in Ordu University Training and Research Hospital (ntotal=100). The data were collected by using Self-Description Form, The Scale of Occupational Stress and Medical Error Attitudes Scale. SPSS 20.0 (Statistical Package for The Social Sciences) program was used to evaluate the data of the study. Mann Whitney U and Kruskal Wallis-H tests were used for non-parametric variables. In order to compare parametric variables, Z test was used to compare two groups and correlation test was used to determine the relationship between two variables. The data of the study were evaluated with 95% confidence interval and 5% significance level.

**Results:** The average age of surgical nurses was  $36.6 \pm 7.6$ . The mean scores of the WorkRelated Stress Scale, and Medical Error Attitudes Scale were respectively  $40.8 \pm 5.4$ , and  $42.2 \pm 4.9$ . In case the total mean scores of these two scales were compared to each other, it was found that there was no statistically significant relationship ( $p > 0.05$ ). The mean work-related stress and medical error attitude scale scores of surgical nurses were at the moderate level. When it is considered that these two scales are directly proportional to each other, it can be concluded that the work-related stress will be low when nurses have medial error attitudes of nurses will be positive.

**Conclusion:** It is believed that the findings of this study will contribute to the similar studies.

**Key Words:** Surgical nurse, nursing care, work-related stress, medical errors

<sup>1</sup>University Hospital of North Norway    <sup>2</sup>UiT The Arctic University of Norway

### Background

The University Hospital of North Norway Surgery and Intensive Care Clinic has 380 nurses, including 32 specialist nurses, in three hospitals. The job descriptions and duties of the specialist nurses vary, even within the same field. In 2013, aiming at a more unified professional approach, the Clinic created a position for a Research and teaching nurse (RTN) with a PhD, and MSc nurses as professional development coordinators (PDC) in each field (20% clinical work).

### Purpose

The purpose was to achieve a uniform structure for better coordination of professional development and enhance experience sharing and cross-disciplinary learning.

### Design

RTN and PDC will prepare action plans based on the Clinic's priority areas.

Quality assurance of information flow, division of responsibilities and decision-making processes will be addressed in meetings between RTN, PDC and department heads. A similar meeting structure at section level has been established between PDC, specialist nurses and department nurses.

Evidence-based practice (EBP) is the common platform and working method for the three-year project. An annual plan for training and supervision will be prepared in cooperation with leaders.

### Results

Leaders and specialist nurses attended 1-2 day courses in EBP.

The annual in-service conference for specialised nurses was improved, with a clearer profile, reflecting competence-building needs in different fields.

PDC and the quality advisor implemented a patient safety programme.

New job descriptions for specialist nurses have been created. PDC have conducted surveys resulting in



recommendations and gradual implementation of new/changed practices.

#### **Discussion/conclusion**

The Clinic has established a consistent structure for professional development, strengthened by PDC across sections and disciplines. EBP as a common platform enhances the Clinic's profile and reduces the theory-practice gap. Quality assurance and improvement are in focus.

A well-structured system that prioritises professional development will ensure more competent staff and enhance treatment and patient safety.

## EP247

### FEASIBILITY STUDY OF REPROCESSING MEDICAL EQUIPMENT

**Fotopoulou E, RN, Head Nurse of Central sterile supply Department<sup>1</sup>**

**Padadopoulos E, RN, Assistant manager of Nurse Department<sup>1</sup>**

**Mistakidou K, RN, Head Nurse of Lab Catheterization Department<sup>1</sup>**

**Voutoufianaki I, RN, PHD@ Director of Nurse Department<sup>1</sup>**

<sup>1.</sup> *Onassis Cardiac Surgery Center, Athens, Greece*

**Purpose:** To investigate the feasibility of a hospital procedure for the proper management of reusable material (connecting cables for electrophysiological study) <sup>1</sup>

**Objective:** To establish and implement a document procedure which refers to the use of some connecting cables for electrophysiological study in the catheterization lab and will full responding in all security parameters<sup>1</sup>.

**Methodology:** Inter- department cooperation of hospital departments: a) Catheterization laboratory b) Central Sterilization Supply Department c) Office of Infectious Diseases in the following aspects: recording of materials , screening, study the specifications of the manufacturing firms <sup>2,3</sup>, recording data of the information system of the hospital for the number of electrophysiology acts and the number the connecting cables from March 2014 until October 2014 and March 2015 until October 2015

**Results:** We studied 13 codes of electrode cables. For the four (4) of them the hospital had not the possibility to use the sterilization method that the manufacturing firms proposed (Ethylene Oxide) <sup>2,3</sup>. For the remaining nine (9) codes there were all the proper conditions for their reprocessing. So, we had the creation and implementation of the procedure from 2/3/2015 until today with positive results.

**Application in Perioperative Nursing :**Reusable medical equipment which is safe for the patient while at the same time there are cost savings for the hospital.

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3. Information for Use
4. Stockert GmbH Electrophysiology Electrode Cable
5. Information for Use



## P248 DETERMINING FACTORS FOR SUSPENSION OF ELECTIVE SURGERY AT A TEACHING HOSPITAL, HIGH COMPLEXITY OF THE FEDERAL DISTRICT, BRAZIL

**Jacqueline Ramos de Andrade Antunes Gomes**

### RESUME

The objective of this study is to identify the main factors for the suspension of elective surgery a public hospital of high complexity of the Federal District. This is a quantitative, retrospective, descriptive study, carried out in the Surgical Center of a public hospital, teaching, tertiary, Federal District. From January to October 2015 were scheduled 6,926 surgeries, 4,587 of these were conducted and 2,339 surgeries suspended, totaling a surgical cancellation rate of 33.8%. The main reason for surgery suspension was unjustified, with 30.1%. The determinants for surgery suspension must be strictly controlled and restricted, for this is essential awareness of everyone involved, in order to decrease the rates found. The findings enables you to perform a situational analysis regarding the assistance and makes it possible to identify weaknesses, improve performance and adapt the work process to the patient's needs and industry.

**Keywords:** Surgery, Surgical Procedures, Elective, Surgical Center, Health Care Evaluation Mechanisms

## DAY SURGERY PATIENT COMFORT AND FACTORS AFFECTING THE PATIENT COMFORT

EP249

**Rahşan Çam\*, Havva Yöner\***

*\*Adnan Menderes University, Nursing Faculty, Surgical Nursing Department*

Day surgery is a surgery that is the patients are discharged on the same day. Thanks to developments in anesthesia and surgical techniques, ambulatory surgery has spread rapidly in many countries. Patients are treated with day surgery in many areas such as ENT(ear-nose-throat), orthopedics, gynecology, general surgery, cardiovascular surgery, plastic surgery, pediatric surgery, patients oral and dental surgery. Comfort concept, has been used in nursing for a long time and provide information about the quality of care. Day surgery is being applied to more patients in more cases every day. Comfort, which is expected result the of nursing care, is very important for providing better nursing care.

This study was performed to determine day surgery patients' comfort and factors that effects the patients' comfort. 300 patients who were admitted to day surgery have been included in this study. Individual Characteristics Form, Perianesthesia Comfort Scale and State-Trait Anxiety Inventory Form have been used to collect research data.

The mean score of comfort  $70.197 \pm 11.01$  average STAI score of  $43.7 \pm 9.03$ , trait anxiety scores average  $46.77 \pm 7.51$  were found to be in this study.

As a result, patient's comfort is effected by variables satisfaction with care, the time of giving information about surgery, previous hospital experience. Some of other variables have effect anxiety levels but comfort level has not effected by this variables.

**Key Words:** Day Surgery, Comfort, Nursing.

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