



European Operating Room Nurses Association



ABSTRACT BOOK

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Priority Sessions

Priority Sessions

PR01 How Norway handled the COVID Pandemic

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Like many other countries, Norway was forced onto a very quick and steep learning curve when faced with the challenges of the COVID-19 pandemic. I will detail some of these obstacles, the roles of the main actors, and the way decisions were made. Whilst considering society as a whole, I plan to focus mostly on the decision-making, information gathering and implementation practices concerning guidelines for the Norwegian health service and how we attempted to balance the protection for staff, patients and treatment. Finally, I will end by looking at some of the lessons we have learnt, and how we are trying to benefit from the work that has been done.

PR02 Operating room of the future; from scrubs to self-contained operating table

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Operating rooms are becoming more complex and dynamic, containing advanced technologies including robotic systems, image guided surgery, remote surgery, 3D images, virtual reality, holograms, hybrid systems, a variety of data display and information screens, and more, and with them the workload and congestion increases.

Despite these great technological developments, design issues and human factors considerations at the operating room, are still lagging behind.

The lecture will present three research projects concerning the diverse users, the platform (equipment), and the environment of the operating room:

A. All-inclusive operating table, to overcome the clutter, congestion, restriction, and blockage of cables, tubes, lines and wires resulting from the radial configuration of operating rooms.

B. Design and ergonomic concepts of operating room clothing (scrubs),

C. A multi-sensory approach for data and information displays in operating rooms.

Future directions indicate the importance of a multidisciplinary team in designing future operating room, that will be people centred and not only technology driven, responding to the dynamic and changeable needs of the patient and the surgical team.

PR03 Professional ethics in nursing - Stable or changing?

M. Kangasniemi¹

¹University of Turku, Finland

This presentation addresses professional ethics from different perspectives, such as professional rights and responsibilities as well as collegiality. Professional ethics will be reflected in relation to worker's personal values, shared values in the intra-professional and multi-professional collaboration and the history of nursing profession.

PR04 Artificial intelligence in the management of perioperative services

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Symposia - Invited speakers

Symposium: Effective management in the OR

IS01 Nurse managers' decision making and information needs in perioperative settings

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The aim of this study was to describe the nurse managers' decision making, information needs and role in daily unit operation. The study consisted of three phases.

First, the decisions made by the nurse managers (n=20) were described. The data was collected with think aloud method. During their shift the nurse managers made ad hoc, near future and long-term decisions. They made operational and tactical decisions and they were repeatedly interrupted in their decision making.

Second, nurse managers' essential information needs in decision making were defined, described and identified. The survey was addressed to nurse managers (N=412, n=288). The survey consisted of 76 information needs consisting of four main themes: "Patient's care process", "Surgical procedure", "Human resources", and "Tangible resources". Based on the results, the nurse managers valued 41 information needs as essential. The most essential information needs focused on shift and strength of the nursing staff during the shift, the form and need for patient's isolation and patient's surgical procedure.

Third phase focused on describing the nurse managers' role by conducting an integrative literature review (n=9). Based on the literature, nurse managers' role can be divided into three themes: 1) education and experience, 2) skills and 3) tasks. The results can be used when developing the content of information systems supporting knowledge management and decision making of nurse managers in hospitals. Finally, these results can be used in orientation and when clarifying the nurse managers' role.

KEYWORDS: daily unit operation, decision making, information needs, nurse manager and perioperative settings

Symposium: Competences for future nurses

IS02 How competent are graduating nursing students in Europe? Findings from the European cross-cultural study project, COMPEUnurse

S. Kajander-Unkuri¹

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Competence of nurses is an important issue in health care as it is related to professional standards, patient safety and the quality of nursing care. In Europe, there are several issues, which will increase the importance of nurse competence of graduating nursing students (GNS) as they are in an essential role in taking the place of retiring nursing staff and meet the increasing need for care.

The purpose of this study project is to assess and compare the level of competence of graduating nursing students at the point of graduation and in early years of practice in Europe based on their self-assessment. In addition, the purpose is to identify and analyse the factors (individual, organisational) related to the level of competence.

The data were collected between February 2018-September 2019 from GNSs in six European countries (Czech Republic, Finland, Italy, Portugal, Slovakia, and Spain). GNSs (N=4,135) were invited to respond to the research instruments (the Nurse Competence Scale, the Clinical Learning Environment and Supervision scale, the Self-Rating Scale of Self-Directed Learning scale and the Essential Elements of Nurse Empowerment) with VAS 0-100 scale and several background questions at graduation.

In all countries, GNSs' (n=1,746) assessed their competence on a good level (VAS mean 64.5, SD 14.8), albeit with statistically significant differences between countries. Competence correlated statistically significantly and positively with GNSs' perceptions of their clinical learning environment, self-directed learning abilities and nurse empowerment.

The results can be utilised for the development of nurse education and successful beginning of the nursing career.

Symposia - Invited speakers

IS03 The integrated Masters' degree (MSc) – An OR nurse education for the future

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In Norway, registered nurses with two years of experience have been offered formalised OR nurse education since 1952. Initially, it was hospital driven with a duration of 12 months. In 1998 the responsibility for the education was moved to the universities/colleges and the duration was increased to 18 months (90 European Credit Transfer and Accumulation system (ECTS) credits). Following the Bologna process for higher education, an optional master's degree (120 ECTS) was introduced in 2012.

The University of Stavanger enrolled the first students to the master's programme in 2014, and five students completed their degree of MSc in operating room nursing in 2016. Since 2018, all our OR nursing students graduate with masters' degree. Including the graduates of 2022, a total of 57 students have completed their thesis. These OR nurses have thorough clinical qualifications for delivering high quality OR nursing, and the scientific competence to further develop the profession in accordance with future needs.

IS04 Operating room nursing certificate education in Turkey

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Operating room nurses become certified for a variety of reasons, including professional validation, personal achievement, and career advancement. Becoming a certified operating room nurse is a mark of distinction and demonstrates a commitment to maintaining the highest standards in patient safety.

Operating room nursing certificate training program in Turkey started in 2015 and is approved by the Ministry of Health. Nurses who have worked in the operating room for at least 2 (two) years can participate in the certificate program. The certificate program includes 96 hours of intensive theory and 80 hours of clinical practice courses, lasting a total of 22 days. Up to 30 (thirty) participants can be trained in a training. A person who gets 70 (seventy) points out of 100 (one hundred) is considered successful. The participant who is successful in the theoretical examination and clinical evaluation is entitled to receive a certificate.

Operating room nursing certified training programs are implemented in 70 centres in Turkey. More than a hundred operating room nursing certified training programs have been given in different institutions in Turkey. 68.3% of the training was given in training and research hospitals. The provinces where operating room nursing certified training programs are frequently organized are 16.9% Istanbul (n=42), 14.5% Ankara (n=36), 8.0% İzmir (n=20).

In this presentation, information will be given about the operating room nursing certificate training and evaluation in Turkey and the results of the research on this subject.

Symposium: Robotics - Who will be the next nurses?

IS05 RONNA G4 robotic system in neurosurgical operation theatre from development to realization and prospective study on robot-assisted brain biopsies performed on 32 patients

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We present a novel robotic neuronavigation system, RONNA G4, used for precise preoperative planning and frameless neuronavigation. The system has been developed by a research group from the Faculty of Mechanical Engineering and Naval Architecture, University of Zagreb and a team of neurosurgeons from the University Hospital Dubrava, Zagreb, Croatia. Frameless stereotactic robot-assisted biopsies were performed on thirty-two consecutive patients. Post-operative computerized tomography (CT) and magnetic resonance imaging (MRI) scans were assessed to precisely calculate the

Symposia - Invited speakers

target point error (TPE) and the entry point error (EPE). All clinical data, the learning curve, and the influence of the trajectory angle on targeting accuracy were measured and evaluated. The application accuracy of the RONNA system for the TPE was 1.95 ± 1.11 mm, while for the EPE was 1.42 ± 0.74 mm. In our cohort, only one pathohistological diagnosis was inconclusive; thus, the total diagnostic yield was 96.87%. Linear regression showed statistical significance between the TPE and EPE and the angle of the trajectory on the bone ($p=0.026$, $p=0.010$). The learning curve analysis showed statistical significance, especially for one neurosurgeon who performed most of the procedures ($p<0.001$). The operation duration was significantly reduced over time, as shown by comparing the first ten procedures with the last ten procedures ($p=0.0007$). We also used RONNA G4 for cyst evacuation and ventricular drainage placement. The RONNA G4 robotic system is a precise and highly accurate autonomous neurosurgical assistant for performing frameless brain biopsies. In the future we plan to perform other neurosurgical operation such as deep brain stimulation, stereo EEG implantation and navigation to deep located intracranial lesions.

Symposia: Leadership skills: Shift the focus on resilience

IS06 Ways to strengthen the OR nurses' resilience in their role as leaders in the OR nursing context

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The OR nurse's competence is indispensable for ensuring patient safety during surgery. They are also expected to manage demanding situations by using diverse strategies to restore patient safety and they must be prepared to make quick decisions. The OR nursing profession includes knowledge of both technical and non-technical skills and participation in the surgical teamwork. There are however several areas for which OR nurses possess specialist knowledge and skills and therefore they have special responsibilities. Such an area is the prevention of postoperative surgical site infections. The OR nurse also guarantees a hygienic and aseptic environment throughout the operation by creating a safe and sterile working surface.

To demonstrate leadership in the surgical team and to stand up for the patient using the application of different knowledge and skills can be challenging given the demands imposed by the requirement of evidence-based practice. This complex vocational role can lead to a lot of pressure and it can affect the OR nurse's resilience in putting the patient at the centre. What can be done to strengthen the resilience of the OR nurse?

IS07 Operating theatre: leadership at the service of performance

S. Toussaint¹

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Hospital reforms and current health policies are leading operating theatre organisations to evolve in a logic of increasing rationalisation. Subject to management indicators, the surgical activity cannot be improvised, at a time of efficiency and productivity where quality and safety of care must be guaranteed to the persons treated. Exercising managerial functions at the heart of an operating theatre, with these performance objectives, suggests strong personal and professional qualities to build a cooperative advantage. Leadership, adapted to the situation, is one of the keys to success with an appropriate situational approach where effective communication, trust and dynamism are undeniable advantages for the health actors making up the multidisciplinary wealth. The block manager is an actor, pilot and conductor of a collective with strong individualities in an environment where power issues are high. The managerial strategies exercised in a participatory logic allow to conduct the operational activity by mobilising each actor. The guarantee of its mission is individual but also institutional by building governance with shared responsibilities.

Symposium: Effective management in the OR

S01 Crew resource management in the OR

H. Folkertsma¹

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Failure of communication between the crew in the cockpit was one of the main causes of the airplane crash in Tenerife in 1977 involving a KLM and PanAM airplane with 583 dead passengers. Shortly thereafter, NASA has developed the CRM safety training, now a concept in aviation. CRM focuses on making and strictly adhering to communications and collaboration agreements, eliminating traditional authority relationships.

Professional leadership, mutual communication, knowing how each team member is “in his skin”, and taking into account, are conditions for safe collaboration and therefore for safe patient care in the OR. We know that it can be wrong in the OR if cooperation or communication between disciplines and individual caregivers is not good enough. Therefore, the CRM system has been translated from aviation to healthcare.

Highly complex technology is no longer thought out of hospitals, but it has its own security risks. As technology becomes more advanced, systems become increasingly insensitive to healthcare providers. Certainly, there is a risk of malfunctions in the equipment. Also, systematics and standardization in, for example, alarms of medical equipment are not very much the case, as opposed to aviation. This increases the risks of the care process. More attention to the “human-machine interaction” is urgently needed.

In this presentation I will discuss in detail the aspects of the briefing OR and the debriefing OR at the three aspects:

Patient, Personnel and Planning.

S02 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

A. Ekepil¹

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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. 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 for the operating room on the following topics; patient identification, count procedure and unintentionally retained surgical items, safe use of tourniquet, protection of surgical smoke, handling of specimen, safe handling of medications, routines for product specialist visiting the operating room, surgical procedures during the COVID-19 pandemic, establishing and maintaining a sterile field for surgical items and use of surgical gloves during invasive surgery.

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 and have also been distributed in booklets to all members in SEORNA.

Symposia

Symposium: Robotics - Who will be the next nurses?

S03 Educational software for handling the Da Vinci Robot in the process of teaching-learning of the operating nurse in training

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This document brings important arguments where the lack of training in the branch of robotic surgery with the operating nurse is evidenced, this being of great relevance in the development of the surgical act due to its knowledge, who seeks to minimize the pathways entry of pathogenic microorganisms that disturb the physical well-being of the patient. In addition, there is evidence of the lack of educational material that allows the operating nurse to obtain knowledge in their teaching-learning process in their academic stay in higher education institutions and also shows how to correct this problem with the firm intention of designing educational software accompanied by the use of augmented reality. It has been developed in the period of time between 2020-1 and 2021-1, applying the instrument to directors or coordinators of operating nurse programs in Colombia.

Objective: Design educational software for handling the Da Vinci Robot in the teaching-learning process of the operating nurse in training.

Methodology: It is a descriptive and cross-sectional quantitative study because it requires identifying the need for the software, in addition, the content of the software within the document will be detailed and also corresponds to a specific period of time.

Results: 77% affirm not to know pedagogical strategies that facilitate the teaching-learning process of robotic surgery in the training of the Surgical Instrumenter, on the other hand, 69% affirm not to know pedagogical strategies for the manipulation of the Da Vinci Robot, 100% ratify the need to create software that facilitates the teaching-learning process in the handling of the Da Vinci Robot, likewise, it is recognized that through the design of the pedagogical strategy the performance capacity of the Surgical Instrumenter is strengthened. Finally, the content of the software was addressed, where the inclusion of theoretical content, its evaluation and interactive resources stands out with 85%.

S04 “Techno-Stress”: the influence of new technologies on the OR nursing team

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Background: The process of adopting and implementing novel technologies in medicine is crucial for their optimal utilization. During the last two decades, surgical technologies have much evolved thus, contributing to better and faster patient recovery. However, it appears that the OR nursing team is subjected to frustration, stress and anxiety due to difficulties in running these new technologies.

Aim of the study: To assess whether extensive usage of new technologies in the OR, increases “Techno-stress among the nursing staff.

Methods: The cohort included nurses who worked in OR. THE Research tools included two questionnaires: sociodemographic and Environmental questionnaires.

Results: The study included 39 members (28 Female), age 43 years (24-64), seniority 12 y (1.5-42). High level of Techno-stress was identified among the participants (4.1 mean; max is 5). Statistically strong associations were found between Techno-stress and peer support ($p<0.01$, $r=0.37$), Tecno-stress and use of jargon ($p<0.001$, $r=0.46$) and peer support and use of jargon ($p<0.001$, $r=0.47$). Techno-stress level (high) was inversely proportional to peer support and use of jargon (low).

Conclusions: The results of the present study shed light on a “weak spot”, which is crucial to smooth functioning of the OR, specially designed training programs are needed for integrating new technologies thus, supporting the wellbeing of the nursing teams as well as improving OR efficiency.

Symposium: Quality of care: No room for compromise

S05 The importance of the operating room reception for patient care

Y. Edry¹, OR nurses advisory committee, Israel national nursing administration - the professional guidance committee

¹IPNA- PRESIDENT, Tirat Carmel, Israel

The reception room unit in the operating room department is a crucial point for the quality of care and patient safety. It's the first meeting of the patient and families with perioperative staff, the point of checking the patient preparation for the operation and the last place that we can fix problems or stop a mistake.

In 2018 the national nursing administration of Israel decided to work together with the professional associations to promote the quality of care and patients' safety of patients who need to be operated on.

IPNA - Israeli Perioperative Nurses Association took part in that project and we decided to create guidelines for the Perioperative reception units, not only a list of doing or not to do, we wrote the Reception Unit Nurses professional job description. We start our project by collecting data from most of the Israeli operating room departments. we create a questionnaire that included the question:

1. reception room nurse's education?
2. the nurse's professional experience?
3. how many shifts are the reception unite is staffed?
4. do you have guidelines for the reception unite nurses?
5. Do you think that only perioperative nurses must work in the reception unite?

We found that in half of the reception room units the nurses are not perioperative nurses.

In most hospitals, the reception rooms not working afternoon and night shifts, in 50% of hospitals they don't have guidelines for the reception unit.

Results: In cooperation with our association and the national nursing administration, we created the official guidelines for the operating department's reception room, including an education program for nurses that working in the reception units. In August 2021, the guideline was published to all the hospitals.

Next year we attending to check the implementation of the guidelines in the operating room department in Israel.

S06 Brief and debrief: an essential exercise to promote quality and safety in the operating room

L. Lynch¹

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As a manager and a leader, the presenter considers the implementation of briefings and debriefings as core elements in the delivery of safe and quality care in the OR. This led the presenter to explore what qualities are needed as a leader to become an effective change agent. In addition to possessing knowledge, eagerness and enthusiasm to drive change effective leaders must have the ability to motivate and empower colleagues to develop and express their own ideas (Glenn, 2010). Bassett and Westmore (2012) advise that if there is poor leadership within an organisation it leads to inadequate and poor performance. To implement any change effectively the change agent requires two leadership styles. Transactional and transformational. Collins (2005) outlines five levels in a hierarchy of leadership. He suggests that the Level five leader is on top of a hierarchy of abilities and is an essential requisite for transforming an organisation from good to great. Sadri (2012) reports that leadership may be enhanced if individuals Emotional Intelligence (EI) is developed and augmented. The presenter suggests that leadership in the OR is essential and needs to be fostered to ensure safe quality care.

What my presentation will do:

Recognise the necessity of briefing and debriefing in the OR.

Identify skills that need to be cultivated to implement any change in practice in the OR.

Understand leadership, styles and traits of effective leaders.

Improve the overall quality and safety of care delivered in the OR.

What I want: I feel this is a very pertinent patient safety topic and I would be delighted to get the opportunity to present my work at an AORN conference. As a leader implementing change continuously, I would like to share my expertise. As I am travelling from abroad assistance with travel would be gratefully appreciated.

Symposia

S07 Sailing the unprecedented winds of global perioperative practice

D. Peneza¹

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As the multiple global crises emerge leaders continue to race against time, clinical safety, and finding balance. This presentation outlines the journey of an internationally educated clinical and volunteer leader as she journeys the tides of the global pandemic and other unforeseen crises while boosting team dynamics, ensuring success in professional involvements, and finding one's true power as a novice nurse - a leader in the frontline. Successful global strategies on innovative leadership and creative education will be shared to illustrate and paint the trend of the future.

Symposium: Leadership skills: Shift the focus on resilience

S08 Assessment of factors that affect stress level on operating room nurses

M. Elin¹

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Background: It's a well-known fact that nurses are suffering from stress in their workplace. This especially shows up in such departments as emergency, intensive care units and operation theaters. There is no evidence of what primarily cause stress in operating room nurses and which nurses are especially influenced by these factors.

Aim: This paper provides a study exploring factors that affect the stress level on operating room nurses and compares the reaction to stressful situations of well-experienced and less-experienced nurses.

Methods: The focus group was conducted with 74 operating theatre nurses in three public hospitals in Israel. The paper version of the questionnaire that was designed by the researcher, based on the STAI questionnaire, was distributed to operating room nurses. The research data were collected in a computer database and statistical survey was performed using the IBM SPSS Statistics 23.

Findings: From the analysis of the collected data, three themes were identified:

1. The operating room nurses with experience of 6 years and less in OR, has a higher level of stress.
2. The highest level of stress was shown in those situations in which professional skills are necessary for quick and effective action.
3. The general level of stress in the Environment category of stressful situations was higher for nurses with more than 6 years of OR experience.

Conclusions: The most obvious finding to emerge from this study is that nurses with experience in operating theater of 6 years and fewer have a higher level of stress in comparison to their more experienced colleagues. The highest level of stress was reported on professional issues are related to the lack of knowledge of equipment or complex operations with an unexpected scenario. Also, urgent emergency operations and multi-trauma can cause an extremely high level of stress in less experienced nurses.

S09 How to keep your head when all around you are losing theirs. Resilience skills. Can we learn them?

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Resilience is a concept that refers to an individual's ability to bounce back or positively respond to adversity.

Psychological characteristics of resilience that can be learned include positive coping skills, engaging the support of others, optimism, humour, and cognitive restructuring (Mealer et al, 2014).

Irrespective of the method or approach there appears to be a demand for the design and implementation of stress management that promote resilience for employees. This may reduce burnout and attrition. It can be achieved by offering counselling and other occupational health measures that promote the physical and mental wellbeing of staff. However, the provision of an opportunity for careers to discuss the psychological and emotional aspects of their work may encourage the development of resilience (Gray, 2012).

Symposia

Resilience is a vital skill that nurses require which will enable them to reflect on their experiences and develop stress coping tactics (McAllister, 2013). This is further reiterated by McGee (2006) who suggests that the promotion of personal growth is paramount for nurses. Recognising the value of developing resilience may increase retention within the profession. Schulte (2013) state that healthcare organisations needed to develop resilience in their leaders in order to inspire the people working within them. Resilience breeds resilience. 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.

The author who is an experienced perioperative nurse and is currently undertaking a doctorate in Stress has designed strategies to develop resilience. These are based on her experience, observation and extensive reading.

The strategy known as the (OSPCS) strategy include:

- Optimism cultivation
- Shift the focus/Flip the thought
- Process difficult feelings
- Connect
- Self-awareness

Parallel Sessions

Parallel session: Scientific research - Shaping the nurse identity

OP01 Nurse-led randomised controlled trials in the perioperative setting: a scoping review

J. Munday^{1,2,3}, N. Higgins¹, S. Mathew¹, L. Dalglish¹, A. Batterbury^{1,3}, L. Burgess¹, J. Campbell¹, L. Delaney¹, B. Griffin¹, J. Hughes¹, J. Ingleman¹, S. Keogh^{1,3}, F. Coyer^{1,3}

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Objectives: The aim of this review was to identify domains of perioperative care in which nurse-led randomised controlled trials have been conducted, and issues impacting upon quality of research undertaken in this setting. Within the multidisciplinary perioperative setting, it is appropriate that nurses are at the frontline of driving care improvements and identifying research priorities.

Methods: This scoping review was conducted in reference to Joanna Briggs Institute (JBI) scoping review methodology (Peters, Godfrey et al. 2015), by a collaborative group of acute care researchers and clinicians. A comprehensive search strategy found both published and unpublished nurse-led randomised controlled trials in the perioperative setting from 2014-2019. Full text screening, critical appraisal using the Joanna Briggs Institute Critical Appraisal tool for Randomised Controlled Trials (Joanna Briggs Institute., 2017) and data extraction were undertaken by independent paired reviewers. Studies were organised into subgroups according to the objectives.

Results: From the 86 included studies, key areas where nurses have led randomised controlled trials include: patient or caregiver anxiety; postoperative pain relief; surgical site infection prevention; patient and caregiver knowledge; perioperative hypothermia prevention; postoperative nausea and vomiting, in addition to other diverse outcomes. Issues impacting upon quality (including poorly reported randomisation), and gaps for future investigation (including a focus on vulnerable populations), are evident.

Conclusions: Nurse-led randomised controlled trials in the perioperative setting have focused on key areas of perioperative care. Yet, opportunities exist for nurses to lead experimental research in other perioperative priority areas, and within different populations that have been neglected, such as in the population of older adults undergoing surgery.

References:

Peters, M.D., Godfrey, C.M., Khalil, H., McInerney, P., Parker, D., Soares, C.B. (2015) Guidance for conducting systematic scoping reviews. *International Journal of Evidence-Based Healthcare*. 13(3):141-146.
Joanna Briggs Institute. *Checklist for Randomised Controlled Trials*. https://joannabriggs.org/sites/default/files/2019-05/JBI_RCTs_Appraisal_tool2017_0.pdf

OP02 Unveiling tacit knowledge: non-technical skills in operating room nursing

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Objectives: Previous studies of the non-technical skills (NTS) of operating room (OR) nurses have primarily explored the skills of scrub nurses. The low volume of previous research including the circulating nurse warrants an exploration of the NTS used by scrub and circulating nurses. Thus, the aim of the study was to identify the NTS essential for OR nursing in the intraoperative timeframe.

Methods: A three-round modified e-Delphi technique was used. Norwegian registered OR nurses (n=106) with a minimum of two-year experience (mean=17.1) were selected for the expert panel. Response rates in the three consecutive online surveys were 100%, 90.6%, and 84.4% respectively. Descriptive analysis was performed on the quantitative data while deductive thematic analysis based on crew resource management (CRM) theory was performed on the qualitative data. Consensus was determined by stability between rounds.

Preliminary results: Consensus was obtained on which CRM categories are essential to OR nursing, and several novel NTS was identified in the qualitative data. The following list presents CRM categories with representative NTS:

Situation awareness (SA): Uses all senses to gain SA; Has awareness towards wrong information; Are continually 'One step ahead'.

Leadership: Uses authority to promote patient safety; Shows competence in management; Considers consequences when planning activities.

Parallel Sessions

Decision-making: Safeguarding availability and function of surgical equipment; Considers the patient, surgeon, and available equipment when making decisions; Considers urgency and available resources when selecting and implementing options.

Communication: Uses appropriate communication techniques; Identifies and reduces barriers to communication.

Teamwork: Contributes to shared SA; Contributes to efficiency.

Conclusions: This study shows that the NTS of OR nurses are more extensive than previously identified. Identification of a diversity of novel NTS contributes to the verbalisation of skills which formerly were considered tacit. This verbalisation may facilitate teaching of NTS, promoting accelerated development of NTS and further improve patient safety.

OP03 Interprofessional simulation-based learning and its impact on developing perioperative nursing students' professional identity

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Objectives: The purpose of this study was to explore how interprofessional simulation-based learning contributes to shaping perioperative nursing students' professional identity.

Methods: We used a qualitative and explorative design for this study. Between May and October 2019, we conducted six focus-group interviews with thirty-four perioperative nursing students from five educational institutions in Norway. Data analysis used a phenomenological hermeneutical method (Lindseth & Norberg, 2004).

Results: To include students from different professionals' educations can create challenges when organising interprofessional simulation-based learning to develop a greater understanding of their role function as a member of the interprofessional team. When organising interprofessional-simulation based learning for perioperative nursing students, there is a need for facilitators with competence in perioperative nursing to provide students with required information, and to focus on the perioperative role during debriefing. This is important to support their need for information related to their role, tasks, environment, and equipment and to be able assisting the perioperative nursing students with constructive feedback and knowledge during debriefing. The content of the simulation case needs to be relevant to perioperative nursing student's future professional roles or tasks and to ensure this, educators from different educational professions should collaborate in organising interprofessional simulation-based learning, scenarios, helping participants to fulfil their roles and functions. Through interaction with others, perioperative nursing students can discover what is peculiar to one's own profession and practice and what sets them apart from other professions. By evaluating themselves in this social interaction context, perioperative nursing students begin shaping their professional identity.

Conclusions: It seems that interprofessional simulation-based learning creates experiences that can shape perioperative nursing student's professional identity. It is important to organise interprofessional simulation-based learning to enable the students within the different educational professions to feel included, accepted and provide them with affiliation in the interprofessional team.

OP04 Effectiveness of nurse-led preoperative assessment for anaesthesia: a prospective cohort study

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Aims and objectives: To evaluate, in low-complexity surgical patients, the effectiveness of preoperative assessment carried out by nurses with anaesthetic training compared to that carried out by anaesthesiologists in terms of cancellations and inadequate surgical preparation.

Background: Preoperative assessment of surgical patients is vital to identify patient's risk factors and provide education. In some hospitals, a nurse with anaesthesia training evaluates, under supervision, patients who are candidates for low-complexity surgery.

Design: Non-superiority prospective cohort study.

Methods: One hundred and eighty-three patients were recruited who had undergone low-complexity surgery between

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May and September 2020. Sixty-nine patients were preoperatively assessed by a nurse and 114 by an anaesthesiologist. Data collection included a questionnaire to assess patient satisfaction and knowledge acquired from the preoperative assessment. Descriptive and inferential statistics were used for data analysis.

Results: Incidents causing cancellation of surgery were the same in both cohorts (3.8%, 2.6%). The incidence of poor preparation attributable to the patient was also similar in both cohorts (17.0% vs 18.4%). Patients seen by nurses valued the satisfaction with the preoperative assessment more highly than patients seen by anaesthesiologists (median 91.67 vs 84.62). In terms of Knowledge obtained from the preoperative assessment, both professionals did not show statistically significant differences in knowledge levels.

Conclusions: Preoperative patient assessment performed by a nurse with anaesthesia training in low-complexity surgical patients can be as effective as that performed by an anaesthesiologist, without having an impact on surgical cancellations or patient preparation. On the day of surgery, patients who had been assessed by a nurse were more satisfied with their care during the visit and acquired similar knowledge about preoperative preparation as patients assessed by anaesthesiologists.

Relevance for clinical practice: Properly trained nursing staff can perform the preoperative assessment in low-complexity surgical patients to the same standard as anaesthesiologists.

Parallel session: On the path to success - A way out burnout

OP05 Professional burnout of nursing staff and working groups in surgical unit

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Immersed in a project on professional burnout and working groups, the COVID-19 Pandemic forced us to segregate the staff. Once the team has regrouped, we studied the evolution of their level of professional burnout and quantified the participation in working groups.

Methodology: Prospective longitudinal descriptive study. We used the Maslach Burnout Inventory (MBI) questionnaire in June **2019, 2020** and **2021**. Epi_ Info. 7 data processing. Diagnosis according to the values of Gilmonte and Peiró.

Results: Response rates above **75%, 76%** and **97.7%** n **33 33 44**. The group averages obtained were for Emotional Fatigue (EQ) **26.93 26.21 27.66**. **Levels** high high high. For Depersonalisation (DP) **6,73 7,39 8,77**. **Levels** medium medium medium. For Personal Accomplishment (PR) **33,94 36,15 35,25**. High medium medium level.

The number of people affected by **high level** of professional burnout has been for CE **60.61%. 63.64%** and **68.18%** for PD **30.30% 45.45%, 46.45%**. For PR **54.55%, 36.36% 50.00%**.

38% of those who participated and **60%** of those who did not participate in working groups present a high level of professional burnout in **PR** Personal Accomplishment.

Conclusions: Although the 2021 figures position us at high medium medium level for CE, DP and PR, we interpret that the group diagnosis is **HIGH LEVEL** of professional burnout as the scores have increased and less than 3 tenths is the distance to the high level in DP, PR.

The number of people with high level has increased more than 8% for **CE** and 16% for **DP** compared to 2019 data. 22% of the participants in working groups have a better level of **PR** and 12% have a better level in **CE**, which suggests that working groups could reverse the observed trend and encourages us to continue promoting them in our work environment.

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OP06 Operating room nurses' resilience: systematic review

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Objectives: Resilience is an adaptive quality in the presence of adversity, contributing to independent functioning and well-being. Operating room (OR) nurses need to be resilient in order to cope with extreme demands in their workplace. The aim of this review is to examine studies investigating the resilience of operating room nurses.

Methods: This study was created by using the Preferred Reporting Items for Systematic Review and Meta-Analysis - Meta Analyzer-PRISMA checklist. Medline/PUBMED, Scopus, Cochrane Library and Google Scholar were searched from electronic databases and published before August 2020. The keywords "resilience, operating room, operating room nurse and nursing" were searched in the databases in combination. After reviewing the eligibility and exclusion criteria, four studies were included.

Results: It was observed that studies on resilience in operating room nurses were conducted between 2007 and 2017, and at least 41 and at most 772 operating room nurses were included in the studies. It was determined that three of the studies were quantitative and one was a quasi-experimental study. In one study, a statistically significant relationship ($p < .001$) was found between burnout and resilience ($r = -.59$, $p < .001$). In another study, it was stated that there is a high level of relationship between resilience and hope and self-efficacy, and a moderate relationship between coping skills, achievement and control. In a quasi-experimental study, it was observed that the effectiveness of sensory stimulation therapy was determined as an intervention to strengthen the resilience of operating room nurses.

Conclusions: There are few studies examining resilience in operating room nurses. Studies show that resilience level, factors related to resilience and intervention activities performed to increase resilience in operating room nurses were determined.

OP07 Mindfulness minding the minders - Introducing mindfulness to the OR

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Work-based stress and anxiety is unfortunately a fact of our working lives, COVID-19 has exacerbated that stress and exposed areas of weakness within teams. In order to mitigate against this a group of dedicated people including theatre nurses introduced an initiative "Mindfulness at Work" to give our staff the resources to manage stress and build resilience. Mindfulness is the practice of paying attention to the present moment, bringing awareness to the fore without judgement or interpretation. Mindfulness based practices include breathing exercises, guided meditations and stress reduction relaxation. The benefits of mindfulness include:

- Decreased stress and psychological distress in adults and employees
- Enhanced mental health and functioning
- Increased emotion regulation and self-control
- Decreased anxiety, depression, worry, and rumination
- Reduced incidence of problem drinking and symptoms associated with problem drinking.

Mindful champions have been trained across all disciplines throughout the hospital. Mindfulness skills can be used by staff in their working and personal lives, and will be particularly helpful in delivering patient centred care. The theatre department currently have a number of trained mindfulness champions to include the author. They have implemented mindfulness exercises at the beginning and end of each working day. These are proving to be very beneficial in helping reduce stress in the theatre department.

"When you hand good people possibility, they do great things." Champions are trained and mentored to introduce mindfulness exercises to each handover / team meeting. There is also a weekly mindful check in.

"A true champion without a cause is entrapped energy. A great cause without a champion is but an elusive dream. But with a great cause with a true champion is the realization of a vision"

Parallel Sessions

OP08 How giraffes, monkeys and Jackals can help you being a happier and more efficient OR manager

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NVC, mindfulness or even meditation have become popular in recent years. Those concepts offer new management skills such as authenticity, acknowledgement of emotions and the ability to let go.

However, is this a sustainable way or will it soon be swept away by another more innovative model?

As OR nurses, we have high standards, such as scientific rigor, quality of care and permanent formation to only name a few.

Nevertheless, in the mindfulness world, we found and experienced lots of tools and tips that we would like to share with you. It will then allow you to have a more relaxed everyday practice and you would in this way become more serene and efficient.

Interactively, we develop the means of giving oneself quality time even on a hectic day. We will discuss two little sentences that can help you sort out the demands quickly and efficiently, known as monkey management.

Specifically in the communication field, we come back on how to give and receive feedback, especially negative feedback, how to speak as a giraffe choosing words that can build a relationship instead of destroying it. We explore how to avoid traps and bites of the jackal.

We will present a 5 steps technique, which is fast and efficient. This technique will lead you to make fair decisions. At last, we finish with by 3 magic sentences to use without moderation during a crisis.

Our goal is to share tools and inspiring techniques which are proven to be working and will give to each OR manager the keys to achieve an even deeper well-being and personal blossom at work.

"I treat as I am"

Parallel session: Online and practical tools to enhance students' learning

OP09 Operating room nursing lecture during COVID-19 pandemic: two years' experience

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Introduction: During COVID pandemic all education systems started online education. 2019- 2020 and 2020-2021 Spring term second year nursing students have a selective course operating room nursing course. When the pandemic started classes also continued online. Online classes have many applications and university systems. These applications are already using all students.

Objectives: This study was aimed to determine the opinions of nursing students about the usage of YouTube in content of operating room nursing lectures and using WhatsApp application for communications.

Methods: A descriptive study was conducted with 2019- 2020 semester 53, 2020-2021 term 75 second grade nursing students. Videos related to the topics found by the students were shared over the WhatsApp group and were presented in the lesson when their suitability was approved by the educator. The data were collected with an online survey. Questions asked on a 1-10 rating scale obtained students' opinions. Data were analysed by number percentage, mean and standard deviation.

Results: 2019- 2020 term the nursing students stated that the integration of YouTube videos were 7.4 points. The students were given 7, 4 point online classes done via cellular telephone with WhatsApp application. 2020-2021 term the effect of integrating course content with video on their understanding of the subject is 7.9931.9; The level of satisfaction with the "Video" application in the course content was 7.8131.80; The contribution of the videos to their education is 7.8032.0; The effect of using "Video" in the lesson on learning levels 7.7131.8; points were found.

Conclusions: Active participation of students can be ensured with video presentations in order to support the course content in nursing education, enrich the learning environment, and provide targeted information.

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OP10 Bachelor nursing students in rotation practice in the operating room department: a collaborative project by Oslo Metropolitan University and Oslo University Hospital

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Purpose: To explore the Operation Room Department (OR) as a learning arena for bachelor nursing students and if rotation practice in the OR increased their knowledge of the surgical patient's need for surgical nursing and treatment throughout the surgical process.

Method: A descriptive design and quantitative method with a comparative pre and post survey followed by a Likert scale survey. The bachelor nursing students' intervention group (N=43) received a theoretical instruction before one week of supervised practice in the OR. They received a multiple-choice survey, which included questions regarding their knowledge in surgical nursing. The survey was taken twice, first one week before the supervised rotation practice in the OR and then when the practice was completed.

The bachelor nursing students (N=52) in the control group were not offered the rotation practice, but received the same survey midway through their surgical ward practice. Descriptive analysis, frequencies, percent, crosstabs and chi-square tests, was performed. At the end of the surgical ward practice, the intervention group received a Likert scale evaluating survey and descriptive analyses were performed (frequencies, percent).

Results: A significant difference in knowledge between the intervention and the control group was found, regarded to; preventing hypothermia ($p=,027$), pressure-, strain- and nerve damage ($p=,050$), preventing infection and infection control ($p=,000 - ,013$) and patient safety ($p=,034$). Results of the survey at the end of surgical ward showed that 98% of the bachelor nursing students gained greater insight into the surgical patient's needs for nursing care and 98% recommended rotation practice in the OR.

Conclusions: One-week supervised rotation practice in the OR for bachelor nursing students in surgical ward practice increased their knowledge and insight into the patient's need for surgical nursing and patient treatment. The students recommended rotation practice as part of their surgical ward practice.

OP11 Video of clinical procedures can increase students' self-efficacy in clinical skill development

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Objectives: Clinical skills are important for developing the operation nurse's expertise. Increased efficiency and production requirements in the hospital health service can constitute an obstacle to skills training and self-efficacy for students in post graduate program for operating room nursing. A high degree of self-efficacy increases motivation, cognition, courage, interest and initiative, which in turn can increase the success rate of clinical skills development.

Methods: A quantitative study were conducted to investigate the potential benefits of using instructional videos in the learning process for the development of clinical skills, and its contribution to students' self-efficacy. Five instructional-videos containing clinical procedures, produced by the head teacher, were available to the students throughout their studies.

Data management and analysis were performed using descriptive statistics in summary sizes, and a 2-tailed Spearman's rho to measure correlations between variables.

Results: The study revealed a significant correlation between how often the videos were watched and the students own self-efficacy. In addition, the students reported an increase in the development of clinical skills.

Conclusions: Given the limitations of practicing clinical procedures, video can be a well-adapted learning resource for learning clinical procedures and has the potential to promote self-efficacy in students. The number of students imposes restrictions on the transferability of the study.

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OP12 The effect of online learning methods on nursing students' motivation during the COVID-19 pandemic: a mixed method study

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Objectives: This study investigated the effect of online learning methods on nursing students' motivation and their experiences with those methods during the COVID-19 pandemic.

Methods: This was a mixed method study. The sample consisted of 237 nursing students who took the Surgical Nursing in the spring semester of the 2020-2021 academic year in a university in Ankara, Turkey. The course involved interactive learning methods (true or false?, puzzle, concept map, brainstorming, slogan creation, concept map, case study, etc.) on web-based applications (kahoot, mentimeter, wordwall, learningapps, crosswordlabs, etc.). Moreover, case videos were presented, group counseling was provided throughout the semester, "case presentations" prepared by student groups were discussed. The data were collected online using the Instructional Materials Motivation Survey (IMMS) and the Achievement-Oriented Motivation Scale (AOMS) at the end of the semester between June 1 and 6, 2021. Three focus groups (n=8 each) were formed using simple randomization. Focus group interviews were conducted between 9 and 12 July 2021 to determine participants' experiences with the online learning methods. The quantitative data were analysed using descriptive statistical methods. The qualitative data were analysed using thematic analysis.

Results: Participants had a total IMMS and AOMS score of 94.83315.79 and 142.39318.80, respectively. The results suggested that they had high motivation for online learning methods. In addition, they made positive statements regarding the online learning methods in the focus group interviews. They mostly noted that the methods increased their motivation and interest, made classes more fun and easier to learn, and promoted learning retention.

Conclusion: Nursing students have high motivation for the online learning methods in the Surgical Nursing course. They also think that the methods promote interactive learning, learning retention, and student engagement. They suggest that there be more interactive learning methods commonly used in courses.

Parallel session: Insights into the perioperative journey

OP13 The monobloc fronto-facial advancement in paediatric patients: a complex double team surgery

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Craniostenoses are craniofacial malformations resulting from the closure of sutures.

Syndromic forms affect around 1 out of 50,000 births per year in Europe. They involve a complex craniostenosis with severe hypoplasia of the facial bones. This major impact on the face and the skull has important functional repercussions such as exorbitism, intracranial hypertension and life-threatening ventilation disorders.

Since the start of this surgical procedure in 2014 at the hospital of La Timone in Marseille, we have operated on 10 patients aged from 2 to 11 years.

To achieve such a complex procedure, a teamwork including two surgeons of different specialties is essential for the patient's management.

First, the neurosurgeon exposes the frontal region widely up to the orbits by a coronal approach and performs the frontal and superior orbital band osteotomies.

Next, the maxillofacial surgeon performs bilateral osteotomies of the orbits, zygomatic arches, and osteosynthesis of the external walls of the orbits.

Together, they perform frontonasal disjunction.

Then the maxillofacial surgeon performs the pterygomaxillary disjunction.

The fronto-orbitomaxillary complex is then entirely dissociated as a single piece from the rest of the skull.

Finally, the placement of distractors allows the post-operative advancement to carry on.

This procedure allows significant correction of the intracranial hypertension, dental joint, exophthalmos and improves obstructive ventilatory difficulties. It also has a major psychological impact on these children, who suffer daily from the

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aesthetic aspect of their pathology.

The role of the surgical nurse is essential to carrying out all stages of the procedure:

- reception of the patient
- Cooperation with surgical teams
- Risk management
- Transmission of knowledge
- Training.

In conclusion, the surgical nurse is the link that unites the different protagonists who work in unison so that this extraordinary procedure is a flawless success for the patient.

OP14 Documentation of the temperature of patients undergoing laparoscopic surgery

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Background: Perioperative hypothermia is a prevalent condition across all surgical specialties, and is associated with significant adverse events. A large proportion of patients undergo laparoscopic surgery: whilst insufflation gas is heated in some institutions, others utilise unheated gas.

Research problems/goals: This study aimed to investigate whether there were differences in temperature between patients receiving standard or heated insufflation, utilizing documentation of temperature from the operating theatre (OR) ward.

Methodology: A retrospective medical record review of 170 patient records, from the same hospital, were performed as a quality project: 86 patients received standard CO₂ gas, and 84 patients received heated CO₂ gas. The data were analysed using descriptive and comparative statistics.

Results: This study questions how perioperative temperatures are documented: inconsistencies in documentation impeded the comparison in temperatures that could be made between unheated and heated insufflation gas. Nonetheless, there was some indication that heated gas resulted in less heat loss.

Conclusions: This study suggests there is an opportunity for documentation of temperature monitoring to be improved. The measurements documented vary in quality and methods making them unlike to compare. Future studies comparing the use of heated versus unheated gas would benefit from using prospective study designs.

Keywords: documentation, hypothermia, laparoscopic surgery.

OP15 Effectiveness of educational interventions used with children, adolescents and parents in the perioperative journey

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Introduction: Paediatric surgery is a potentially stressful and traumatic event for the child and family. Family-centred educational interventions can serve as a resource for nurses in managing perioperative anxiety, pain, and behaviours of parents, children and adolescents undergoing surgery.

Aim: Evaluate the effectiveness of family-centred educational interventions in the anxiety, pain and behaviours of children/adolescents (3-19 years old) and their parents' anxiety in the perioperative period.

Methods: This review followed the Joanna Briggs Institute guidelines for systematic reviews of effectiveness. Databases MEDLINE, CINAHL, PsycINFO, Cochrane Central Register of Controlled Trials, and SciELO and sources of unpublished

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studies OpenGrey, Open Access Theses and Dissertations, and RCAAP Portugal were systematically searched to find both published and unpublished studies from January 2007 to April 2021 available in English, Spanish and Portuguese. Two independent reviewers assessed records following the inclusion criteria.

Results: Twenty-eight studies were included from a total of 4500 records identified. Family-centred educational interventions focused on explanations about pre and postoperative care, preparation of a child for surgery, strategies to facilitate children's adaptation to the operating room environment, and providing parents with knowledge about equipment and procedures in the recovery area. DVDs, videos, games, booklets, leaflets, face-to-face teaching, tour visits and therapeutic play were used among the studies. Data from meta-analysis revealed that children/adolescents who benefited from educational interventions were significantly less anxious throughout the perioperative journey, demonstrated better compliance at induction of anaesthesia and displayed reduced postoperative pain intensity. No evidence was found regarding the effectiveness of these interventions in reducing postoperative maladaptive behaviours, such as sleep disturbances, eating or emotional disorders. Preoperative parental anxiety was also reduced, favouring family-centred educational interventions.

Conclusions: Family-centred educational interventions must be considered in the management of anxiety and pain of children/adolescents and parents' anxiety during their perioperative journey.

OP16 ELPO APP: innovation tool for risk assessment of the development of patient positioning injuries

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Background: Patient Positioning when not performed in the best possible way, can cause injuries in several systems of the body. Thus, it is essential to assess the risks to design an individualized care plan for the patient on time to prevent complications. ELPO (Risk Assessment Scale to development of injuries related to patient positioning) as a valid and reliable tool widely used in perioperative clinical practice in Brazil. This project aimed to build an ELPO Scale Application for Smartphones and Tablets.

Methodology: This is a technological development of an educational mobile application through scientific rigor. The construction followed the steps: contextualize (problem); Project; coding (use of programming tools); test.

Results: The ELPO App was developed in two languages, the Portuguese version, and the English version, and can be downloaded for free on the digital platforms of mobile applications. ELPO has seven items that consider intrinsic and extrinsic risk factors for the development of injuries related to patient positioning. The ELPO App allows the selection of items interactively. The software sums the scores of the selected sub-items and at the end shows total scores and evidence-based care recommendations. From August to November of 2021 almost 4000 downloads were registered and the evaluation on mobile app's stores is five stars. The use of ELPO can facilitate the work of the perioperative nurse, the analysis of who is the patient at greatest risk, directing care, and ensuring the safety of the surgical patient. Using this scale in digital format can make this process even easier.

Conclusion: The ELPO App is a technological tool to assess the patient's risk of developing injuries related to patient positioning and present Evidence Based Care Recommendations to guide the care. Are you ready to guarantee excellent care during patient positioning? Download the ELPO App and enjoy!

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Parallel session: Education of nurses: Spotlight on digital tools

OP17 My operating room nurse coach (MYORCO)

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In Europe, Perioperative Nurses do not necessarily follow a specialized training before entering an operating theater! Where available, the trainings are very heterogeneous and sometimes, not legally required.

There is a clear and significant pressure on the operating theaters: the number of aging surgical patients increases steadily, there is a big staff turnover, and the surgical techniques are evolving very quickly. Consequently, the staff and the OR managers are facing increasingly complex requests.

On the other hand, ambulatory surgery (patient leaves the hospital the day of its operation) is heading toward a permanent just-in-time process which involves a new approach of personnel practices.

How to address these public health issues which affects OR nurses and also the patient?

Key Skill Management in the Operating Room (KSMOR) is the first European project dealing with this situation and was presented before in a previous EORNA congress.

KSMOR provides OR managers with a method and a software focusing on key practices used in high-risk environments by the operating room nurses.

In order to meet the requests of the OR professionals, a new project has been developed centred on the practices of the OR nurse: « My Operating Room Nurse Coach (MYORCO) ».

MYORCO will provide a large range of video trainings for OR nurses. These video trainings highlight the devices, tools and surgical instruments the OR nurses use during the perioperative care. Around one hundred of short movies on ergonomics of instrumentation for new OR nurses will be realized, on the basis of regular surgical practices. A specific software will allow each individual OR nurse and his/her Mentor to make sure that the practices are correctly followed. The software also will allow the OR nurse to do a part of the training on his/her own.

MYORCO will complete the KSMOR website.

OP18 Digital technology helps in the education and daily work of medical staff in the operating room

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Operating room is a workplace that requires a great deal of knowledge from the medical staff in a very wide variety of professions and technologies. Doctors, nurses and technicians are exposed to thousands of names of medical equipment and instruments, hundreds of types of surgical activities, surgical techniques which each technique requires different preparation, different equipment, etc.

This is a serious problem even for an experienced team and especially for a new and less experienced team. Incomplete preparation for operation ultimately results in delays between operations, during procedures, unnecessary waste of very expensive equipment and significantly decrease patient safety.

The construction of the database, which will include lists of equipment required for each operation, explanations of surgical techniques, explanations of the operation of surgical equipment and an explanation of the names of basic surgical instruments should reduce errors in the preparation for procedures, reduce the level of stress of the medical staff and ensure patient safety.

The tool I developed is based on the DROPBOX app, where all records are made by WORLD and the files are saved on the personal computer. After completing the construction of the database, the entire folder is shared by sharing link via WhatsApp to all relevant staff.

When any change is required in the database, it made on the main computer and the team gets an update immediately.

As a result of using the tool there is a significant decrease in errors in preparation for operation, so patient safety is more guaranteed. There is a decrease in the cost of the surgery and there are fewer delays during the surgery. This shortens the duration of the surgery and anaesthesia, which affects the results of the treatment.

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OP19 Audiovisual study supports in the field of operation in central operating theaters in FN Brno

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The specifics of the environment and care provided in the Central Operating Theatres place high demands on the adaptation of new arrivals, as well as existing employees or interns. To streamline the process of adaptation to the specific environment of operating theatres, a project is being implemented within the program: Development Fund of Masaryk University. The project aims to prepare audiovisual study support for clinical internships organised in the Central Operating Rooms and to verify the benefits of its application in the educational process. Audiovisual recordings will be designed to demonstrate how to properly and effectively implement the activities necessary to provide perioperative care.

The Project was implemented in cooperation with the Central Operating Theatres and the Department of Nursing and Midwifery at the Faculty of Medicine of Masaryk University. The course of the project can be divided into three phases. The first phase aims to use the brainstorming method to select topics suitable for the processing of audiovisual educational aids and then prepare scenarios for audiovisual recordings.

In the second phase of the project, audiovisual recordings will be made in a real clinical environment of operating theatres. The videos will be published on the educational web portal of the Faculty of Medicine, Masaryk University.

The third phase of the project is focused on assess the benefits of the videos for their users (trainees, COS employees in the adaptation process). A questionnaire survey will be used for the assessment.

Instructional videos are one of the current educational methods in case of impossibility of direct participation in internships; they are illustrative, additional material for teaching students in clinical practice. We believe that their use in pre-clinical training will help trainees and employees in the adaptation process.

The example of education video will be part of our presentation at the Congress.

Parallel session: Patient safety: Risk mitigation in the operating room

OP20 Management of risk and register of risk in operating rooms

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Medical institutions with accreditation standards need to correlate composition of recognition and record of risk. Norm ISO 31000 2018 enables a common approach and management of all types of risk, it is a form of global document that secures a common approach of management of all types of risk and it's not a specific form for certain industries or sectors. Management of risk with a base of this document is necessary to use through the entire cycle of organisation and can be used for any process to make decisions on any level of organisation. Inside of medical institutions, risk can be divided between clinical, security, legal, financial, general risks that are related to the image of the hospital and risks performances. Further into the subject will be presented basic methods for risk recognition, assessment, also risk assessment as well as basic methods to establish barriers for the development of unwanted events as well as basic examples for risk assessment for patients in operating rooms with an accent on risk management related to hospital-associated infections. To identify and access risk it is necessary to use methods as "Swiss cheese", "Bowie Tie" and "Matric risk plate", inside of one healthcare institution with an accent between hospital institutions impossible to copy risk management and register of risk just because of personal, architectural and technological features of every hospital institution. Also, for adequate management of risks and risk composition, it is necessary to establish a register of risks as a basic document that requires regular updates, teamwork, and responsibility.

Parallel Sessions

OP21 Rolling out training in risk management and open disclosure in the operating room

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It is now acknowledged that, while most things are done for most patients most of the time, process failures, cognitive impairment/human error, and less than optimal teamwork result in inconsistencies of care and adverse outcomes.

Dr Gawande, 'We look for medicine to be an orderly field of knowledge and procedure but it is not. It is an imperfect science, an enterprise of constantly changing knowledge, uncertain information, fallible individuals and at the same time lives on the line. In surgery, you couldn't have people who are more specialised and you couldn't have people who are better trained. And yet we see unconscionable levels of death, disability that could be avoided. Every year, an estimated 234 million surgeries are performed globally. Of these, an estimated seven million complications and one million deaths occur; half of which is thought to be preventable.

The scale and typology of surgical harm common to the world's health systems was first identified in 2004, due to returns to the World Health Organisation (WHO) and data analysis from some 54 countries. It was calculated that, of an estimated 187 million major procedures conducted worldwide per annum, 3-16% resulted in major complications and with disturbing death rates (Weiser et al 2008).

Risk management is essential in modern healthcare. It promotes a transparent system of care where error is identified, analysed, controlled and evaluated. Reporting an incident or a near miss is the corner stone of risk management.

Risk management incorporates and promotes the essential concept of open disclosure. Open disclosure is an open, consistent approach to communicating with patients when things go wrong in healthcare. The authors introduced an education programme upskilling staff on risk management, open disclosure and reporting.

"To err is human, to cover up is unforgivable and to fail to learn is inexcusable".

OP22 Surgical counting, a tool for patient safety during surgery: a qualitative study of the experience of operating room nurses

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Background: Retention of surgical items in patients after completing surgery is a significant problem that causes harm and suffering to the patients and, in some cases, death. The operating room nurses have an important role in performing the surgical count correctly and to prevent adverse events.

Aim: The purpose of this study was to attain knowledge of the operating room nurses' practice and experiences in performing the surgical count and how they reflect on patient safety.

Method: A qualitative approach was chosen for this study. Field observations of 12 surgical teams followed by semi-structured interviews of the scrub nurses were conducted in 3 hospitals in Norway in 2017. Content analysis guided the analysis of data.

Results: Three main themes were identified: Variation in the implementation of the procedure; Perceiving presence and situational awareness; Disrespectful attitudes and near-miss events. The analysis shows that there is variation in the implementation of the counting procedure, and uncertainty regarding the existence and use of guidelines. At the same time, the operating room nurses were sentient present and adapted their practice with their own understanding of the situation. They gave examples of disrespectful attitude from other team members in relation to the counting procedure, and describe that near-miss events occur. The findings are contradictory. The operating room nurses express uncertainty regarding execution of the procedure, and the observations showed great variation. Instruments got lost in 2 of the 12 observed operations.

Conclusion: The study provides a basis for strengthening the education of operating room nurses regarding the recommended guidelines for surgical counting. Furthermore, to guide the operating room nurses to be resilient and show authority when it comes to practicing the counting procedure, and dare to report events that may threaten patient safety.

Parallel Sessions

OP23 Intraoperative peripheral nerve injury related to lithotomy positioning with steep Trendelenburg in patients undergoing robotic-assisted laparoscopic surgery: a systematic review

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Background and aim: In spite of the fact that robotic-assisted laparoscopic surgery is less stressful for the patients, there are some challenges associated with positioning of the patients on the operating table. The aim of this systematic review was to examine the incidence of intraoperative peripheral nerve injury, symptoms, risk factors and function in patients undergoing robotic-assisted laparoscopic surgery related to lithotomy positioning with steep Trendelenburg.

Methods: A systematic review using guidance for the Cochrane Handbook for systematic review and PRISMA was performed from January 2000–February 2019. Titles and abstracts were screened for inclusion criteria. Full-text assessments of each paper were conducted by two reviewers. The quality of the included papers was assessed using the Mixed Methods Appraisal Tool. Descriptive statistics and thematic analysis were used to synthesize the data.

Results: Eleven quantitative studies were included with three themes: incidence of intraoperative peripheral nerve injury; upper extremity intraoperative peripheral nerve injury related to steep Trendelenburg positioning; and lower extremity intraoperative peripheral nerve injury related to lithotomy positioning. The overall incidence of intraoperative peripheral nerve injury in robotic-assisted urologic, gynecologic, and colorectal surgery was 0.16–10.0%, and the symptoms appeared immediately after surgical procedures. Risk factors for intraoperative peripheral nerve injury were prolonged operative time, high ASA scores, comorbidities, and high BMI.

Conclusion: Intraoperative peripheral nerve injuries are rare, but occasionally serious complications following lithotomy positioning with steep Trendelenburg. Operating room nurses have a responsibility both for positioning patients and for being familiar with the technological developments that will influence the preoperative handling of patients. Increased robotic-assisted laparoscopic surgery necessitates further research examining the incidence of intraoperative peripheral nerve injury.

Round Table Sessions

Round Table: Patient safety: More support from guidelines

RT01 Patient positioning in orthopaedic surgery. Responsibilities of the perioperative nurse

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Introduction: Positioning for orthopaedic procedures on the OR table require ensuring patient's safety, comfort and dignity. Positioning the patient is a shared responsibility among the surgeon, the anaesthesiologist, and the nurses in the operating room. Orthopaedic surgery often requires unorthodox methods of positioning patients. Each patient requires unique positioning based on the type of orthopaedic surgery. Ideal patient positioning involves balancing surgical comfort, against the risks related to the patient position.

Aim: The aim of this study was to determine involvement of the perioperative nurses in patient positioning and whether have the appropriate knowledge to do so and secondary to clarify the opinion of orthopaedic surgeons about the process of patient positioning.

Methods: Two questionnaires regarding patient positioning were distributed, one for perioperative nurses and the other for orthopaedic surgeons. The sample size of this research included 108 operating room nurses and 142 orthopaedic surgeons. For the data analysis, the statistical package SPSS v.22 was utilized. To evaluate the internal consistency, Cronbach's alpha was computed.

Results: 76% of operating room nurses are aware of adverse events that occur from improper patient positioning, nevertheless 41% do not participate in positioning the patient because they consider it as an additional workload (52%). Orthopaedic surgeons answered that they receive help positioning the patient from 58% of the perioperative nurses, who acquired their knowledge either empirically (46%) or from themselves (31%). The majority of surgeons (82%) wish that perioperative nurses undertake the patient positioning if they are trained, mainly by attending special courses (65%).

Conclusions: According to study results perioperative nurses lacked appropriate training in patient positioning for orthopaedic surgery. From this study emerges the need of continuing education for perioperative nurses and the expansion of perioperative nursing knowledge and skills.

RT02 Impact of the WHO Surgical Safety Checklist: a systematic review

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Objectives: Based on the content of the review protocol presented at the EORNA Virtual Congress 2021, an extensive systematic literature review is ongoing. In order to identify the relationship between the WHO Surgical Safety Checklist and perioperative clinical and organisational outcomes.

Methods: The systematic review is conducted in accordance to the recommendations provided by the Cochrane Handbook for Systematic Reviews of Intervention. For the electronic search, PubMed, Scopus, CINAHL with Full Text, and Web of Science databases have been explored through structured search strings. Additional search strategies have been foreseen as well as the assessment of the risk of bias of included studies.

Results: A total of 2,799 records have been retrieved from the electronic search. After removing duplicates, 1,658 abstracts were screened independently by two researchers for relevance. Any disagreement between authors has been solved by discussion with a third researcher. Currently, two researchers are screening independently a total of 211 full texts as potentially suitable for inclusion. According to the time schedule, authors plan to conclude the systematic review in Autumn 2021 and to present the main relevant results at the 10th EORNA Biennial Congress in 2022.

Conclusions: It is expected that the impact of the WHO Surgical Safety Checklist on patients' safety will be highlighted thanks to this systematic review. Consequently, this extensive work could inform healthcare organisations about the best application of the WHO Surgical Safety Checklist and could allow to implement organisational strategies aimed at ensuring the best level of patients' safety.

Round Table Sessions

RT03 Re-traumatization of torture survivors under somatic healthcare generally and specifically under surgical care

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To achieve a successful and meaningful clinical interaction with torture survivors during surgical care and to prevent re-traumatization, it is important to build trust, to maintain confidentiality, and to show empathy. An important factor preventing re-traumatization in departments as operating theatre is to increase awareness about re-traumatization of torture survivors among health professionals as well as identification of triggers. Health care professionals at surgical departments must be familiar with potential challenges giving torture survivors quality healthcare and to adapt standard treatments with increased focus on safety and protection of patients who have been victims of torture. A systematization of literature summarizing the patients' experiences may be a start to improve awareness around the topic and to implement necessary improvement of surgical routines to prevent re-traumatization.

Method: In this systematic review we included qualitative studies including refugees, asylum seekers and war survivors who have experienced torture and have received treatment in somatic departments. We included studies that used qualitative methods for data collection (participant observations, in-depth Interviews, focus groups, and case reports) and qualitative methods for data analysis (thematic analysis, grounded theory and framework analysis). We also included studies using mixed methods if the findings were of a qualitative nature and were fully explained.

Phenomenon of interest: We assessed experiences of survivors of torture receiving somatic health care in different contexts like hospitals, operating theatres, health care centres, emergency departments, intensive care departments and polyclinics. We focused on experiences of re-traumatization.

Conclusion: This systematic review included eight studies summarizing healthcare experiences from 290 participants. The findings show that torture survivors experienced challenges receiving somatic healthcare. The results suggest that re-traumatization can occur under treatment in somatic departments.

Keywords: Refugees, asylum seekers, torture survivors, somatic, surgical care, re-traumatization

RT04 Patient safety during joint replacement surgery: experiences of operating room nurses

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Background: Avoidable complications for surgical patients still occur despite efforts to improve patient safety processes in operating rooms. Analysis of experiences of operating room nurses can contribute to better understanding of perioperative processes and flow, and why avoidable complications still occur.

Objectives: To explore aspects of patient safety practice during joint replacement surgery through assessment of operating room nurse experiences.

Method: A qualitative design using semi-structured interviews with 21 operating room nurses currently involved in joint replacement surgery at three different hospitals in Sweden: one university hospital, one public general hospital, and one private orthopaedic hospital. Inductive qualitative content analysis was used.

Results: The operating room nurses described experiences with patient safety hazards on an organisational, team, and individual level. Uncertainties concerning a reliable plan for the procedure and functional reporting, as well as documentation practices, were identified as important. Teamwork and collaboration were described as crucial at the team level, including being respected as valuable, having shared goals, and common expectations. On the individual level, professional knowledge, skills and experience were needed to make corrective steps.

Conclusion: The conditions to support patient safety, or limit complication risk, during joint replacement surgery continue to be at times inconsistent, and require steady performance attention. Operating room nurses make adjustments to help solve problems as they arise, where there are obvious risks for patient complications. The organisational patient safety management process still seems to allow deviation from established practice standards at times, and relies on individual-based corrective measures at the 'bedside' at times for good results.

Round Table Sessions

Round Table: Learning needs in the focus

RT05 Identifying curriculum content for operating room nurses involved in robotic-assisted surgery: a Delphi study

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Objectives: This study aimed to identify learning goals relevant to include in a curriculum for OR nurses working with robotic-assisted surgery (RAS). Furthermore, we wanted to investigate which learning methods would suit each learning goal and for whom it was relevant (function of; circulating nurse, scrub nurse, Registered Nurse First Assistant (RNFA)).

Methods: A three-round Delphi approach, with an additional survey, was used in this study, carried out by online questionnaires. We invited four OR nurses from every department in Denmark that performed RAS to the Delphi panel. A total of 56 RAS nurses from 15 different departments covering the specialties gynaecology, urology and surgery, and all five regions in Denmark was included. All participants and their answers were kept anonymous. A processing group processed the data gathered from the Delphi panel. This group was composed of experienced RAS nurses, Robotic Coordinators and Specialists in medical education.

Results: With response rates of 93%, 81%, and 79%, respectively in the Delphi survey and 68% in the additional survey, and after the processing of data, a list of 57 learning goals, sorted under 11 domains, e.g. "Necessary competencies before working with RAS", "Docking" and "Troubleshooting" was produced. Sixteen of these were rated "Not relevant". In the additional survey, the panel rated the learning method of "Supervised training during surgery on patients" as the most relevant, followed by "Dry lab" and "Team training".

Conclusions: The list of learning goals can be used to develop a curriculum for OR nurses working with RAS. During the processing, it became clear that there is a need to investigate further issues such as the training of practical competencies in executing an emergency procedure, communication challenges, and the role of RNFA in Denmark.

RT06 Skills and drills!

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Objectives: The hospital at present has multi-theatre sites across various levels, a learning need identified, to up-skill and educate staff maintaining a skilled workforce to provide safe quality care to patients which is a core fundamental of nursing practice. The skill and drills initiative aims to cater for all departments learning needs. Having the absences of a clinical facilitator within the service has led us to formalise education and training through the skills and drills programme.

Methods: The programme initially started with *ad hoc* days, however initial feedback led us to formalise the running of the initiative. The decision was taken to run on a Monday morning at 7:30 prior to the start of the scheduled list and to utilise a Friday afternoon when the anaesthetic department were away for department monthly meeting to recap the previous month's sessions. Education itself is delivered in relaxed environment to encourage staff participation. Skills and Drills is primarily nurse lead, both specialist nurses and our own nursing team within theatres, other specialities also facilitate us with education sessions. We have also incorporated joint simulations with other specialities into our education sessions.

Results: The overall feedback has been positive. We noted in the beginning people were initially hesitant with the early starts and the education sessions. These feelings have changed as the sessions formalised into set days and staff enjoyed the knowledge exchanges. Staff have noted personal growth through the delivery of sessions and well as increased confidence from the simulations in emergency situations. Communication has also improved across the multi sites as people interact with staff from other departments.

Round Table Sessions

Conclusion: The skills and drills initiative has been a positive experience for staff while increasing patient safety. Staff have up-skilled on emergency situations and gained new skills and confidence within their role as theatre nurse.

RT07 Overcoming fatigue from Zoom

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When we met with the corona virus our lives changed completely. Social events, family life, conversations, work routines and especially the education of our students have completely changed. Video conferencing soon became the primary means of communication for work, study and social life. From standing in front of a classroom, seeing our students, lecturing and instructing them on work techniques, we had to deal with network problems, opening zoom groups, while the students sat at home in front of the computer without being able to move for long hours, and we could only see their faces too close or black squares.

People started complaining about special fatigue “**zoom fatigue**” at the end of whole days of video conferencing and zoom lectures.

Symptoms: Feeling tired between calls and in the end of the workday than usual, not focused on the meeting or lecture, overeating, feeling sweaty during calls, eye irritation that is not pre-existing, regular headaches, constant exhaustion, anxiety of having to turn on your camera.

Reasons: We're too close for comfort, hate watching ourselves, trapped in a chair, can't see body language, software frustrations, home at work syndrome, eye strain, audio and video don't always match up.

Ways to Overcoming Zoom fatigue: Zoom out of the full-screen option, create a comfortable space between yourself and the masses by use external keyboard / camera, use the “hide self-view”, turning video off, reduce multitasking during calls, use mini breaks, choose other meeting options, healthy sleep routines, avoid eye strain.

Zoom fatigue worse for women, over 13.8% of women feel “very” to “extremely” fatigued after video conference calls, compared to 5.5% of men.

Conclusion: Zoom fatigue is real, and in order to prevent or reduce it, we must be aware of the signs, causes and how it can be overcome.

RT08 Experiences with Instagram as a recruitment tool

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Background: We were been by board member of NSFLOS Åse- Lill Ellingsæter before NORNA Congress which was cancelled, to talk about our Instagram account with the name @operasjonssykepleierne. Then we were asked by Gunilla Maria Fredheim if we could send an application to EORNA 2021 instead, and now to EORNA 2022 by Cathrine Heen. Background for using social media, was the great lack of Operating Room Nurses at the hospital and elsewhere in the country, and the desire for recruitment from management and clinic.

Research: To be able to share photos / videos from Oslo University Hospital, one must adhere to different guidelines and privacy, both in relation to patients and staff. In addition, various permits were obtained from management, and a collaboration with the communications department was initiated before the account was opened.

Conclusions: The Instagram account @operasjonssykepleierne has received some attention, and many have contacted us to find out more about the operations nurse profession and asked us how we work. Showing off and sharing our everyday life in the green with our followers on Instagram is both fun, challenging and requires daily follow-up. In this post, we will cover some of the process of getting started, and how we use our Instagram account to make visible the operations nurse profession.

Keywords: Recruitment, social media, Instagram, Operating Room Nurses, @operasjonssykepleirne.

Round Table Sessions

Round Table: Healthy and happy at work

RT09 Switch for more happiness

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Change is part of life. The world is constantly changing. In the operating theatre, change is in the evolution of techniques or the arrival of new equipment. It is also in the dynamics of the teams: nurses arrive, others leave, expertise evolves, roles change. Every time, it is a change and new energy is created.

The problem is that nobody likes changes.

How can we experience change with more serenity?

Faced with change, I use SWITCH PHILOSOPHY to bounce back. Since I am convinced that performance depends on well-being, I ask myself: how can I change the way I look at the world to move towards the “+”?

I’m going to share with you one of my latest experiences, lived this summer in the middle of the floods in Belgium and the COVID-19 pandemic. Even when everything seems complicated, we always have the choice to switch.

And in the OR? How about trying to switch for more happiness?

RT10 “Clubbing in the operating room” a quality improvement project to improve reading, critical appraisal and patient outcomes

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Delivering safe care based on best available research is a standard of conduct identified as one’s professional responsibility. Evidence based practice requires that nurses have an awareness of the most recent evidence available and it is imperative that they can access, critically analyse and incorporate this evidence into practice to enrich the patient experience. Observing staff in theatre, a gap was identified where nurses were hesitant in engaging in literature searching, critical appraisal, policy making or quality improvement projects. Barriers included lack of organisational support, insufficient time, knowledge and lack of critiquing skills. Institutional barriers included staff shortage, operating list priority, lack of motivation and leadership. Indeed, a local survey determined that 55% of staff were not proficient and 100% requested training in critical appraisal. Consequently, a quality improvement project (QIP) to set up a journal club was established.

The aim was to support the research culture in the department. This would facilitate identification of theory practice gaps with the nurse’s confidence in their research role enhanced if relevant evidence was translated into practice. The club was formed, meeting regularly to critically appraise evidence. Measurement of the project included using outcome, process and balancing measures. Outcome measurement included staff satisfaction, knowledge change, critical analysis skills and reading ability. Outcomes for patients were measured by auditing practice changes following benchmarking against research. This promoted confidence in practice and encouraged sharing of knowledge. Process outcomes were measured by evaluating the frequency, timing and setting for the club, minor but vital elements to ensure its ongoing viability.

Additionally, it promoted learning which was summarized in personal portfolio as evidence of continuing education. This project enhanced nursing practice and aligned nursing goals with the hospital governance framework. It encouraged teamwork; optimizing evidence-based practice by sharing critical nursing practice information.

Round Table Sessions

RT11 An exploration of the perception of conflict among perioperative nursing staff in an acute Irish hospital (pre COVID-19)

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Workplace conflict has been identified as a significant issue within the perioperative setting causing patient harm, surgical error, and sentinel events.

The aim of this study was to identify the causes of conflict in the operating room as perceived by perioperative nursing staff, as there was a dearth of evidence of perioperative workplace conflict in the Irish setting.

A qualitative study of 20 perioperative nurses using a semi-structured interview explored the perception of workplace conflict among perioperative nursing staff in an acute Irish Hospital.

Data revealed a highly educated and vastly experienced nursing workforce. Perioperative nurses perceived perioperative workplace conflict occurred most days between various multidisciplinary members. The dominant causes of workplace conflict arose from competing organisational and public demands for acute surgical services. Precipitating factors were: limited resources, staff workload, and interpersonal relationships. Felt effects were mostly negative including job dissatisfaction, emotional responses, reduced theatre efficiency, interpersonal conflicts, suboptimal delivery of patient care and communication failures. Conflict resolution required time taken from patient care responsibilities, with collaboration and compromising as the most preferred strategies for conflict resolution. Nurses never used an avoiding strategy when conflict arose around a patient safety issue. Positive effects included problem solving, improvements to the quality of patient care, and team cohesion. The majority of nurses reported that they had not had conflict management training since graduate nurse training. Nurse resilience and coping methods were demonstrated by nurses with higher levels of clinical experience and professional development.

Recommendations are for findings to be disseminated via organisational management structures within the Hospital, with multidisciplinary perioperative staff to receive education and training about acceptable professional workplace conduct and improved team communication. Also, the implementation of regular ongoing mandatory conflict resolution strategies, and continued professional development educational programmes, to enable awareness of a healthier working environment.

Round Table: Beyond COVID: Challenges and solutions

RT12 The impact of COVID-19 pandemic on nursing care provided in operating rooms

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Objectives: The main aim of the study was to document the impact of COVID-19 pandemic on nursing care provided in operating rooms as perceived by a sample of Italian nurses. The secondary aim was to document the impact of COVID-19 pandemic on interpersonal relationships and stress levels of nurses.

Methods: An explorative cross-sectional study was conducted involving nurses registered at the Italian Association of Nurses in Operating Teams (AICO) who participated at the 20th AICO Webinar National Congress. An *ad hoc* electronic survey was administered to collect socio-demographic data and information about the impact of the pandemic on nursing care, interpersonal relationships, and stress levels. Before data collection, the study aims were explained to nurses and their written informed consent was obtained.

Results: One hundred and fifty-five nurses were enrolled. More than half were females, and the average age was just over 43 years old. Their professional experience in operating rooms was lasted in average 15 years, and the most of them were working as scrub nurses. About the 40% of participants perceived a significant change in both direct and indirect nursing care during the COVID-19 pandemic. These changes were mainly due to the application of specific protocols aimed at ensuring the safety of patients and healthcare workers during the perioperative period. Most of nurses perceived an increased workload and a significant negative change in their interpersonal relationships. In addition, an increase in the level of stress was perceived during the COVID-19 pandemic.

Round Table Sessions

Conclusions: This study highlights the significant impact of pandemic on the perioperative nursing care, interpersonal relationships, and stress of nurses working in operating rooms. A discussion on this topic is urgent, since the study results could have relevant implications for the quality of nursing care, patient safety, and nurses' work engagement.

RT13 Nursing care of two COVID-19 patients in the light of the Neuman Systems Model and Henderson's theory of 14 basic needs in nursing care: a case report

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Objective: 2019 novel coronavirus (COVID-19) is one of the worst pandemics that has taken hold of the whole world. The new coronavirus disease is an infectious disease caused by the SARS-CoV-2 virus. The early clinical symptoms of COVID-19 are fever, cough, and shortness of breath. Comorbidities and new symptoms led to an upward trend in transmission, prevalence, and mortality rates. Most patients have acute respiratory complications and are treated in intensive care units to support respiratory functions. The disease has prognostic uncertainty and symptoms varying from patient to patient. This study discussed the nursing care and experiences of two patients who were treated in an ICU due to COVID-19-associated acute respiratory distress syndrome.

Case: The first case was a 76-year-old male patient admitted to the clinic with symptoms of high fever, tiredness, shortness of breath, and arrhythmia. The second case was a 70-year-old female patient admitted to the clinic with symptoms of cough, fever, diarrhea, tachycardia, and respiratory failure. They were the first COVID-19 patients of a university hospital in Turkey. The mean intubation and ICU length of stay were 22 and 26 days. The patients received antivirals and steroids, and plasma transfusion and were followed up with conventional ARDS procedures, such as prone position, and high flow oxygen device and mechanical ventilators. The Neuman systems model and Henderson's Theory of 14 Basic Needs in Nursing Care were used to analyse their experiences.

Conclusion: It is an indisputable fact that high-quality nursing care has a significant impact on ICU COVID-19 patients with a high mortality rate. ICU nursing care should be planned according to individual differences and needs due to possible complications and comorbidities. Nursing models lead the way for high-quality nursing care, new research, professional training, and care practices, and contribute to the development of professional autonomy.

RT14 Operating room nursing leading in COVID times: a One Health approach project

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In the context of the beginning of COVID-19 pandemic in Portugal, an idea of implementing an Ultraviolet Germicidal Irradiation system emerged within the nursing team of the operating room (OR) of Beja Hospital (Local Health Unit of Baixo Alentejo), to help enhance disinfection of the COVID OR and other working spaces. After searching for existing solutions in the market, it was found that these devices reached high prices and were not available due to high demand.

Objective: The aim of this project was to develop an economically accessible autonomous robotic Ultraviolet C irradiation (UVC) model able to efficiently disinfect healthcare facilities.

Method: Universities and R&D institutions were contacted by members of the nursing team of the OR. After positive feedback, the project began to take shape with an interdisciplinary collaboration of professionals from different areas (nursing, medicine, veterinary medicine, biotechnology, engineering) under a scope of One Health participatory approach. A funding pitch and a project schedule with milestones were made and presented to sponsors, which afforded the

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collaboration protocol between sponsor and involved institutions. Full funding of the project was obtained for robot development, laboratory validation of the irradiation process and acquisition of a UVC radiometer.

Result: An economically accessible autonomous robotic UVC prototype able to disinfect efficiently healthcare facilities was developed.

Conclusion: One Health promotes the effective collaboration of diverse disciplines and sectors to work together to attain optimal health for both people, animals and environment. This global vision of interconnectedness and integrated efforts addressing common issues was the basis for this project. OR nursing plays a key role in the implementation of infection control measures in the OR during the current pandemic, being able to lead this process, with remarkable capacity of mobilization and setting an example to follow.

RT15 Predictors of anxiety and depression in operating room nurses working in different countries during the COVID-19 pandemic

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Purpose: Operating rooms are areas where infected and possible COVID-19 patients are operated on, and where the risk of COVID-19 transmission is high due to the use of high-risk equipment (surgical instruments, gases, etc.), because the working area is closed and narrow. The aim of this study is to compare because of the long-lasting epidemic the anxiety-depression levels experienced by the ORN's working in different countries, to determine their predictors, and the differences between countries.

Method: The study was carried out in descriptive and cross-sectional type and ORN's who are members of the "Operating Room Nursing Associations" of Turkey, Australia, England, Israel and India between February 2021 and June 2021. Data were collected with Personal Information Form, Operating Room Nurses' Practice and Attitude Questionnaire towards the COVID-19 Epidemic, and Hospital Anxiety and Depression Scale (HADS). Binary logistic regression analysis method was used in data analysis.

Results: Mean age of operating room nurses participating in this study from Turkey (n=254), Australia (n=228), England-Europe (n=81), Israel (n=30), India (n=53) was determined as 42.28311.10. It has been determined that the created anxiety model can predict the state of anxiety with 68.7% accuracy by using these variables. According to the analysis, the incentive system, the acceptance of COVID-19 as an occupational disease, how adequate is the PPE virus prevention, the level of concern about getting sick with COVID-19, the state of working hours allowing rest, and your confidence that your workplace can manage the COVID-19 pandemic were not found to be a risk factor for the presence of anxiety. It was found that the rate of anxiety is 3.25 times higher in nurses who have difficulty in reaching the vaccine, 3.12 times higher in those who have difficulty in accessing personal protective equipment (PPE), and 3.61 times higher in those who have excessive anxiety about infecting their loved ones with COVID-19. It was determined that the depression model created was able to predict the incidence of depression correctly at a rate of 74.3% using these variables. According to the analysis, country, education level, age, working years in the operating room, number of children, the unit employed after the change, taking part in the COVID case surgery, training to prevent COVID transmission, daily working hours, weekly working hours, incentive system, occupational disease acceptance, being infected, having an infection, difficulty in reaching personal protective equipment, worrying about infecting loved ones, losing a loved one due to COVID, allowing rest during working hours, level of feeling valuable in the institution, trust in the workplace were not found as risk factors for the presence of depression. It was found that the rate of depression is 2.12 times higher in nurses living away from family after COVID-19 care. It was determined that the rate of depression is 6.55 times higher in nurses who gave a somewhat adequate answer to the question of how much is PPE sufficient to prevent virus. It has been determined that the risk of depression is 3.85 times higher in nurses who have a significant level of anxiety about getting sick with COVID-19, and 4.16 times higher in nurses who are excessively sized.

Conclusion: It is seen that the anxiety and depression levels of the operating room nurses are affected by institutional factors such as working hours in the institution, the management of the institution, as well as the nurses' fears about COVID-19 and the fear of infecting their families.

Keywords: Operating Room Nurses, Anxiety, Depression

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Round Table: Improved OR practices for young patients

RT16 Implementation of an operating room safety checklist in paediatric surgery

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Introduction: Operations on the wrong patient or site are sentinel events that can be linked to several factors, such as lack of preoperative planning, lack of control systems, and inadequate communication between healthcare professionals, and professionals and patients. The “surgical safety checklist” helps the operating team manage and document the activities carried out before, during and after the operation. The checklist adopted by the “A.O.U. Ospedali Riuniti di Ancona” made use of the WHO Guidelines for Safe Surgery, and the “Raccomandazione del Ministero della Salute n.3, 2008” for the correct identification of patients, surgical sites and procedures. To promote safe treatments, the Hospital Directorate has decided to implement the “surgical safety checklist” in paediatric surgery.

Objective: To guarantee the correct procedure, on the correct patient and site by implementing the “surgical safety checklist” in every surgical procedure.

Beneficiaries: The Operating Procedure is aimed at all healthcare professionals involved in surgical activities in the operating room.

Area of applicability: The checklist is applied to all patients aged ≤ 14 years undergoing surgical procedures performed in the operating room in ordinary hospitalisation and Day Surgery.

Procedure: The checklist consists of five phases distributed over three distinct periods

1. Period of preparation for surgery (in the days or hours preceding the surgery): it includes the 1st (Acquisition of informed consent) and 2nd phases (Verification and marking of the operative site)
2. Period immediately before entering the operating room: includes the 3rd phase (Identification of the paediatric patient).
3. Period immediately before surgery in the operating room: it includes the 4th (Time out) and 5th phase (Double Check). These activities must be formalised by filling in the “Pre-operative form to correctly identify the patient, surgical site and procedure”.

RT17 Best practice recommendations for Sacral Neuromodulation implant in paediatric patients

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Sacral neuromodulation (SNM) is a treatment that can solve problems related to overactive bladder, retention or urinary incontinence. A small implantable device controls nerves of the sacral area at the s3 level. This device works with permanent electrical stimulation to stimulate the bladder.

SNM is utilised, on paediatric patients, as neurogenic bladder therapy. Bambino Gesù Paediatric Hospital (OPBG) is, in this regard, one of the major reference centre in Italy.

The aim of this article is to present the best-practice adopted by OPBG regarding intraoperative positioning of the patient during the placement of SNM in order to prevent any adverse events such as pressure injuries, cervical spine injuries, compartment syndrome, neuropraxia, neurotmesis.

It has been performed a literature review regarding prone positioning of patients during SNM implantation that returned few studies on this subject. Therefore, articles concerning intraoperative positioning of paediatric patients in general have been selected and analysed to highlight what is the best practice to be preferred.

A retrospective study was also performed on the records of patients operated in our hospital between 2019 and 2021: 30 surgeries were performed on patients between 12 and 31 years of age, the neuromodulator had been either implanted, replaced or permanently removed. Among these patients, none of them presented any problems or adverse events mentioned above due to intraoperative positioning.

Conclusions: The responsibility of intraoperative positioning of patients with SNM implant lies within the entire surgical team. Since there are currently no clear and defined internal protocols available, the practice adopted by our hospital seems, in this regard, to be effective and highlights the need for guidelines to be clarified and designed in order for the nursing staff to be properly prepared to offer the best intraoperative care to paediatric patients.

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RT18 Educational opportunities; paediatric operating room nursing

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Experience from education within paediatric operating room surgical care:

University course which contains a theoretic part in Paediatric Surgical health care and a clinical education in Paediatric surgery.

Collaboration between Clinical Practice and Theory; Exchange between Karolinska Institute, Astrid Lindgrens Children's hospital/Karolinska university hospital and paediatric surgical clinics. To reach out to the demands that safe patient care needs and specifically in supporting a patient centred care is an ongoing challenge, especially at a paediatric unit. When working at a university clinic/hospital and in a paediatric care environment there is a greater knowledge demand and therefore the continuing learning needs support by the stakeholders in this content.

The overall objectives are such as **increasing knowledge processes** and **complexity in a patient centred care** in a **paediatric** perioperative unit.

Presenter's Antoniadou and Jonsson will discuss both the content of the course and how to handle some aspects of knowledge demands.

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CL01 Perioperative nursing care for craniopagus twins' separation

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Craniopagus is a clinical condition characterized by incomplete separation of the skull and contained structures of conjoined twins; surgical separation has always proved to be a failure until 1952.

A multi-step surgical approach, favouring progressive adaptation of cerebral circulation in both twins has been key to success in the last decades.

We describe the experience of our multidisciplinary group at Bambino Gesù Children's Hospital, that recently succeeded in surgical separation of total angular craniopagus twins.

To simplify patient's identification, in the acceptance phase, a unique colour code was assigned to each twin. In order to share collected data, periodic updates were foreseen, involving all allocated medical and nursing staff.

In the diagnostic phase, extensive neuroimaging was performed, requiring coordinated action by neurosurgery, imaging and anaesthesiology nursing staffs. Since diagnostics required sedation procedures, a dedicated medical-nursing team was established for each twin.

During the pre-surgical phase, the perioperative nursing staff was involved in the multidisciplinary briefing. Dedicated anaesthesiology and operating room nursing teams were defined for each twin and all details were discussed. Two adjacent operating rooms were prepared with all the necessary material the day before surgery.

On the day of surgery, patients were accepted in the operating room and prepared for craniotomy. Anaesthesia induction was performed sequentially, as was hemodynamic monitoring and infusion lines and additional devices' positioning.

At the end of each procedure, patients were transferred to the intensive care unit.

After each surgical step a debriefing was performed, covering all the aspects about the twins' path.

Therefore, such surgical procedures required the formation of a coordinated multidisciplinary nursing team able to carry out a holistic care management but at the same time personalized for both twins.

We cannot overemphasize the role of cooperation and development of specific technical skills to accomplish successful craniopagus separation.

CL02 Prevention of electrosurgical burn injuries related to the grounding pad

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Introduction: Complications related to grounding pads are often reported. The grounding pad is the common name of a rotating electrode placed on the patient to direct the current out of the body. The grounding pad is usually placed by interns or nurses. Electro surgery grounding pad problems can lead to local skin reactions ranging from blisters to burns. Burns due to the grounding pad also cause morbidity in the patient and medicolegal, economic, physical, financial and psychological effects on patients and their families.

Objectives: In this presentation, current recommendations will be examined to prevent burns to operating room nurses with grounding pads.

Methods: In this statement, the guides of the official organisations published on this subject, the recommendations of the material manufacturers and the published studies were examined in order to prevent burns with the grounding pad.

Results: When the recommendations related to prevention are examined; choosing a place for the return electrode/dispenser pad as close as possible to the surgical site, clean and dry, well-vascularized and on a large muscle mass. Avoiding bone protrusions, adipose tissue, scar tissue, skin on implanted metal prostheses, furry upsets and pressure points. If necessary, shaving the multi-haired skin in the pad area is moist and evenly spreads throughout the contact area of the patient. Removing metal jewellery on the patient to prevent complications from possible current leakage to ensure that it provides equal contact with the skin. If the electro surgery circuit is activated for 10 seconds, it is recommended to use a larger and bendable ground pad to prevent burn injury.

Conclusions: The primary goal of the patient intervention is to provide a safe and positive operative experience. Burn injuries due to the grounding pad can be easily prevented by taking the necessary precautions.

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CL03 Traffic accidents as part of the perioperative process: a case study

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Objectives: Analyse the perioperative process during the health care of a young person who suffers a traffic accident in Bogotá, Colombia.

Provide perioperative nursing care by a student and a professor during a clinical training in a state hospital in Bogotá, Colombia.

Method: Clinical and social factors that directly intervene in the situation under study were analysed. Epidemiological data, the context where the accident occurs, clinical characteristics of the person, risks and possible complications of the surgical procedure also were considered. The Nursing Care Process was used as an educational tool to organise data and understand the complexity of the physical and mental clinical situation of the person.

Result: A nursing care plan was created and executed for assistance at the accident place (preoperative), in the operating room (intraoperative) and during recovery, rehabilitation and return to routine activities (postoperative).

The definition of perioperative care is broadened, understanding that it begins when a health professional identifies a surgical need in a person and ends with rehabilitation, return to daily life or effective grief in case of death due to surgery. This process not only includes physical health, but also mental health, family health and the success of the experience that is lived, is related to economic, social, and cultural determinants

CL04 Surgical fire the risk almost forgotten: a case study

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The considered case occurred during an elective inguinal hernia repair on a 41-year-old male patient, without comorbidities. Upon entering the operating room, the patient asked the team about the possibility of excision of a pendulum fibroma located in the cervical region. The team agreed to perform this second procedure, although it had not been previously planned. Patient preparation was carried out according to the institution's protocol. The first procedure was performed under balanced general anaesthesia, ventilation with a laryngeal mask and went accordingly to what was expected. The second procedure was going to be performed in the cervical region, which presented dense body hairiness; however, it was not considered necessary to perform the hair removal. To complete the second procedure on schedule, the work pace was fastened and the disinfection was performed with a cutaneous spray solution containing ethanol and isopropyl alcohol. The procedure began after the surgical site has been considered to be dry. When the electrosurgical unit was used, a fire was triggered in the body hair and the operative field. The fire was immediately extinguished by the professionals using existing gauze pads on the operating table. The patient had 1st and 2nd-degree burns and immediate care was provided. When the patient was awakened and had recuperated his full cognitive capacities, the incident was communicated by the team. An apology was made for what had happened and continuity of care was guaranteed until the complete resolution of the damages. The patient achieved full recovery.

CL05 Hell-in: C-section, COVID-19 and fire

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The hospital located in the town of Hellín (Spain) provides care services to 250,000 people, living in the same town, as well as public from numerous little villages located in the surrounding mountains. It counts with 126 beds, and provides a large range of services, attending 32,000 cases in Accident and Emergency (A&E) and 4,000 surgical procedures per year. On 28th May 2020, around 17:30, amidst of the COVID-19 emergency, took place in this hospital a challenging event: a massive fire emerging from the basement consumed storage facilities and part of A&E department. At that time, in the Operating Room (OR), a new life was about to come. At 17:30 the surgical team, consisting on one anaesthetist, two scrub

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nurses, one Health Care Assistant (HCA), one gynaecologist, one surgeon, one midwife and one porter, were about to start a caesarean section. All of them were provided with appropriate Personal Protective Equipment (PPE), consisting on FFP2 mask and eye-protective screens. While preparing the sterile equipment, the scrub nurse commented to the HCA that she was 'smelling something, but I can't identify what it could be'. The HCA replied that 'it can be anything, as with the ffp2 and the COVID-19 aftereffects, I cannot tell what that smell is or where it is coming from'. The mom-to-be, a non-Spanish speaker young woman, was anaesthetised with spinal anaesthesia at 17:35. Five minutes later the c-section started and the baby was born at 17:38. Right at that moment, a phone call was made to the nurses' bleep. An orthopaedic surgeon rang shouting: "leave the operating room now! There's a fire!" What would you do if you receive such a call and the fire alarms aren't ringing? If you were staff in the hospital, would you have thought to alert the OR staff?

The circulating nurse, alerted the rest of the team, because none of the fire alarms were ringing, and took the leadership of the situation. The porter took the baby into the incubator and pushed it to the street, together with the father of the baby, followed by the midwife. The gynaecologist, surgeon and scrub nurse closed the wound as fast as possible. Anaesthetist, HCA and circulating nurse managed to transfer the woman into a stretcher immediately the wound was covered. As the brand-new mom did not understand well what the staff were saying, she remained calm. Once she was being pushed through the OR doors, the nurses managed to inform her about the fire and where the baby was taken to. On their way to the fire exits, many other patients were led to the outside of the hospital by the staff of the ICU and the wards. Safety doors were locked behind them, containing the fire and a thick smoke. During the evacuation patients and staff were calm, until they found the street access locked. For two long minutes, they were held in front of the doors, trying to figure out how to open the doors.

At this point, what would you think it would have been the best decision to make to unlock the doors and comfort the patients? Luckily, police and fire brigade were already forcing the doors until they opened them, letting the staff and the patient leave the hospital and look for the meeting point outside. The whole hospital was evacuated in less than 15 minutes, including intubated ICU patients. What do you think that happened afterwards (short-term, midterm and long-term measures taken)? Our patient, her husband and their baby got together in the gym of the nearby school. Critical patients were transferred immediately to the reference hospital, in Albacete, 50 km away from Hellín, as well as those Ward patients that could not have been discharged at that time. COVID-19 patients were gathered in a defined area, to avoid other patients or the helping people to get infected before they were transferred to other nearby hospitals.

Special mention to Hellín citizens, who had an amazing proactive attitude towards patients and staff, bringing chairs, duvets and food to everyone who needed it. A&E was moved to a nearby Health Care Centre for about 15 days, until it was safe to re-enter into some non-affected areas of the hospital building. After that, the clinic assessment offices were reconverted into A&E boxes. All the PPE had to be replaced, as they were stored in the basement, as well as the linen and staff uniforms. Hospital managers carried out a deep investigation about the source of the fire and why the safety devices in place did not work as they should. Six months later, the reconstruction work in the damaged areas ended. The fire safety committee updated the fire planning and established a compulsory annual fire safety training for the staff.

Conclusion:

- Proper preventive maintenance should be done to the building safety devices, in order to avoid risk for patients and staff.
- Staff should attend to mandatory fire safety training with enough frequency to keep up to date their knowledge about the fire protocols in the institution.
- Definition of responsibilities for fire management, adequate fire risk assessment and an updated fire planning save lives.

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CL06 Emergency management of an unconscious pregnant women with intracranial haemorrhage: when the husband enters the OR

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The clinical case presented will relate to the story of a night in the operating room during which two life-threatening emergencies presented themselves simultaneously, including a pregnant woman presenting an intracranial haemorrhage with cerebral herniation. Aspects of clinical leadership and the arrival of the patient's husband in the operating room will be discussed.

CL07 Always remember latex

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We report a case that illustrates importance of considering latent latex allergy as a possible cause of hemodynamic instability.

A 76 years old active female patient was admitted to the hospital with a femoral neck fracture. Her medical history included hypertension and hypercholesterolemia. She had no known allergies.

An urgent surgery for fracture fixation was planned and the patient was taken to the operating theater. After induction of general anaesthesia, a Foley catheter was placed into the urinary bladder.

Few minutes later the patient developed sudden hemodynamic instability. This included tachycardia, hypotension and shortness of breath. The anaesthesiologist decided to cancel the procedure and started preparations for inotropic treatment and CPR if necessary.

At this stage, the reason for patient condition was unclear, as she did not report any allergies. However, one of the nursing staff suspected latex allergy and proposed to exchange the catheter from latex to silicon. The catheter was changed and indeed, in few minutes the vital signs improved. The patient rapidly recovered and shortly, after a reassessment, it was decided that the procedure can be carried out. The surgery passed uneventfully and the patient had no intraoperative or postoperative complications. She was discharged three days later to a rehabilitation facility.

Guided Poster Walks

Guided Poster Walks

P01 Results of the readership survey and significance of having a professional magazine

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Background: Pinsetti magazine is one of the two leading professional magazines for nurses working in perioperative setting in Finland and it is a membership magazine of the Finnish Operating Room Nurses Association (FORNA). The magazine focuses on professional perioperative nursing and development of working conditions.

Objectives: The purpose of this readership survey was to describe the readers' views on Pinsetti magazine and its significance to operating room (OR) nurses. Research problems (RP) were: 1) How satisfied readers are with the magazine? 2) What is the significance of having a professional magazine from the perspective of OR nurses.

Methods: A cross-sectional descriptive survey was conducted at spring 2019. The sample of this survey comprised members of FORNA who had an updated email address (N=1177) in membership database. The data collected using an online questionnaire, which consisted of structured as well as open-end questions. The data analysed with statistical methods (RP1) and thematic analysis (RP2).

Results: 209 respondents took part in this survey (response rate 18 %). Most of the respondents reported being satisfied with the magazine's overall impression (n=194, 93%) and with the fact that association has its own professional magazine (n=207, 99%). Respondents (n=81) described that Pinsetti-magazine is an important forum to distribute professional knowledge and to support professional development. Additionally, respondents thought that magazine enhances professional cohesion and strengthen one's own professional identity.

Conclusions: The results indicate that readers are very satisfied with Pinsetti magazine and it has a special meaning to OR nurses in Finland.

Keywords: Operating Room Nurse, Professional magazine, Readership, Survey

P02 Impact of an operating room nurse pre-operative dialogue on anxiety, satisfaction and early postoperative outcomes in patients undergoing major visceral surgery: a randomized controlled trial

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Background: Anxiety is common before surgery and known to negatively impact recovery from surgery. The purpose of this study was to evaluate the impact of a preoperative nurse dialogue on patient's anxiety, satisfaction and early postoperative outcomes.

Method: This 1:1 randomized controlled trial compared patients undergoing major visceral surgery after a semi-structured preoperative nurse dialogue (an interventional group: IG) to a control group (CG) without nursing intervention prior to surgery. Anxiety was measured with the auto-evaluation scale STAI-T (Y-A form) pre- and postoperatively. The EORTC In-Patsat32 questionnaire was used to assess patient satisfaction at discharge. Further outcomes included post-operative pain and nausea (visual analogue scale: VAS 0-10), opiate consumption and length of stay (LOS).

Results: Over a period of 6 months, 35 participants were randomized to either group with no drop-out or loss to follow-up (total n=70). The median score of preoperative anxiety was 40 (IQR 33-55) in the IG vs. 61 (IQR 52-68) in the CG (p<0.001). Postoperative anxiety levels were comparable 34 (IQR 25-46) vs. 32 (IQR 25-44) for IG and CG, respectively (p=0.579). The IG presented higher overall satisfaction (90.315 vs. 82.9316, p=0.057) and a trend towards less pain at day 2 (1.331.7 vs. 231.9, p=0.077), while opiate consumption, PONV levels and LOS were comparable.

Conclusion: A preoperative dialogue with a patient-centred approach helped in this cohort undergoing major visceral surgery to reduce preoperative anxiety and increase postoperative satisfaction.

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P03 Development of a paediatric perioperative program

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We are a collaboration of medical professionals including a paediatric anaesthesiologist, surgeons, operating room nurses, OR management, pre-operative and postoperative units.

Preparation and planning: Identification of goal was agreed upon-to become a paediatric care specialty centre.

Equipment and supplies were characterized as appropriate or needed to purchase. Educational requirements were identified. Simulations were prepared.

Assessment: RNs volunteered from pre-op, intra-op, and post-op areas to be part of the core paediatric group. Each nurse did research for their respective areas needs and reported back to the group. Information was then presented to the staff for further discussions.

Implementation: Paediatric emergency airway cart was created and reviewed with staff. Staff was educated with workflow powerpoint. Paediatric emergency simulations were performed.

Outcome: First paediatric case was done successfully with staff reporting being comfortable and prepared for the paediatric population.

Implications for Perioperative Nurses: The paediatric population has specific needs that should be addressed before implementing a paediatric surgical program. Identifying patients' needs along with staff education and knowledge is critical to a successful program.

P04 Perioperative professional competence of nurses in the organ donation process

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Objectives: The aim was to describe the Norwegian perioperative nurses' own perception of their professional competence in the organ donation process, and to identify educational needs.

Methods: A cross-sectional survey was conducted at 9 of 26 Norwegian donor hospitals between June and August 2018, and 441 perioperative nurses were invited to participate. Response rate was 34% (n = 151). Data was analysed using descriptive statistics. Chi-squared and T-tests were used to compare means and groups at a significance level of p<0.05.

Results: The majority (70%) regarded themselves as competent in providing care for the donor in the operating room, nevertheless they reported a need for further education in the topics covered in the survey.

The results indicated positive attitudes towards organ donation among Norwegian perioperative nurses. Most participants (67%) indicated that organ donation had a positive impact on their work, and only 1 out of 10 reported emotional distress.

The majority was positive towards cooperation with the procurement team.

The results showed compliance between how perioperative nurses had developed their competence and what they considered most important for the development of competence. Practical training and repetition were stated as useful and experience was seen as the main factor for developing competence.

Conclusion: Educational input and discussion about aspects of the organ donation process was seen as important for further development of professional competence.

P05 Operating room - classroom

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The operating room, for the surgical patient, is the centre in which all preoperative research and preparation actions are directed and the centre from which all postoperative care for the treatment and restoration of his health originates. Although the basic principles of nursing are the same worldwide, some practices are different and that's why the trained surgical nurse is required to learn and follow. The aim of the review was to highlight the operating room as a classroom.

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The data was collected through electronic databases PubMed and Medline from the last 10 years, using the keywords operating room, training nurse, experiences. The results showed that the operating room is the one that accepts a large number of trained nurses, of any age group or education. Around the operating room is described all the theoretical knowledge about how to move in, as well as all those practices that confirm the theory. Anxiety about the different, fear of the unknown environment, storm of information and images, intense work rhythms, are just some of the many things that a new nurse faces. Along with these, there are some that cannot be taught, but are inextricably linked to the new nurse's contact in the operating room. The need to work with many departments, specialties and different personalities often causes stress to young nurses. However, there are also moments when the new nurse enjoys the appreciation of his/hers associates, especially when he/she has an appetite and perseverance for learning. In conclusion, the operating room is the one that prepares all those nurses who will later become toolmakers, mobility nurses, trainers, managers or supervisors. For this reason, it is necessary to staff it with capable people to be able to pass on their knowledge and later pass the baton to the new generation.

P06 Safety Attitudes Questionnaire (SAQ) among health workers in paediatric operating rooms, Athens, Greece

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Objectives: We aimed at applying the Safety Attitudes Questionnaire (SAQ) in order to assess safety culture in operating rooms at Greek children's hospitals.

Methods: Operating room professionals working at 3 children's hospitals in Athens, were invited to self-complete the SAQ. The 30-item Greek version of the SAQ consisted of six domains. The respondents rated their agreement with each item using the following 5-point Likert scale. Statistical packet R was used and a multiple regression analysis was performed, while the minimum level of statistical significance was set at 5%. Ethical issues were addressed.

Results: Out of a total of 252 operating room professionals, 181 (72%) fully completed SAQ. Their median age was 47; their median work experience in paediatric operating rooms was 14 years. The results of the multiple regression analysis show mainly that the participants who wanted more teamwork at work were the older at the age ($p = 0.009$). The participants who wanted greater safety at their workplaces (operating room) were male ($p < 0.001$), older ($p < 0.001$), those with longer work experience in the hospital ($p = 0.007$), were satisfied with their workload ($p < 0.001$). Participants who were satisfied with their work were mainly those who had more experience at the hospital ($p = 0.007$). The participants with more stress were male ($p = 0.004$), the youngest ($p < 0.001$), married ($p = 0.001$), operative room nurses surgeons ($p < 0.001$), those with longer hospital service ($p = P = 0.001$), more experience in the surgery ($p = 0.001$), those who were exhausted by their workload ($p < 0.001$). The participants who wanted more effective administration were those who were older ($p = 0.002$).

Conclusions: The findings of this research have shown that the surgeons and operative room nurses in the paediatric hospital had difficulties to ensure an appropriate safety climate.

P07 Safety culture among OR nurses and surgeons in paediatric operating rooms, Athens, Greece

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Objectives: We aimed at investigate the safety culture in operating rooms at Greek children's hospitals.

Methods: Operating room professionals working at children's hospitals ($n=3$) in Athens, Greece. Questionnaire of consisted of six items about: "burn out", "occupational stress", "quality workplace", "perception of health care", "perception of cooperation", "satisfaction of management". The respondents rated their agreement with each item using the 5-point Likert scale. The statistical packet R was used and a multiple regression analysis was performed, while the minimum level of statistical significance was set at 5% ($p \leq 0.05$). Ethical issues were addressed.

Result: Out of a total of 252 operating room professionals, 181 (72%) fully completed the questionnaire. Their median

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age was 47; their median work experience in paediatric operating rooms was 14 years. Both surgeons and OR nurses experienced a high rate of > 70% (72.4% to 85.5%) burnout and occupational stress ($p = 0.224$ and $p = 0.647$, respectively) in their workplace. Compared to surgeons, operating room nurses had a statistically significantly better perception of their workplace quality on average, $p = 0.027$, and considered that they participated statistically significantly more on average in achieving their workplace quality $p = 0.002$. In terms of the safety of children in the OR of public paediatric hospitals, the OR nurses working in them had a statistically significantly better view on average than the surgeons $p = 0.011$, while both the OR nurses and the surgeons on average almost unreservedly recommended surgery operating as safe for paediatric patients ($p = 0.111$). The satisfaction that both the surgeons and the OR nurses had from the management of the management of the hospital, in which the operating room worked, was moderate ($p = 0.093$).

Conclusion: There is a need for better management and decision-making that improves working relationships.

P08 Expectations for life among adolescent, children and youngster undergoing hematopoietic stem cell transplantation

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Objectives: The aim of the research study was to investigate the expectations of children, adolescents and young adults who have undergone hematopoietic stem cell transplantation.

Methods: The sample of the study consisted of 100 children, adolescents and young adults who had neoplastic disease and who now come for follow-up after hematopoietic stem cell transplantation. The expectation questionnaire, together with a special questionnaire concerning health information, transplant procedures, complications, satisfaction, mental health, information on future consequences after hematopoietic stem cell transplantation, as well as the socio-demographic and clinical characteristics of children and adolescents and young adults. Factor analysis, *t*-test, Mann-Whitney, analysis of variance (ANOVA) and Kruskal-Wallis test were used to analyse the results using the statistical program SPSS 25.0.

Results: The sample consisted of 55 boys (55%) and 45 girls (45%) most of whom were aged 7-12 (61%) years. In terms of clinical features, the majority of the sample had hematologic malignancy (73%). The results of the analysis of the principal component analysis of the expectations showed a total internal relevance factor of Cronbach's alpha = 0.82, while in the other questionnaire Cronbach's alpha = 0.73. The statistically significant difference was observed in the family perspective and more specifically, the patients who had received treatment have higher expectations for starting a family ($p = 0.005$), while another statistically significant difference was found in health information and discharge and more specifically, patients who had received a transplant from a relative donor had better information ($p = 0.037$).

Conclusions: Investigating the expectations who have undergone hematopoietic stem cell transplants could be used to assess their current psychosocial status, and to improve the quality of their provided inpatient health care.

P09 Parental presence during needle venipuncture in Paediatric hospital

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Objectives: The present quantitative research aims to explore the attitudes, beliefs and behaviours of medical and nursing staff regarding the presence of parents during venipuncture in paediatric patients.

Methods: The sample comprised of medical doctors and nurses, working in the public paediatric hospital. Ethical issues were addressed after the permission of the Scientific Board of the hospital. The researcher utilized anonymous self-administered questionnaires to investigate the attitudes, beliefs and behaviours of the medical and nursing staff of the hospital toward parental presence during needle venipuncture. Collected data were processed and analysed using the SPSS 25.0. Multiple linear regression analysis was performed. The level of significance was determined at $p < 0.05$.

Results: 134 was completed questionnaires - 62 by medical doctors (i.e. 46%) and 72 by nurses. In the sample of the medical doctors, the results of the linear regression analysis revealed that was higher emotional attachment during venipuncture ($p = 0.043$), and (c) disapproval of restraint when performing venipuncture ($p = 0.004$), were positive

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predictors “facilitative effect of the presence of informed parents”. Adopting the distraction of children’s attention as a supportive method during this invasive procedure, “parental presence is desirable” ($p = 0,043$). In the sample of the nurses, their attitudes regarding the necessity to respect children’s rights predicted “the presence of parents, convinced of the necessity of venipuncture, is preferable” positively ($p = 0,006$). The non-pharmacological approach of play therapy predicted statistically significantly “parental presence is acceptable” ($p = 0,032$). Finally, “the presence of parents, convinced of the necessity of venipuncture, is preferable” correlated statistically significantly with the independent variable – disapproval of restraint when performing venipuncture ($p = 0,009$).

Conclusions: In conclusion, parental presence during venipuncture procedure in paediatric patients is necessary. For that reason, medical and nursing staff should attend continuous training programs on family-centred care.

P10 Investigation of the intensity of occasional parental anxiety before and after their children undergo a surgical operation

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Objectives: The purpose of this study was to assess the intensity of occasional parental anxiety before and after their children undergo surgery.

Method: The sample of the study consisted of 300 parents of hospitalized children at the General Paediatric Hospital of Athens. The data were collected by filling in by the parents of the “State Trait Anxiety Inventory for adults” of Ch. Spielberger. The statistical t-test and ANOVA were applied. The significance level of 5% was considered statistically significant.

Results: The study sample consisted of 300 parents, of whom 257 (85.7%) were mothers. The intensity of occasional anxiety pre-operative in 6% of them was within normal range, in 9.3% there was a mild tension, in 23% a severe tension and 61.7% experienced a very severe tension. After the surgery, the corresponding percentages were 60.7%, 27.7%, 8.3%, and 3.3% respectively.

Parents whose children are hospitalized in Intensive Care Units for children and neonates are experiencing very severe anxiety before surgery with a statistically significant difference, $p < 0.001$. All parents, regardless of the type of surgery, experiences very severe tension-like anxiety. Postoperatively, the same group also experiences a higher incidence of occasional anxiety, $p < 0.001$ but of mild tension. With regard to child’s age, there were no statistically significant differences in anxiety intensity pre-operatively, $p = 0.083$, but post-operatively parents whose child was under the age of 1-year experienced higher anxiety but milder $p = 0.003$. Parents dealing with the household experience greater pre-operative anxiety, $p = 0.01$. Postoperatively, those who lived in a village experienced a higher mild, occasional anxiety, $p = 0.022$. The preoperative and postoperative hospitalization time for those who were more than 8 days in the hospital increased the anxiety intensity $p = 0.030$ and $p < 0.001$ respectively.

Conclusion: The intensity of occasional parental anxiety depends on clinical factors affecting the child, but also on various socio-demographic factors.

P11 Quasi-experimental study: implementation of a patient information model to improve the quality of care in the pre-operative period

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Introduction: The problems related to misunderstanding information about surgical preparation received by the patient could result in surgical cancellations. The evidence points to the need to improve the communication with the patient through methods that allow easy access to information for any patient profile (1-3).

Objectives: The hypothesis was: The use of a message that reinforces the pre-operative information reduces the number of cancellations of surgical interventions due to lack of adequate preparation.

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Methods: A Quasi-Experimental study is carried out at the Hospital Universitari Sagrat Cor in Barcelona, from 1st October 2021 to 1st October 2022. The intervention was the implementation of a communication method, where an SMS (Short Message Service) is sent to the patients the week before the operation with relevant information. Study subjects are all patients scheduled for any surgical specialty.

Results: The data collection allows to identify the effectiveness of the new tool, establishing correlations between post-intervention cancellations and data before implementation. Currently, our cancellation rate is 1.2%.

Conclusions: Such as the evidence reported that intervention allows to reduce costs and increase surgical productivity (4).

References:

- 1- De Sousa Araújo PFC, Do Nascimento JS, Melo Azedo SPB, Xavier SM, Costa IKF, De Araújo G. Cancelamento de cirurgias eletivas em hospital escola: causas e estatísticas. *Enfermeria Global*. 2020;59:298-309.
- 2- Gaucher S, Boutron I, Marchand-Maillet F, Baron G, Douard R, Bethoux JP. Assessment of a Standardized Pre-Operative Telephone Checklist Designed to Avoid Late Cancellation of Ambulatory Surgery: The AMBUPROG Multicenter Randomized Controlled Trial. *PLoS ONE*. 2016;11(2).
- 3- Díaz-Pérez A, Vega-Ochoa A, Dominguez-Lozano B, Carrillo-González S, González-Puertas J. Seguridad del paciente en el perioperatorio: evidencia de los factores determinantes de la cancelación quirúrgica. *Cirugía y Cirujanos (English Edition)*. 2020;88(4):489-99.
- 4- Oliveria Botazini N, de Carvalho R. Cancelamento de cirurgias: uma revisão integrativa da literatura. *Revista SOBECC*. 2017;22(4):230.

P12 Psychosocial environment and psychosomatic manifestations among operating theatre nurses after a pandemic period

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Objectives: To identify the psychosocial risks and the incidence of psychosomatic manifestations among nurses in an Operating Theatre Unit; prior to and after a period of COVID-19 pandemic.

Methods: A prospective longitudinal descriptive study. Our tools are Copenhagen Psychosocial Questionnaire CoPsoQ_Istas_21, the Severity scale n for indicators NOC 1212 Level of stress NOC 1211 Level of anxiety. Questionnaires in November 2019 and June 2021.

We use Istas_21 application and EpiInfo_7.3.2.1 for data processing.

Results: Response obtained in 85% of n=40 and 96% of n=33. Pre-pandemic, eleven psychosocial dimensions show unfavourable exposure for ≥ 50% of nurses. Post- pandemic, 4 dimensions have decreased and 6 have increased in prevalence. We highlight the pace of work, which remains at 100%.

The favourable exposures possibilities of development and sense of work affect 60% and 70% of the respondents. In post-pandemic period these two dimensions increase in prevalence and join the group (Job Security, Recognition, Vertical Trust) affecting between 56% and 72% of participants.

Pre-pandemic period: 90% of the nurses present psychosomatic signs related to their work. 32% of the explored NOC indicators affect more than 50% of the respondents in a moderate, substantial or severe degree. Post-pandemic: 43.48% of the indicators affect 100% of the people.

Conclusions: The increase in the prevalence of five dimensions perceived as favourable is a strengthening element within the Unit.

The group suffers an overall increase of 16.57 points within the perception of unfavourable dimensions such as Influence on work, Need to hide emotions, Quantitative and emotional demands, Clarity of Role and Double Presence. We consider that all these and the rhythm of work should be considered as the focus for interventions to promote a decrease in psychosomatic manifestations among the nurses of the Unit.

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P13 Educational interventions used with children, adolescents and parents in the perioperative: a systematic review protocol

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Objectives: To synthesize which educational interventions are used with children, adolescents and parents in the perioperative. Introduction: Nearly 50 to 75% of children and adolescents undergoing surgery experience fear and anxiety during the preoperative period, emotions also common to parents. Educational interventions are recommended as a method to reduce perioperative anxiety, increase knowledge, satisfaction, improve attitude and behaviours. These should aim the child and adolescent, taking into consideration their stage of cognitive development, and also be centred on the family.

Inclusion criteria: This review will consider studies whose participants are parents and their children – 6 to 12 years old – and adolescents – 13 to 19 years old – undergoing elective or scheduled surgery under general anaesthesia, regardless of the type of surgery. Day and/or ambulatory surgery will also be included. The participants must have been submitted to the educational interventions perioperatively. The main outcomes are pain and anxiety levels in children and adolescents and anxiety levels and satisfaction in parents. Experimental and quasi-experimental study designs will be considered for this review.

Methods: This review will be conducted following the Joanna Briggs Institute methodology for systematic reviews of effectiveness. Databases for published and unpublished studies, available in English and Portuguese, from January 1st 2007 will be searched. There is no geographical or cultural limitation for the acceptance of studies. Titles, abstracts and full text of relevant studies will be independently assessed against the inclusion criteria, and two independent reviewers will critically appraise eligible studies. All selected studies, regardless of their assessment of methodological quality, will be presented in a tabular form. A narrative synthesis will accompany the results and, if possible, meta-analysis will be performed, and a Grading of Recommendations, Assessment, Development and Evaluation (GRADE) Summary of Findings presented.

P14 Nursing care in awake surgery in the surgical treatment of drug-resistant epilepsy in paediatric patients: a clinical case report

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Background: Awake surgery is an innovative neurosurgical technique that involves brain surgery on an alert and cooperative patient. This technique is used when the lesion affects the so-called eloquent cortex or areas of the brain that perform functions that need to be tested during surgery.

Case presentation: 14 years old female patient suffering from drug-resistant epilepsy undergoing surgery to remove the epileptogenic lesion in awake surgery. It is essential to choose the best type of patient to undergo this technique, not only for their illness, but also for their ability to control anxiety and fear of pain. For the nurse in the operating room, a holistic view of the case is therefore necessary, keeping in mind the pathology, the patient's maturity, anxiety and fear, and the family context. Primary objective of the case: not to make the intervention a traumatising event.

The nurse who cared for the patient created a comfortable setting by making her listening to music, communicating continuously with her throughout surgery, helping her to relax and overcome moments of fear, answering her questions, and by never making her feel alone.

Discussion: Awake surgery is an emotionally engaging experience for both the neurosurgeon and the patient as they both cooperate to achieve the same goal. No diagnostic test can accurately establish the function of the areas of the brain where the team is performing surgery, so, if the patient is alert, they can help eliminate the lesion by “guiding the surgeon's hand”. The awake technique helps minimise post-operative neurological deficiencies, minimise the need for

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neurological rehabilitation, and allows a faster return to daily life.

Conclusions: The best results are obtained through teamwork, and designed through clinical and educational paths developed in the various stages of hospitalisation, in order to improve the quality of life and continuity of care.

P15 Double mask system: reducing occupational exposure to anaesthetic gases in the paediatric operating room. A Bibliographic review

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Introduction: The leakage of volatile gases into the environment is considerable during general anaesthesia in paediatric patients. The operating room personnel can suffer damages associated with the continuous inhalation of volatile gases, such as toxic effects, risk of carcinogenesis, abortions, and infertility.

Objective: To determine if the use of the Double Mask System in paediatric patients undergoing inhalation anaesthesia reduces the level of gas leaked into the environment to protect the exposed personnel's health.

Methodology: The Bibliographic review was carried out on literature available in Pubmed, academic google, Scopus, Epistemonikos, Ibecs, as well as grey literature. A search using a combination of Keywords: "anaesthetics" and "double mask" and "occupational exposure" and "paediatrics" was performed. The research was executed including all articles with no language, data or type of study restrictions. The studies included focused on dental surgery, oncology surgery and minor procedure for pain. They determinate the adverse effects of anaesthetic gases used in paediatrics for the personnel and the advantages of using devices such as the Double Mask System. Two reviewers independently assessed the quality of the included studies and synthesized results.

Results: A total of 17,6011 articles were reviewed by title and abstract. Seven articles corresponding to descriptive observational studies, one randomised clinical trial and one systematic review were included. In all the studies evaluated, the use of a double mask reduced the risk of gas exposure considerably compared to a single mask in ambient (33.81 vs 66.95ppm).

Conclusions: The use of a double mask system in paediatric anaesthesia reduces the exposure of personnel to anaesthetic gases.

Spanish regulations recommend incorporating the double mask system in the operating room to reduce the risks of exposed personnel, but its use is not mandatory.

P16 Virtual nurse training software

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We've devised an immersive and interactive virtual reality training software to improve both working professionals' skills and futures' ones in the subject of Surgery.

Our purpose is to give professionals workers and teachers a high-efficiency way of learning and updating knowledge that could be demonstrated a posteriori, since this project looks at a sample of persons that could have been subjected to a cerebral mapping(*QEEG) or if it is defected, the most indicated techniques, to detect differences, if there are any significant ones, between people who were trained by our programme and those who weren't.

With this option, we aim to send this learning method and that it could be recognized by the EEES in the near future, being homogenized by these 48 members countries, being implemented in both public or private health systems.

At this time, Spain has a population, according to the statistic national institute (INE), of about 247.974 working nurses (2017, May) with an annual growth of 2,7%, as well as a population of 291,84 8doctors, which increased 2.7%, an indication that it's an adequate population to implement this project of teaching and learning before they can perform on live patients during de clinical practicum MIR or EIR.

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P17 Developing self-efficacy in responding to acute situations amongst perioperative nursing students' through interprofessional simulation-based learning

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Background: Interprofessional simulation-based learning (ISBL) offers learning situations that influence self-efficacy and prepare students for the complexities and challenges of clinical practice (1, 2). Self-efficacy is related to students' learning processes and performance in various situations (3).

Aim: To describe perioperative nursing students' experiences with ISBL and its contribution in developing self-efficacy.

Research questions: How do experiences of ISBL contribute to self-efficacy in communication, interdisciplinary collaboration, and prioritising tasks in acute situations for perioperative nursing students?

Methodology: We utilised a qualitative design and conducted six focus-group interviews between May and October 2019 with thirty-four perioperative nursing students from five higher educational institutions in Norway. Data were subjected to directed content analysis (4), using Bandura's social cognitive theory with four sources influencing self-efficacy (5).

Results: Gaining mastery experiences and valuable competence (communicating, interdisciplinary collaboration, technical skills, and prioritising) through ISBL gave students faith that they could master acute situations entering clinical practice. Vicarious experience, as observing others first, made it easier to perform in the scenario themselves, increased their competence in prioritising, and gave insight into the importance of clear communication in acute situations. Verbal persuasion and social influences, as positive feedback, strengthened students' mastery experience. During ISBL, all the educational professions needed to receive equal attention to be recognized as important team members. Physiological responses were linked to feelings of stress, where positive stress provided challenges that could give rise to mastery. The opposite, unnecessary stress, made students feel insecure and hindered their feelings of mastery.

Conclusions: Bandura's sources of self-efficacy in ISBL contribute to perioperative nursing students' self-efficacy beliefs in communication, interdisciplinary collaboration, and prioritisation of tasks in acute situations. Critical conditions that cause unnecessary stress should be considered, such as not feeling prepared, perceiving ISBL as artificial, and/or feeling assessed.

P18 Operating theatre nurses' considerations about bladder catheterization of the patient undergoing surgery

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Background: In Norway clinical recommendations were changed in the patient safety program, 2013, to reduce urinary infections among operating patients undergoing different kind of surgery. It was a goal to reduce the amount of bladder catheterization when the patients were in the operating theatre ward and perioperative setting.

Aim and design: A qualitative study was conducted to investigate the considerations done by the specialized nurses in this setting according to the patients undergoing surgery and preventing urinary bladder distention.

Ethical approval: The study was approved by the ethical committee of the faculty of the University of Agder and the Norwegian Centre for Research Data (NSD) (number 55766).

Method: Eight semi-structured interviews were conducted with operating theatre nurses from two different hospitals in Norway. The interviews were transcribed verbatim and analysed using Kvale and Brinkman.

Results: The data showed how the operating theatre nurses cooperated with the team in their considerations of whether there was a need for preventing urinary bladder distension or not. They made sure that the patient went to the toilet before going to the operating theatre, and kept an eye on: for how long time the surgery took, in addition to communicate with the anaesthetic personnel about their need of keeping a more accurate measure of the urinary production through the surgery.

Conclusion: The operating theatre nurses' experiences and clinical judgement are important in collaboration with the surgical team in advocacy of the patients' interest even though they not always consider written routines or procedures.

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P19 Factors associated with anxiety and depression in parents of children undergoing a bone marrow transplantation

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Objectives: Aim of this study was to investigate factors associated with anxiety and depression in parents of children undergoing a bone marrow transplantation.

Methods: The sample of the study consisted of 100 parents of children with leukemia from «Agia Sofia» Children's hospital during the period of December 2020 – February 2021. Data were collected via interviews using the questionnaire "The Hospital Anxiety and Depression Scale (HADS)".

Results: Eighty-one and 64% of parents experienced anxiety and depression respectively, based on HADS scores. A statistically significant association was observed between parental anxiety and gender ($p = 0.017$), how often they visit the hospitalized child ($p = 0.023$), whether they would like other family members to also remain in the hospital ($p = 0.033$), the need to participate in daily care ($p = 0.023$), the need for assistance based on personal needs ($p = 0.026$), the need for scheduled meetings with parents facing similar problems ($p = 0.006$), the need for communication after hospital discharge ($p = 0.035$) and the need to obtain written information ($p = 0.044$). Regarding depression, a statistically significant association was observed with difficulties encountered during the hospitalization ($p = 0.034$), whether they would like other family members to remain in the hospital ($p = 0.009$), the need for dedicated time for questions ($p = 0.004$), the cooperation with the medical and nursing staff ($p = 0.011$), the need for scheduled meetings with parents facing similar problems ($p = 0.026$) and the need for communication after discharge from the hospital ($p = 0.038$).

Conclusion: The planning and the application of psychological intervention protocols, before the admission to a paediatric bone marrow transplantation unit, can play a significant role in the reduction of anxiety and depression of parents of these patients and make their hospital stay easier.

ePosters

eP01 The influence of obesity in the postoperative period of heart surgery

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Obesity is associated with an increased risk of cardiovascular diseases and these patients are an increasing proportion of the cardiac surgery population. To implement the best care strategies, assessment about the postoperative prognostic, like the length of stay in an intensive care unit (ICU), is very important to the perioperative professionals' team. In this context, this research was developed to understand the influence of Obesity (Body Mass Index ≥ 30) in the postoperative period of patients undergoing cardiac surgery and aim to determine the association between preoperative obesity and length of stay in heart surgery patients. This study is a retrospective observational study. The patient cohort was performed by adults (>18 years), had elective cardiac surgery, and information about BMI status. Regression unadjusted and adjusted analysis was performed to determine the association between preoperative obesity and postoperative length of stay in ICU. 1146 eligible patients were analysed and cardiac surgery included coronary artery bypass graft (CABG), valve surgery, or combined CABG and valve surgery in 532 (46%), 494 (43%), and 120 (10%) patients, respectively. Differences between groups with and without Obesity were stratified by age, gender, primary diagnosis, BMI, Diabetes, type of surgery, and presence of any postoperative complications. In a regression analysis we found that did not have any increase in ICU days that would be predicted by the presence of Obesity (0.33) and adjusted analysis with confounders some variables that may be associated with predicting the outcome, as Postoperative complications and Bleeding ($p < 0.001$). These results can be explained by a phenomenon known as the "obesity paradox" and can subside new studies about preoperative nutritional therapies to benefit surgical patients' postoperative recovery. In this study, preoperative obesity is not associated with a major length of stay in an ICU in patients undergoing heart surgery.

eP02 Patients' experiences regarding severe leg wound infection associated with coronary artery bypass grafting: a qualitative study

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Objectives: The aim of this study was to describe patients' experiences associated with acquiring a severe infection in the harvesting site after coronary artery bypass grafting (CABG).

Methods: This study was conducted at the department of vascular and cardiothoracic surgery in a Swedish university hospital. Patients diagnosed with a severe surgical site infection in the harvesting site following CABG were included. Sixteen face-to-face interviews were conducted from May to December 2018 and analysed with inductive content analysis.

Results: Varying impact of body and mind was the main category and illustrated the patients' experiences of severe wound infection in the harvesting site after CABG. Two generic categories were identified: physical impact and thoughts about the complication. The experience of pain in the wound varied greatly between the participants, from no pain at all in several of the patients to severe pain in others. Several of the participants said it led to increased fear and anxiety, with thoughts and reflections regarding why the infection had occurred or whether there would be even more difficult complications in their recovery, while others were affected only slightly or not at all. For most of the participants, everyday life was affected to varying degrees due to the complication in the harvesting site.

Conclusions: The findings in this study indicate the complications as an important issue with varying impact for the patients. However, most of the participants were satisfied with the outcome after the wound had healed. Patients should be advised to seek care at an early stage if symptoms of infection occur. Improved individual pain management is needed for those with severe pain, and varied experiences imply a need for person-centred care.

ePosters

eP03 Experience of living with crooked and/or blurred vision caused by epiretinal membrane

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Purpose: To describe people's experience of living with crooked and/or blurred vision caused by epiretinal membrane (ERM).

Background: The study population was patients diagnosed with the eye disease ERM. This visual disturbance is characterized by a crooked vision (metamorphopsia), i.e., straight objects are perceived as wavy/crooked. There is also reduced visual acuity. The disease is most common in the elderly and is often remedied by surgery.

Method: Using a qualitative content analysis, information from 16 semi-structured interviews has been analysed through an inductive approach. Through repeated readings of the text, the material became familiar and thus obtained a sense of wholeness. The text was divided into meaning units to be followed by codes and then subcategories and categories. A process that oscillates back and forth to finally discern a theme.

Results: The theme 'To see life through other eyes' illustrated the patients experience of living with ERM. Four categories were identified; physical expressions, emotional reactions, limitations in daily life and strategies to compensate for impaired vision. Physical symptoms such as headaches, dry eyes and/or nausea occurred. Visual problems were also common like blurred vision, affected detail vision and crooked vision. Restrictions in everyday life in the form of reduced activities such as sports or driving were also found. Even one's self-image seemed to be affected due to the loss of identity. Strategies to compensate for lack of vision were shown by taking support from their surroundings, changing settings on for example a mobile phone and in some cases stopping the activity altogether.

Conclusions: By acquiring this knowledge, the understanding of their life situation and how vision effects them in everyday life increases. Based on this, be able to offer person-centred care, as well as enable priorities in terms of measures.

Keywords: Epiretinal Membrane, Metamorphopsia, Quality of life

eP04 Women undergoing caesarean section: a scoping review

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Background: Perioperative nurses are integral in the surgical team during caesarean delivery. However, there are no recommendations or guidelines regarding their role during caesarean delivery.

Purpose: Identify clinical guidance that focuses on the operative nurses' responsibilities during caesarean delivery.

Method: A scoping review was conducted based on guidance by the Joanna Briggs Institute. Systematic literature searches were conducted in four databases, in addition to grey literature and broad coverage of other information sources. Guidance was synthesized into themes and critical appraisal of the included papers was conducted.

Results: Fourteen studies related to the operating room nurse's role during caesarean delivery were included.

Conclusion: This review address intraoperative care provided to women undergoing caesarean delivery by operating room nurses. In particular, it is clear that practice needs to align with current guidance regarding vaginal preparation.

Keywords: caesarean delivery, operating room nurse, guidance

eP05 An e-learning course in electrosurgical equipment used in surgeryT. Staff¹, I. Øen¹, A. Horn², J.-O. Feste Larsen³, R. Skaathun⁴, M. Sandnes⁴, A. Viste²*¹Haukeland University Hospital, Dep. of Anaesthesia and Intensive Care, Bergen, Norway, ²Haukeland University Hospital, Department of Surgery, Bergen, Norway, ³Haukeland University Hospital, Department of Clinical Engineering, Bergen, Norway, ⁴Haukeland University Hospital, Department of Research and Development, Bergen, Norway*

Objectives: Electrosurgical equipment is devices that convert energy from high frequency electric current into heat to incise and coagulate tissue at the point of application. These devices have the potential to cause electro-thermal injury, interfere with implants, etc.

The Western Regional Norwegian Health Authority (Helse Vest) is the governmental owner of the regional and community hospitals in its counties. In March 2019, a multidisciplinary group created an e-learning course in electrosurgical equipment. The purpose was to ensure a good understanding of the use of electrosurgical equipment in surgery.

Methods: We used guidelines from authorities such as the Norwegian Radiation Protection Authority, the labour inspectorate and the instructions manuals from suppliers of the electrosurgical equipment to design a script.

We set the following main learning objectives:

- You have theoretical knowledge of diathermy, laser and ultrasonic surgical instruments as well as radiofrequency ablation
- You understand the effects of, and are familiar with, the use of high-risk energy instruments
- You know that improper use can lead to injuries to patients, personnel and equipment

We forwarded the e-learning course for consultation to the chief physician responsible for the education of doctors in the hospital (LIS 2 program), managers and professionals in the fields of operating theatre nursing, professionals in medical technology and the Western Norway University of Applied Sciences' (HVL) Operating Theatre Nursing Program.

Results: The result is an e-learning course for doctors, nurses and radiographers who are in contact with the relevant tools. The e-learning course is located in the Learning Portal in Health region west and documented (automatically) in the Competence Portal.

Conclusions: As part of the training of surgeons, operating theatre nurses and others, the course is a simple and important contribution to improving quality and patient safety. This is an interdisciplinary collaboration, which is important for quality in health care.

eP06 Cerebral oximetry in cardiac surgeryK. Mintzaridis¹*¹Children Hospital Agia Sophia, Cardiac OR, Athens, Greece*Konstantinos Mintzaridis¹, Ioannis Koutelekos²*¹RN, Perfusionist, ECCP, MSc, PhD (c), Children Hospital Agia Sophia, Athens, Greece**²Assistant Professor, Department of Nursing, University of West Attica Athens, Greece*

Open heart surgery has become increasingly common since first performed by Gibbon in 1953. Cerebral injury after cardiac surgery is a dreaded outcome and is associated with longer hospital stays, including intensive care unit stays and increased mortality.

So there was a need for monitoring of cerebral perfusion during cardiac operations to reduce neurological complications. Cerebral perfusion is a major factor for regional and global imbalance in oxygen supply –demand, which may result in brain injury following cardiac surgery.

Cerebral oximetry was developed as a non-invasive technique for a continuous assessment of cerebral blood flow. Published studies have demonstrated that cerebral oximetry may help identify vulnerable periods during cardiac operations, which may require immediate intervention to avoid adverse events.

Published outcome studies at cerebral oximetry monitoring with active interventions, have demonstrated reduced postoperative cognitive decline and length of hospital stays.

ePosters

eP07 Parents' knowledge and attitudes regarding home-related accidents

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Objectives: Children's accidents that occur at home are a global public health problem. Injury types, causes and consequences vary among populations and among countries, while children's risk of injury in the home depends on interactions between parent/caregiver, child and the home environment. The aim of this study was to examine parents' knowledge and attitudes regarding home-related accidents among children.

Method: This cross-sectional study, which was conducted in two paediatric public hospitals in Athens, General Children's Hospital of Athens, Greece. Included 107 participants, parents of children aged 2-6 years old, all members of the nursing and medical staff of the above-mentioned hospitals. For the purpose of the present study, we used a specific self-completed questionnaire, including sociodemographic characteristics of participants and parental attitudes and knowledge towards home accidents among children. Analyses were undertaken using SPSS Statistics, version 23.0 (SPSS, Chicago, IL). The chi-squared test and Fisher's exact test were used to perform independency tests. The statistical significance level was set at 0.05.

Results: 37.4% of the parents mentioned that their children had experienced at some time an accident in the home. Father's age ($P=0,035$), working units ($P=0,020$) and short sleep duration in childhood ($P=0,036$) were found to play very important roles in determining the parents' attitudes to preventive measures of home accidents in children. The risk of an unintentional childhood injury at home is significantly higher among those of older mothers, aged 37 or over ($P=0,045$). Nurses' have significantly higher rates of home accidents ($P=0,029$).

Conclusions: Child domestic accident prevention is necessary. This requires designing and implementing educational and intervention programs in order to create safe home environments for children.

eP08 Patients' experiences of day surgery and recovery - considerations for practice

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Background: Day surgery represents an increasing part of elective surgery and embraces an extensive number of procedures. This challenge the traditional role of patients, who are no longer observed and cared for by health care professionals but must recover at home with the help of family and friends.

Objectives: The purpose of this master project was to explore how do adult patients undergoing day surgery experience the processes of treatment and recovery.

Aims: To learn how processes of day surgery practice can be improved to meet patient needs and increase patient satisfaction.

Methods: Eight studies were included in this metasynthesis, using Noblit and Hare's (1988) meta-ethnography approach.

Results: The synthesis revealed four third-order constructs; (1) requests for tailored information, (2) challenges related to managing bodily signs at home, (3) being dependent on continuous professional and personal support and (4) requests for individual adaptation of the treatment process.

Conclusion: Patients experience that the standardization of day surgery practice makes them feel secure; however, they ask for individualized adaptation of the treatment process. Patients highlight the importance of being prepared for what to expect, and the need to have support from family and friends while recovering at home. They also stress the significance of the consistent and ongoing involvement of health care professionals following discharge. Findings indicate a focus on information provision and preparation based on the health professionals' perception of patient needs, rather than the actual requirements of patients. The findings of this study may contribute towards enhancing quality of care and improving patients' experiences of day surgery and recovery.

Keywords: Day surgery, patient experiences, meta-ethnography, metasynthesis, self-care, treatment process

eP09 Scrub nurse intervention in surgical tracheostomy for intensive care patients during COVID-19 emergency period

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Objective: Significantly reduce the exposure time of the surgical staff to SARS-CoV-2 during surgical tracheotomy procedure performed to critical patients affected by COVID-19 in ICU department.

Method: Timing control, from the arrival into ICU department until this place was left.

Sterile field prepared and properly isolated in OR which was adequately transported into ICU department afterwards.

Results: At the beginning, the OR team -anaesthetist, ENT surgeon and two scrub nurses- wore their PPE from the OR department. The time required to get the PPE in place, prepare the sterile field at patient's bedside and perform the tracheotomy intervention in ICU was 1 hour 30 minutes per patient.

Afterwards, for the following interventions, OR department was equipped with a 'tracheotomy trolley', containing all the required materials, including surgical tray with the instruments. This way the OR staff were able to prepare a sterile field at this department and to cover it with different layers of drapes to protect the sterile items on its way to ICU. This method obtained a more effective management of time, therefore the OR team achieved to get to ICU in less than 15 minutes since the sterile instruments were opened. Time required for the whole assistance, since the team left the OR department until they came back were 45 minutes per patient.

Conclusions: Health workers can benefit significantly from a reduced exposure to SARS-CoV-2 when performing an emergency tracheotomy to ICU patients suffering from COVID-19 if the tracheotomy material required is prepared and transported from the OR scrub nurses guaranteeing the sterile conditions of the surgical items.

There were not reported surgical site infections related to this procedure in those patients.

There were no infections reported by the staff involved in the procedure 15 days after they were performed.

eP10 Preventing pressure injuries in the tracheostomy patient

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Introduction: A common area for pressure injuries to occur in the tracheostomy patient population is at the flange base of the tracheostomy tube. Injuries in this area are subjected to tight sutures, secretions, and dressing changes. Prevention of medical device related injuries is one of Stanford Hospital priorities.

Method: A collaboration of nurses, physicians, wound care management, and operating room management worked together to evaluate our current process for placing new tracheostomy tubes. Factors including tightness of sutures, length of time from suture insertion to removal, dressing type, and tracheostomy tube flexibility were evaluated. A trial of a flexible, translucent flanged tracheostomy tubes proceeded including multiple service disciplines.

Results: Working together we were able to decrease the number of sutures used during the tracheostomy tube placement, standardizing the dressing type used directly after surgery and postoperatively, easier skin assessments were performed, and no early decannulations occurred. The positive trial of flexible tracheostomy tubes led to a full facility conversion.

Conclusion: The softer clear material of the new tracheostomy tube has many advantages. Surgical skin assessments can be performed through the clear flange base. Softer flanged base has multiple openings allowing air contact to the underlying skin. Reduction in the number of sutures placed during surgery provides less surgical trauma, reduced skin to device contact, and easier changing of dressing. Early decannulations were avoided.

ePosters

eP11 Novel otoplasty technique: advantages and applications

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The goal of this study is to present the advantages of a novel otoplasty technique that can be used to correct most of the ear auricular deformities.

Material-methods: In this specific technique, after infiltrating the skin surrounding the pinna with a Xylocaine 1% with Adrenaline (Epinephrine) 1:200,000 solution, we design the necessary elliptical skin excision from the posterior surface of the auricle. Afterwards a small incision of 5-6 mm is made in the anterior surface of the pinna, in the upper part of the helical arch furrow, from where, with the help of a Freer Septum Elevator 4.5mm, we detach all the anterior perichondrium and with a special abrasive scratcher we perform the scoring along the entire antihelix, extinguishing in this way the memory of the cartilage. Finally, 4-5 absorbable stitches are placed along the posterior surface of the antihelix to secure the folding of the ear cartilage and maintain the new position of the whole pinna (upper pole, medium portion and lobule of the ear).

Results: This novel otoplasty method has been applied on a large number of children and both the operation times and postoperative results were very satisfactory, as presented in detail with the help of visual material.

Conclusions: This novel otoplasty technique offers us the possibility of a very precise surgical moulding of the ear auricle, as well as of handling in detail any specific ear shape, in the shortest possible surgical time.

eP12 Nursing teamwork: different skills to achieve the best outcome for patients during mitralclip procedure

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Introduction: Patients with severe mitral regurgitation, old age or comorbidities are exposed to high risks during surgery. Mitralclip procedure (a percutaneous edge-to-edge mitral valve repair procedure) has proved to be safe for them.

Objectives: This study aims to emphasise the OR Nurses' skills during Mitralclip procedure.

Methods: A review of the literature was conducted in PubMed. Articles about OR Nurses' skills during Mitralclip procedure and articles with comparisons between Mitralclip procedures and open-heart surgery procedures were selected.

Results: 9 out of 15 retrieved studies were selected; only one focuses on nurses.

Discussion: Nurses support patients and families during their therapeutic diagnostic path.

The Nurse Anaesthetist receives the patient. They prepare and check for the correct operation of the anaesthetic devices and they insert the PVC. Nurse assists Anaesthetist in radial artery cannulation, intubation procedure and insertion of CVC. During Mitralclip procedures, AN controls heart rate, blood pressures, oxygen saturation, FloTrac and electrocardiogram, and they get emogasanalisis and ACT results. They warn the Anaesthetists of any significant change.

The Surgical Nurse prepares and preserves a sterile field in which the operation takes place. They prepare the instruments, the equipment needed for the surgery and the Mitralclip delivery.

The Scrub Nurse must have all the necessary materials for an emergency sternotomy. The Circulating Nurse prepares the operating room, checks for the correct operation of surgical devices, the correct preparation of the patient and applies all the devices needed. Surgeon and Nurse get the patient in position and the nurse prepares the "stabiliser" where the device will be laid on.

Each nurse with his own skills and abilities collaborates with the entire team to achieve the best outcome for the patient.

Conclusions: The professional evolution of the Nurses has to keep up with the introduction of new technologies related to innovative surgical processes.

eP13 Validity and reliability of radial artery assessment techniques in coronary artery bypass grafting: a systematic review

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Objectives: Accuracy and consistency of screening tests implemented for the pre-operative assessment of radial artery (RA) graft, prior to surgical coronary revascularisation, has been at the heart of debate for many years. Correct RA assessment is crucial prior their surgical harvesting to avoid post-operative complications. However, the absence of a universally agreed approach emphasises the lack of evidence-based practice. A systematic review was conducted with the aim of evaluating and comparing the validity and reliability of the most commonly adopted RA assessment techniques, including: modified Allen test (MAT), pulse-oximetry, plethysmography and ultrasonography. The objective of this research was identified as the need to establish the most superior RA screening test within cardiac institutions.

Methods: A systematic search was undertaken, appraising relevant primary research studies published in English between 2010 and 2020. MEDLINE, PubMed, CINAHL, Scopus and EMBASE databases were consulted, to access studies relating to the assessment of RAs during coronary artery bypass grafting. All included articles were reviewed and selection criteria applied, data findings were extracted for analysis, narrative synthesis and conclusions drawn. Critical appraisal of the included studies was performed using the modified Downs and Black checklist.

Results: Nine studies addressing the research question were included in the review. Seven studies identified the reduced validity and/or reliability of the MAT, four of which highlighted the poor sensitivity, poor specificity and the subjectivity of the screening test. Two studies established that pulse-oximetry and plethysmography, used in combination with the MAT, offer more objective results than an isolated MAT, also impacting on sensitivity and specificity. Ultrasonography provides important insight into the morphological characteristics of RAs, providing an accurate and reliable anatomical RA assessment.

Conclusions: This systematic review suggests that ultrasonography screening is superior in RA assessment, enabling selection of RA segments with favourable morphological features, hence optimising post-operative surgical outcomes.

eP14 Angioplasty of the peripheral arteries in peripheral arterial disease

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The etiology of peripheral arterial disease (PAD) is the stenosis or occlusion of the femoropopliteal arteries through atherosclerosis. Main risk factors are age > 60 years, tobacco use, arterial hypertension and metabolic syndrome. Diabetic patients carry an additional risk for the most severe form of PAD, i.e. critical limb ischemia.

The treatment of the stenosis or occlusion of the peripheral arteries require recanalization of the lesion through advancement of dedicated wires under fluoroscopy. It follows the introduction of the balloon catheter and the dilatation of the lesion. This is called angioplasty.

The effect of angioplasty is to open the vessel lumen by stretching and pushing the plaque outwards. In the majority of the cases, the lumen gain is good enough to establish adequate perfusion of the limb. In some cases, recoil or dissection of the plaque may jeopardize the blood flow and additional scaffolding with bare metal stents is necessary. In the current days, the addition of paclitaxel on the surface of the balloons or stents has reduced dramatically the restenosis rate with excellent angiographic and clinical results.

In summary, angioplasty is a minimally invasive treatment strategy of the peripheral arterial disease and provides the unique opportunity to the patient to return quickly back to the daily practice.

ePosters

eP15 “Major Haemorrhage Trolley” Bloody Brilliant! A quality initiative improving patient safety

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Major haemorrhage occurring in the operating theatre (OT) requires a rapid response from the multi-disciplinary team (MDT). Approximately 50% of blood products transfused take place in the OT (De Biasio, 2016). A major haemorrhage protocol is defined as a standardized response that enables the MDT to organise activities quickly and efficiently in order to treat the patient in the most time effective manner (Porteous, 2015). The protocol encourages improved communication, cohesive action, minimal delay and staff support.

Developing the protocol involved the MDT coordinating its progression and initiation. Simulation training with debriefing and evaluation occurred. Recommendations were instigated. Evaluation identified weaknesses in the provision of essential equipment efficiently and effectively, resulting in delayed intervention for the patient and stress for staff. This was identified as a system and process failure, which if not rectified could contribute to an adverse event (Reason, 2000). Following debriefing and collaboration, it was identified that vital equipment should be more readily available to optimize patient care by promoting a lean approach and improving process. This was identified as a transformative learning opportunity that would improve quality of care (Riehle & Hyrkas, 2012). Consequently, staff embraced the project and the major haemorrhage trolley was created. All essential equipment including flash cards for role identification, mobile phone for communication and white board for documentation are systematically laid out on this trolley.

This quality improvement initiative demonstrated a quality culture by examining practice and implementing effort to improve performance interlinking familiarizing, using and evaluating (Ruhe et al. 2009). Evaluation by survey suggested this simple idea improved patient safety. With staff extolling its merits it is now an essential element of the process when the major haemorrhage protocol is activated, reviewed regularly and replicated in other departments in the hospital. (References available).

eP16 Intraoperatively local infiltration anaesthesia in hemiarthroplasty patients reduces the needs of opioids: a randomized, double-blind, placebo-controlled trial with 96 patients in a fast-track hip fracture setting

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Background and purpose: Local infiltration analgesia (LIA) is commonly used as a component in multimodal analgesia. Pain management directed towards hip fracture patients operated with hemiarthroplasty is often based on knowledge on pain treatment following elective surgery. In this elderly patient population, it is of value to clarify whether adding local infiltration analgesia (LIA) to the postoperative analgesic regimen might reduce postoperative pain or have an opioid reducing effect.

Patients and methods: 96 hip fracture patients undergoing hemiarthroplasty surgery in spinal anaesthesia were included. All patients received multimodal pain regimen and were randomized to receive either ropivacaine or placebo. All patients received dolcontin as depoid-opioid and morphine as rescue medicine postoperatively. The primary endpoint was pain during mobilization in the recovery unit the day of surgery. Secondary endpoints were pain during mobilization the day after surgery and postoperative opioid requirements the first postoperative day.

Results: The levels of pain during mobilization both in the recovery unit and on the day after surgery were similar in the 2 groups with median 4 and 0.5 in the placebo group and median 3.5 and 1 in the ropivacaine group respectively. Total consumption of opioids on day 0 and day 1 were 4.6 mg lower in the ropivacaine group (P=0,04). Pain during mobilization were registered only for 44 of 96 patients due to several reason including lack of mobilization.

Interpretation: There were similar pain scores in both the local infiltration and placebo group postoperatively however, a substantially reduced opioid consumption was found in patients receiving LIA.

eP17 Patient experience with early discharge after total knee arthroplasty: a focus group studyV.S. Husby^{1,2}, L.H. Høvik³, B. Aglen⁴

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Objectives: To explore the experiences of patients undergoing total knee arthroplasty in a fast-track pathway during the first 2 weeks after surgery.

Methods: Three focus group interviews, including 13 patients from two different units of an orthopaedic department in central Norway, were conducted from May to June 2015. The interviews were analysed using Malteruds' method of systematic text condensation.

Results: The main finding was the patients' determination and ability to cope at home. The fast-track pathway seemed to enable patients to take an active role in own self-care. The patient's coping capacity was strengthened by education, knowledge and predictability. Four main areas related to coping emerged after discharge. First, most of the patients expressed that it was good to come home and take responsibility for their own rehabilitation. Second, prerequisites for feeling secure after returning home were highlighted. Third, the patients seemed empowered by sharing experiences with others. Fourth, postoperative pain was prevalent in many patients after discharge, but the patients seemed prepared by information provided in the fast-track pathway.

Conclusions: The fast-track pathway released coping skills and resources among the patients. The expectation of, and preparation for early discharge made the patients feel confident when discharged few days after surgery. The patients expected to take great responsibility for their own rehabilitation process.

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eP18 Determining the factors affecting fear of movement in patients undergoing total knee replacementN. Yildiz Emre¹, M. Karadağ²

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Background: Total knee replacement (TKR) negatively affects the recovery process because TKR patients avoid movement and have difficulty meeting their needs.

Method: The sample consisted of 150 TKR patients at a university hospital. Data were collected three times using the Tampa Scale of Kinesiophobia (TSK) (1) before surgery, (2) one day after surgery, and (3) three weeks after discharge. The data were analysed using independent samples t-test, analysis of variance (ANOVA), Tukey, Tamhane, Mann-Whitney U, Kruskal-Wallis H tests, and Bonferroni correction.

Results: Participants had a mean TSK score of 44.0536.24, 45.5437.05, and 42.7938.15 before surgery, one day after surgery, and three weeks after discharge, respectively. Most participants needed help with their activities of daily living after surgery (89.3%). More than three-quarters of the participants avoided movement due to postoperative pain (78.7%). Participants who did not exercise after discharge had higher pain levels than those who did. Participants who exercised regularly had less fear of movement than those who did not.

Discussion: Post-TKR pain and fear of movement cause patients to avoid moving, which negatively affects the recovery process. Patients who exercise regularly recover more quickly. Therefore, it is important to identify the factors affecting fear of movement in TKR patients.

ePosters

eP19 Lest we forget: why the current overreliance on PPE needs to change for a safer OR

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The COVID-19 pandemic brought staff safety into the spotlight within healthcare and the public. There has been significant media attention on how hospitals implement prevention strategies to protect staff and patients. The initial response to the COVID-19 crisis from governments and hospitals around the world focused primarily on increasing the use of Personal Protective Equipment. In March 2021, Amnesty International stated that at least 17,000 people working in healthcare facilities worldwide have died from COVID-19.

The initial measures put in place as response to COVID-19 have been reviewed against the Hierarchy of Controls framework to determine if the most effective control measures were put in place to prevent infections in healthcare workers. The Hierarchy of Controls framework is recognized globally as a method of risk management for occupational injuries and infections.

This review has shown that there were many shortcomings with the initial response to COVID-19, risking the safety of perioperative nurses and other healthcare staff. An overreliance on PPE was made at the expense of higher levels of control measures such as Engineering Controls. Expanding this review to look at the implementation of prevention strategies for other safety hazards within the Operating Room, such as sharps and surgical plume, it has also been observed that there needs to be a greater focus on higher levels of control measures.

This presentation will share the key findings from the review and practical guidance on how facilities can effectively apply the Hierarchy of Controls to prevent respiratory infection risks such as COVID-19, and other safety risks in the OR including sharps injuries and surgical plume.

Systematic staff safety improvements will lead to improved patient outcomes and should be managed at each level within the healthcare system: at the national level, the organisational level, and at the individual level by perioperative staff.

eP20 Environmental burden, efficiency and surgical staff safety in operating rooms comparing two surgical fluid waste management systems across Europe: rationale and design of the GREEN study

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Objective: Incineration waste resulting from ineffective surgical fluid waste management in operating rooms (OR) creates an environmental burden and poses a significant safety risk for surgical site staff. There is a need for waste management systems that improve OR safety, efficiency, and enhance sustainability. This GREEN study (Greening operating Rooms in Europe comparing Neptune vs Canisters) aims to compare waste disposal impact of two systems across Europe.

Methods: GREEN is a 2-arm, non-randomized prospective service evaluation of fluid waste extraction during routine surgical procedures using observational timeseries and survey. Data will be collected from 120 surgeries in France, Germany, Spain, and United Kingdom. Type of surgical procedures included are: Transurethral Resection of the Prostate or Transurethral Resection of the Bladder, Holmium Laser Enucleation of the Prostate, Shoulder Arthroscopy, Knee Arthroscopy, or Joint Replacement (knee or hip). Inclusion criteria are: (i) surgery is performed by an operating team (surgeons and nurses) familiar (≥ 4 weeks) with the use of Neptune and Canisters; (ii) at least three operating team members are trained on this service evaluation; (iii) surgery is one of the surgical procedures included; and (iv) physician pre-operatively expects a normal course of the surgery. Emergency surgeries will be excluded. Primary endpoint is the volume of incineration waste related to Neptune or Canisters in kilograms after surgery. Hypothesis tested is: the volume of incineration waste related to Neptune is less than the volume of incineration waste related to Canisters. Secondary endpoints include time efficiency, user satisfaction, costs, ergonomics, and safety. Primary endpoint will be compared between the two treatment groups using a two-sample t-test at a two-sided significance level of 0.05.

Relevance: Data from this study will potentially enable hospitals in making ORs safer, efficient, and greener. Given the environmental burden caused by incineration waste, this is highly needed and relevant.

eP21 Greening the healthcare supply chain: life cycle assessment of disposable vs. remanufactured medical devicesD. Vukelich¹¹Association of Medical Device Reprocessors, Berlin, Germany

COVID-19 has shined a light on the vulnerabilities in the healthcare supply chain. Medical device and supply shortages, increased waste and cost are all exacerbated by the pandemic. Healthcare itself is particularly toxic as an industry, as recent data shows as published in the journal, Health Affairs. Healthcare professionals are eager for data to guide purchasing behaviour to promote a more circular, less costly and less wasteful supply chains. This session will focus on the role healthcare and its supply chain contribute to waste and greenhouse gas emissions, and one solution, medical device remanufacturing, including a recently published Life Cycle Assessment (in the Journal, Sustainability) of disposable versus remanufactured products.

eP22 Implementation of a protocol of perioperative information to the patient's family membersE. Coll del Rey¹, V. Fernández Gómez¹, B. Gómez López¹, P. Gómez Matas¹¹University Hospital Virgen de las Nieves, Surgical Block, Granada, Spain

Introduction: Surgical-area technique is increasingly important. So that operating-room environment looks cold and hostile for health-system users. Focus on humanization of nursing care, this work considered the possibility of changing such an image. As a result of this concern, a protocol was developed by perioperative nurses to inform patient's family-members, while he was submitted to time consuming-surgery.

Goals: The main objective was to reduce patient's family-members anxiety while waiting for surgical procedure to end. It was too, to enhance the perception of quality care received in the surgical area.

To eliminate variability in the practice of this communication, is a secondary goal just to avoid undesired effects and conflict situations. We also intended to Include family members in patient's health process.

Material and methods: After a bibliographic review the relevance of implementing a nursing perioperative information protocol to the relatives and companions was confirmed.

As inclusion criteria, it was aimed at the companions of patients undergoing medium and long term-surgery. Those with surgery of less than three hours are excluded.

Other exclusion criteria were; those of emergency surgeries with unstable or high-risk patients or if patient denies consent to informed anyone about his status.

Results: A nursing activity to support family was carried out at the information-room. This was a short interview.

Conclusions: The concern for the humanization of care is a constant in many of the areas where we care providers work. Piloting this protocol has shown great acceptance among professionals. In addition, a high number of users have expressed their satisfaction with the personalized attention received at very difficult times for them. Although these results have not been measured to date, a quantitative study is been started about the anxiety-state and quality of care received by patient's family-members in the surgical-block, expressed through specifics questionnaires.

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