

5TH INTERNATIONAL CONFERENCE FOR PERIANAESTHESIA NURSES

EXPLORING NEW HORIZONS,
EMPOWERING GLOBAL PRACTICE



CANCUN MEXICO

DELEGATE HANDBOOK

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International Collaboration of PeriAnaesthesia Nurses
ICPAN

Promoting Global Excellence in PeriAnaesthesia Nursing

“Bienvenidos: Exploring New Horizons, Empowering Global Practice” PROGRAMME STRUCTURE

Tuesday 5th November 2019		
15.00-18.00	Registration Desk Open	
15.00-18.00	Poster and Exhibitor Set Up	
Wednesday 6th November 2019		
Registration Desk Open		
Cozumel		
07.00-18.00	Welcome and Opening Ceremonies - Introduction to Conference: Dr. Joni Brady, ICPAN Chair	
08.30-09.00	Keynote Address - Dr. Ligia Fahl Fonseca, Associate Professor, Londrina State University, Brazil	
09.00-10.00	Rescuing your Patient from the Desert: An Innovative Approach to Perioperative Thirst Management	
EXHIBITOR TIME		
10.00-10.40	Break: Light Refreshments, Viewing of Clinical and Research Posters, Silent Auction	
Room	Cozumel	Tulum
Moderator	Maria Kapritsou	Johanna McCamish
10.40-11.20	Assessing Risk for Preoperative Distress and Optimizing Interventions for Patients with Developmental Diagnoses Abby V Hess (USA)	Increasing Recovery Room Utilization through a Merger of Ambulatory Surgery Units at Michael Garron Hospital Marie Fulcher and Christine Saby (Canada)
11.25-12.05	Integral Role of Peri-Operative Nurses in Enhanced Recovery Program Implementation Alita Campbell-McAdory (USA)	The Impact of Health Literacy on Postoperative Recovery Among Patients Undergoing Day Surgery Maria Jaensson (Sweden)
12.05-13.05	Delegate Luncheon, Viewing of Clinical / and Research Posters, Silent Auction EXHIBITOR TIME	
Room	Cozumel	Tulum
Moderator	Regina Hoefner-Notz	Meg Beturne
13.05-13.45	Screening for Pediatric Preoperative Risk Factors Using an Evidence-Based Checklist to Manage Postanesthesia Respiratory Complications Myrna Mamaril (USA)	Good Arguments for Establishing an IV-Team Rikke Boa (Denmark)
13.50-14.30	Perianesthesia Nurses' Knowledge and Promotion of Safe Use, Storage and Disposal of Opioids Jan Odom-Forren and Joni Brady (USA)	Holding it Together - Patients' Perspectives on Postoperative Recovery when Using an E-Assessed Follow-Up Karuna Dahlberg (Sweden)
14.30-15.00	Break: Light Refreshments, Viewing of Clinical and Research Posters, Silent Auction EXHIBITOR TIME	
15.00-17.00	THE GATHERING OF NATIONS (interactive group discussions) Mette Ring, ICPAN Education Chair, Facilitator Integrating Complementary Care and Alternative Therapies to Enhance Patient Outcomes Results from an international survey by Hanneke van Kooten and current research summary by Joni Brady Clinical Competence, PACU Handover, OR Waste Recycling for Planetary Health Short cases from clinical practice presented by ICPAN Global Advisory Council Members Education, Competency and the Role of the PACU Nurse Results from an international survey by Karuna Dahlberg	
17.30-19.30	Delegate Welcome Reception	
Thursday 7th November 2019		
Registration Desk Open		
Cozumel		
08.30- 09.30	Keynote Address - Dr. Ulrica Nilsson, Professor of Nursing, Karolinska Institute, Sweden Postoperative Recovery: What it is and How to Improve it	
Room	Cozumel	Tulum
Moderator	Ann Hogan	Angela Fraser
09.35-10.15	Exploring New Horizons in Oxygen Administration Paula Foran (Australia)	Civility & Respect: Enhancing Purposeful Communication to Improve Staff Nurse Role Satisfaction and Safe Patient Care Gloria Gia Luu (USA)
10.15-10.55	Break: Light Refreshments, Viewing of Clinical and Research Posters, Silent Auction EXHIBITOR TIME	
Room	Cozumel	Tulum
Moderator	Jan Odom Forren	Pat Smedley
10.55-11.35	Perioperative Nurses' Experiences with Pediatric Emergence Delirium: A Pilot Study Allan J Cresencia (USA)	Can We Do Better to Minimize Postoperative Patient/Family Anxiety in PACU? Xiao Wang (USA)
11.40-12.20	Riding the (end) Tidal Wave to CO2 Monitoring: Using Capnography for Obstructive Sleep Apnea Following Anesthesia Kathryn Scully (USA)	How to Estimate Nurse-Patient Ratio to Accommodate Patient Flow Challenges in a Danish University Hospital Bente Buch (Denmark)
12.20-13.50	Delegate Luncheon, Viewing of Clinical / and Research Posters, Exhibitor Time, Silent Auction Lunch Symposium by PainPod® Biotechnology	
Room	Cozumel	Tulum
Moderator	Ulrica Nilsson	Hanneke van Kooten
13.50-14.30	The Safe Brain Initiative Karina Jakobsen and Finn Radtke (Denmark)	Code Blue: Improving Teamwork, Competency and Confidence Throughout the Perioperative Service Line Pamela Northrop, Ayumi Fielden, Xavia Fuller and Laura Ortiz-Carter (USA)
14.35-15.15	Validation of Assessment Tools to Assess for Sleep Disordered Breathing or Obstructive Sleep Apnea in Pediatric Patients in the PeriAnesthesia Setting Leilani Jankus and Jacqueline Tibbetts (USA)	A Study to Optimize the Postoperative Pain Care for Patients Undergoing Major Shoulder Surgery Dorthe Ramskov Henriksen (Denmark)
15.15 -15.45	Break: Light Refreshments, Viewing of Clinical and Research Posters, Silent Auction EXHIBITOR TIME	
Room	Cozumel	Tulum
Moderator	Lorna Jensen	Mette Ring
15.45-16.25	Management - Head Nurses' Perspective on Evidence-Based Nursing Magnus Flodberg (Sweden)	Aromatherapy in the PACU Laura Martinez, Jill de la Vega, Cheryl Gilliland and Beth Nardi (USA)
16.30- 17.20	ICPAN Biennial General Meeting	
19.00-22.00	SOCIAL EVENT - GALA FIESTA DINNER	
Friday 8th November 2019		
Registration Desk Open		
Cozumel		
09.00-10.00	Keynote Address - Dr. Theofanis Fotis, Lecturer, School of Health Sciences, University of Brighton, United Kingdom Harnessing the Future, Now!	
10.00-10.15	Break: Light Refreshments	
Room	Cozumel	Tulum
Moderator	Trica Garrloch	Susan Fossum
10.20-11.00	PACU Handover Timeout: Promoting Safe Care Transitions Denise O' Brien (USA)	Consideration of Contributing Factors to Unanticipated Cardiac Arrest in the Cardiac Catheter Laboratory Heather Reynolds (Australia)
11.05-11.45	Developing a Position Statement to Address Surge Activity in PACUs in Ontario, Canada Linda Marshall-Masson and Nancy Rudyk (Canada)	Caring for Patients with PTSD/PTSS: A Unified Approach to a Global Phenomenon Meg Anne Beturne (USA)
11.50-12.50	Oral Presentations of Best Poster Submissions	
12.50-13.15	CLOSING CEREMONIES AND CLOSING REMARKS	

Attention United States of America Certified Nurses

The American Board of Perianesthesia Nursing Certification, Inc. will honour recertification credit in the direct or indirect category for all ICPAN 2019 sessions attended. Recertification information will be provided on your delegate attendance certificate.

5TH INTERNATIONAL CONFERENCE FOR PERIANAESTHESIA NURSES

CANCUN, MEXICO

5TH - 8TH
NOVEMBER 2019

www.icpan.org

Welcome to ICPAN 2019



Welcome to beautiful Cancun and the 5th International Conference for PeriAnaesthesia Nurses - ICPAN 2019! Thank you for making the journey to Mexico to participate in this exciting biennial gathering. In addition to the exceptional scientific programme, please take some time to experience the rich history, culture, and warm hospitality of our Mexican hosts in Quintana Roo.

Our professional collaboration has grown steadily since the first international perianaesthesia nurse meeting held in 2011. Looking back, the inaugural ICPAN Conference slogan "Many Practices ~ Just One World" encouraged us to join together to explore our respective practices and align strategic global perianesthesia nursing priorities. ICPAN 2019 offers another unique opportunity to engage with national and international perianaesthesia colleagues, share knowledge and culture, and build lifelong professional and personal relationships. Have fun and make new acquaintances at the Delegate Welcome Reception, Gathering of Nations Forum, Exhibition, and Gala Fiesta Dinner. Check out the Silent Auction to bid on the interesting items donated by global ICPAN supporters.

Please attend the ICPAN Biennial General Meeting to learn more about the mission, vision, and operations of ICPAN, Inc. Nurse participation from all countries is needed to promote broader outreach and strategic goal attainment for the organization. Nurse leaders have advocated for the development of international models of nursing education, regulation and practice. To that end, ICPAN is committed to advancing the voice and role of nurses in evolving safe perioperative care team practices across an interconnected global society. We are excited to share the reports from two international perianaesthesia nursing surveys conducted by ICPAN and its Global Advisory Council at this meeting.

On behalf of the ICPAN Board of Directors and Global Advisory Council, thank you for your dedication to our profession and the commitment to growing our global connections to advance the perianaesthesia science needed to empower us to deliver optimal patient care everywhere. Have a wonderful visit to Mexico and enjoy the conference. We're glad you're here!

**Joni M. Brady, DNP, RN-BC, CAPA
ICPAN Chair**



Dear Colleagues,

It is my honour and pleasure to act as Scientific Committee Chair for the 5th International Conference for Peri-Anaesthesia Nurses in beautiful Cancun, Mexico. We have devised a very exciting programme for you. Our keynote speakers from Brazil, Sweden and the United Kingdom will encourage lateral thinking with their research, knowledge and experience.

Many of our speakers are highly qualified nurses with many years of peri-anaesthetic practice. Others are educators, undertaking some very interesting studies which they will share with you. The Gathering of Nations Forum is always very popular with delegates since it commenced in Dublin, Ireland at ICPAN, 2013. It is an ideal gateway for networking with like-minded individuals and for sustaining friendships and cultivating international peri-anaesthesia practice collaboration. This year, members of the Global Advisory Council are presenting practice issues on Complementary Care, Clinical Competence, PACU Handover, Operating Room Waste Recycling and the Role of the PACU Nurse, which will promote lively discussion and may provoke thoughtful reflection on these problematic topics. We have organised a great lunch symposium on Wednesday which may alter your view on non-pharmaceutical methods of analgesia. Don't forget to visit our exhibitors and poster presenters as they have made great efforts to enhance the educational component of the conference. The six most interesting poster presenters will be invited to present their research/innovate practice on the last day of conference. After the busy conference days, the Welcome Reception and Gala Dinner will provide much needed light relief-Mexican style entertainment may be just what you need!

**Have a wonderful conference,
Ann Hogan**

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General Information

REGISTRATION DESK

The Registration desk, located on the second floor of the International Conference Center (ICC) will be open during the following times:

Tuesday 5th November 15:00 - 18:00 hrs

Wednesday 6th November 7.00 – 18.00 hrs

Thursday 7th November 7.30 – 18.00 hrs

Friday 8th November 7.30 – 10.30 hrs

NAME BADGES

Please wear your name badge at all times during attendance at the Conference. You will also need your name badge to access the social functions.

MEETING ROOMS FOR SESSIONS

All Sessions will be held in the following rooms:

Plenary Session: Cozumel 1

Concurrent Session: Tulum

Exhibition: Cozumel 2

Light Refreshment and lunch breaks: Cozumel 2

Silent Auction: Isla Mujeres

CONCURRENT SESSIONS

Delegates are free to attend the oral presentations of their choice. Each lecture is scheduled to start/finish at the time given in the program. Five minutes has been allowed for delegate movement to their chosen session.

CONFERENCE ABSTRACTS

All abstracts are included in this booklet. For further information on any particular paper or presentation, please contact the author/presenter directly.

CATERING

Light refreshments and lunch will be served in Cozumel 2. For those with special dietary requirements, the food will be labelled to show possible allergens. All efforts will be made to accommodate these delegates who have contacted BTC before the conference. Please ask venue catering staff for assistance.

DELEGATE FORUM: THE GATHERING OF NATIONS - IMPORTANT INFORMATION

Wednesday 6th November : 15.00 -17.00 hrs

The Delegate Forum will have assigned seating to promote peri-anaesthesia practice conversations and direct networking with global colleagues.

To prepare for this session:

- Please note your assigned table number in advance. Seating assignments will be located on information boards found outside the Cozumel Suite and at the Registration Desk on Wednesday morning
- Please be on time and seated at your assigned table number before the Forum begins.
- Each table will have an assigned group leader to guide the discussion. You may participate and contribute to the session without Internet access.
- Please see staff at the conference registration desk if you require more information or assistance about the Forum.

POSTER DISPLAYS

The poster displays are located in Cozumel 2. Please visit the poster displays, as a lot of time and effort goes into producing them. Poster presenters are asked to stand by their posters during the lunch breaks to answer any questions delegates may have.

EXHIBITION

Exhibition booths are set up in Cozumel 2. Please take the time to visit the sponsors and exhibitors and acknowledge their support of the conference.

SILENT AUCTION

The Silent Auction will be held in Isla Mujeres. This room will be open during the light refreshment and lunch breaks. All bids must be made by the end of the afternoon break on Thursday. Auction items must be collected and paid for by the end of the morning break on Friday. Cash payments are preferred but there will be a facility to pay with a credit card if necessary.

MOBILE PHONES

Please turn off or silence your mobile phones during the presentations as a courtesy to the speakers and other delegates.

WIFI AND INTERNET ACCESS

Free WIFI is available within the Cancun International Convention Center. Please check at the registration desk for details. Please be aware that WIFI will be provided for checking e-mails and searching on the internet but may not support the streaming of videos on personal phones.

SECURITY

The venue management or conference organisers accept no responsibility for loss of any items left in the function/meeting rooms, other venue areas or car park.

PARKING

The ICC has onsite car parking facilities and is open from 7.00 until 18.00hrs. Entry is via Boulevard Kukulcán KM9, lagoon side, and is complimentary for delegates who have registered with BTC. As the venue could be hosting simultaneous events, the parking lot will be limited to pre-registered participants.

WELCOME RECEPTION

The Welcome Reception will take place in the Terraza Akumal at the ICC from 17.30 to 19.30hrs on Wednesday 6th November. This will provide a great opportunity to catch up with friends and colleagues and enjoy drinks and canapés. This event is complimentary for all full registration delegates. However, you must wear your delegate badge to gain entry to this event. There is an extra fee for companions of delegates. These tickets can be collected at the registration desk.

CONFERENCE DINNER

The Conference Dinner will take place in the Cozumel Suite from 19.00 to 22.00hrs. If you have purchased a ticket for the dinner, it will be provided in your registration pack. Transfers to and from the ICC have not been arranged – please make your own way there. Further information is listed below.

Address:

Cancun International Convention Center,

Boulevard Kukulcán KM9, hotel zone

Cancún, Mexico

Phone: +52 (998) 8810400

CONFERENCE EVALUATION AND CERTIFICATES OF ATTENDANCE

An online evaluation form will be emailed to all participants after the conference. Please take the time to complete the evaluation, as your feedback is invaluable in planning future events. A Certificate of Attendance will be emailed to you once your evaluation form has been submitted.

Conference Biographies and Oral Abstracts

Wednesday 6th November 2019	
09:00 - 10:00	Cozumel Suite

Keynote Address – Dr. Ligia Fahl Fonseca, Associate Professor, Londrina State University, Brazil
Rescuing Your Patient from the Desert: An Innovative Approach to Perioperative Thirst Management



Dr. Ligia Fahl Fonseca has been a nursing educator in undergraduate and graduate programs for over thirty years at Londrina State University in Brazil. She received her Master's Degree from Case Western Reserve University and PhD from the University of São Paulo. She has shared the results of research in conferences both nationally and internationally and has taught short and long-term courses to students of various universities, nursing educators, and health care professionals. She has coordinated the Perioperative Specialization Course and is currently the Perioperative Residency Program coordinator at Londrina State University. She also teaches Nursing Communication for the Master's and PhD Programs.

For the past eight years, Ligia has been the coordinator of the Research and Study Group on Thirst. Motivated by the realization that thirst is a much forgotten and yet highly distressful and prevalent symptom in the perioperative period, the group has worked intensively to uncover high level evidence on thirst management and propose new reliable tools that have been implemented in clinical practice. Extensive research conducted by the group based on recent discoveries in sensation physiology, resulted in the Perioperative Thirst Management Model, an innovative approach. It allows perioperative nurses to manage thirst in an effective and safe manner, with great impact on patient's comfort and care.

Keynote Presentation

Perioperative thirst is highly prevalent and distressful for the surgical patient and yet it is paradoxically under-valued, under-assessed and under-treated. Recent evidences on discoveries in sensation physiology as well as research results from the Study and Research Group on Thirst bring innovative insights into this scenario. A Perioperative Thirst Management model is presented, with encouraging results to mitigate thirst, both during pre and postoperative periods. Ongoing and future studies will be discussed as well as the advances and challenges presented so far.

10:40 - 11:20

Cozumel Suite

Assessing Risk for Preoperative Distress and Optimizing Interventions for Patients with Developmental Diagnoses

Author: Abby V Hess

Dr. Abby Hess (Winterberg), APRN, DNP, is a nurse practitioner and clinical researcher at Cincinnati



Children's Hospital Medical Center. She began her career at Cincinnati Children's as a research assistant in 2005. She has worked in the perioperative department since 2009, initially as an RN in the post-anesthesia care unit and subsequently as an APRN in the pre-anesthesia consultation clinic. Upon receiving the Doctorate of Nursing Practice (DNP) degree from the University of Cincinnati in 2015, Dr. Hess worked with senior leadership to create a new dual role, combining patient care as a Nurse Practitioner with clinical research. In this role, she has been awarded 8 research/innovation grants, including multiple awards for developing a new breathing-controlled app/device used to decrease pediatric preoperative anxiety. Dr. Hess recently accepted an adjunct faculty position in research at the University of Cincinnati's College of Nursing, where she will focus on nurse-led innovation and clinical research.

Presentation

Introduction: Patients who have developmental diagnoses (e.g. autism, developmental delays associated with genetic syndromes) are at risk for psychological distress during perioperative care. Distress may result in combative behaviors, safety incidents, and future difficulty coping during healthcare visits. Our hospital uses the validated Psychosocial Risk Assessment in Pediatrics (PRAP) tool to stratify patient risk for distress during hospital visits, where 1=low risk, 2=moderate and 3=high risk (1). An individualized Adaptive Care Plan (ACP) is then developed in collaboration with the family to promote safe and productive healthcare visits (2).

Aims: We aimed to determine the association between the PRAP level, interventions provided, preoperative anxiety and induction distress. We also assessed family satisfaction with ACPs.

Methods: This prospective, observational study included 60 patients ages 3-21 years old presenting to Same Day Surgery for anesthesia. All patients had a developmental diagnosis, previously demonstrated difficulty cooperating during healthcare and had an existing ACP.

We measured the patients' PRAP level, preoperative anxiety at 4 timepoints (modified Yale Preoperative Anxiety Score or m-YPAS), and induction distress (Induction Compliance Checklist or ICC, scored 0-10 with 1 point for each distress behavior exhibited). Non-pharmacologic and pharmacologic interventions were documented. Family satisfaction with the ACP was assessed using a survey.

Descriptive statistics were generated. Univariable associations between two variables were examined using two-sample t-test, ANOVA, chi-square, Fisher's exact test, and Spearman or Pearson correlation coefficients, as appropriate. Linear mixed effect models were used to analyze m-YPAS with repeated measures. Multivariable models were developed for m-YPAS at each phase and stratified by PRAP and ICC (adjusting for age and gender).

Results:

- Higher PRAP was associated with significantly higher preoperative anxiety and a higher number of non-pharmacologic interventions provided by Child Life staff (Spearman $r = 0.65$, $p < 0.0001$).
- After premedication, anxiety at transport and induction distress were low for all PRAP levels (mean ICC = 2, 3, and 3 for PRAP I, II, III).
- Induction distress differed significantly based on premedication given and was lowest for patients receiving ketamine (ketamine +/- midazolam mean ICC = 1; Midazolam = 3; no premedication = 4; overall $p = 0.02$).
- 50/60 families completed the post-operative survey; 98% reported high satisfaction

Discussion/Conclusions: The PRAP may provide a clinically useful tool to predict preoperative anxiety and the need for additional staff support. Ketamine premedication was associated with the lowest induction distress. Families reported high satisfaction with ACPs.

References:

1. Staab JH, Klayman GJ, Lin L. Assessing pediatric patient's risk of distress during health-care encounters: The psychometric properties of the Psychosocial Risk Assessment in Pediatrics. *J Child Health Care*. 2014 Dec;18(4):378-87.
2. Liddle M, Birkett K, Bonjour A, Risma K. A Collaborative Approach to Improving Health Care for Children With Developmental Disabilities. *Pediatrics*. 2018 Nov 1.

10:40 - 11:20

Tulum Suite

Increasing Recovery Room Utilization through a Merger of Ambulatory Surgery Units at Michael Garron Hospital

Authors: Marie Fulcher BScN, MN, MHA, Christine Saby BScN, Kathleen Kennedy BScN, MHM, Jane Harwood RN, and Melaine Wistuba, MHA

Presenters: Marie Fulcher and Christine Saby



Marie Fulcher currently works as a Manager in Ambulatory Surgery overseeing the Perianesthesia Care Unit, Pre-Admission Clinic and Out-Patient Surgical Units at Michael Garron Hospital. She has held various leadership positions over the last 15 years in both Adult and Pediatric Healthcare settings. Marie's clinical experience started in Psychiatry and subsequently within the Surgical Program where she has spent most of her frontline work experience as an Operating Room Pediatric Nurse.

Marie's nursing education started in Toronto as a Diploma graduate. Interested in traveling she found herself seeking further studies in Australia obtaining a 3yr undergraduate degree at the University of Western Sydney. Marie was inspired to return home with a desire to teach. Marie went on to obtain her Honors Degree in Psychology and then pursued two Masters' Degrees, one in Health Administration and the other in Nursing, at the University of Toronto. Her passion for Patient Safety and Quality led her to complete her Patient Safety Certification at the Faculty of Medicine, University of Toronto. Marie has received numerous awards in her nursing career to-date including the Miriam Bracken Award, Regina Borowska Award, and Johnson & Johnson Medical Products Baccalaureate Award.



Christine Saby is a Registered Nurse in the department of Surgery at Michael Garron Hospital in Toronto, Ontario, Canada. Christine's nursing career includes a varied experience as a direct care provider in Paediatrics, Intensive Care, and Post anaesthesia Recovery Room (PARR), and as a Nursing Educator in Inpatient Surgery. In her current role as Clinical Resource Leader she works closely with leadership and the interdisciplinary team in the new Perianaesthesia Care Unit (PCU) and Inpatient Surgery units. Christine has a passion for learning, best practice, and supporting nursing teams. She graduated from Ryerson University with a Bachelor of Science in Nursing degree in 2011. She is currently pursuing a Master of Nursing degree at Athabasca University in Alberta, Canada. Christine was nominated for a Toronto Star Nightingale award in 2018.

Presentation

Background: Prior to January 2018, Michael Garron Hospital (MGH) followed a traditional method for post-surgical recovery. Patients would move from the Operating Room (OR) to the Recovery Room (RR) and then be transferred to Day Surgery (DS) or Inpatient Unit. When RR reached capacity, the Registered Nurses (RNs) would stop accepting patients. With nowhere to transfer them, the OR would then be forced to begin recovery care and not proceed with the next patient. Between July and December 2017, OR delays totalled 204 hours, an estimated cost to the organization of \$113,000.

DS and RR merged into a new unit called the “Peri-Anaesthesia Care Unit” to increase recovery room utilization and reduce OR delays. This eliminated physically moving patients between two care teams and locations. Utilizing a collaborative model, the Registered Practical Nurse (RPN) was integrated into the initial recovery of a patient together with the Registered Nurse (RN).

Results: OR delays decreased by 82% in the first six months (estimated cost savings of \$92,000) while reducing patient recovery time by 28% (from an average of 200 to 145 minutes). The inception of a single staffing model initially caused discomfort among nurses. The team continues to engage with each other to find opportunities for improvement. Compared to baseline, staff and physicians’ satisfaction increased by 17% between February and June. To benefit from the patient perspective, the team recently started soliciting feedback through post discharge calls.

Conclusion: This initiative highlights the benefits of combining two separate but similar patient care units. The unit has improved patient flow by employing a nursing practice that is more fluid. Through human resources optimization, financial benefits gained have been reinvested in patient care. Colleges currently offer the Post Anaesthesia Care course to RPNs, which was traditionally reserved for RNs only. MGH has taken the theory of the Integrated Practice Unit to the next level. This has been accomplished by embracing a new model of care which includes the RPN practicing to their full scope, in the RR.

11:25 - 12:05

Cozumel Suite

Integral Role of Peri-Operative Nurses in Enhanced Recovery Program Implementation

Author: Alita Campbell-McAdory



Alita Campbell is a Nurse Manager, in the Preoperative and Post Anesthesia Care Unit, affiliated with The University of Texas MD Anderson Cancer Center in Houston Texas.

Alita has been a nurse for over 30 years. She earned a Master of Science in Nursing with an emphasis in Leadership in Health Care Systems from Grand Canyon University, her Bachelor of Science in Nursing from University of Victoria (Canada), and Nursing Diploma from Georgian College of Applied Arts and Technology (Canada). She has been in various leadership roles for much of her career and has a wide range of experience in surgical nursing, including trauma, intensive care, hyperbaric medicine, home health and emergency care.

Her work with the Enhanced Recovery Program began in 2014, close to the introduction of the program at MD Anderson, and she has worked closely with many teams to help them navigate through the perioperative environment. Alita leads a team of nurses, who are engaged and able to support enhanced recovery as the program has grown.

Presentation

Background: Enhanced Recovery Program (ERP) is a patient-centric, multi-disciplinary, team-based care pathway, designed to promote an early return of a patient's preoperative functional status. At a comprehensive cancer center, the introduction of the ERP led to significant workflow modifications in the peri-operative setting, resulting in adjustment to nurse-to-patient ratios due to increased time per patient in the pre-operative setting for education, assessment and medication management. In response to this workflow a peri-operative ERP nurse champion collaborative was established to participate in institutional ERP planning and initiatives. This team of nurses was instrumental in facilitating and developing efficient pathways, educating staff, and improving patients' experiences.

Aim: The aim of this process improvement initiative was to implement champions to facilitate and evaluate the ERP in the PACU setting, and to participate in institution level process and procedure planning.

Methods: The ERP champion role consists of clinical nurses selected by unit leaders to participate in unit and institution-level ERP workgroups. At the institutional level their responsibilities include: participating in interprofessional specialty surgery teams, developing order sets and process flow, and guiding a strategic framework for the implementation of ERP across the institution. At the unit level the ERP champions are responsible for: facilitating education for clinical staff in the peri-operative nursing workflows to enhance efficiency and patient experience. The ERP champions are also fundamental to the conduct of research and quality improvement initiatives in this area. Close collaboration with anesthesiology, pharmacy, anesthesia assessment center, clinics, and surgical and nursing teams help ensure a smooth transition through a very busy perioperative environment, with minimal delays to surgery.

Outcomes: Institutional ERP teams have grown from six to sixteen surgical groups, in addition to three non-surgical (medical, hematologic and emergency room) teams. Overall reported outcomes include a reduction in length of hospital stay by 2.5 days, a saving of \$2.5 million in healthcare dollars, and a 60% reduction in prescribed opioid use. In the peri-operative setting outcomes from ERP champion implementation include increased efficiency of patient throughput and standardized practice for the care of this patient population.

Implications for Practice: While ERPs have been implemented in diverse international settings, the introduction of this methodology in the oncology setting, particularly focused in non-surgical populations is novel. The implementation of ERP nurse champions can support improved patient and process outcomes. Outcomes including decreased length of stay have significant implications for health care cost and delivery, while reduction in opioid use may help to mitigate the risk for opioid dependence, which has been widely observed across the United States. ERP champions highlight the integral role of peri-operative nurses as leaders in this interprofessional initiative.

11:25 - 12:05

Cozumel Suite

The Impact of Health Literacy on Postoperative Recovery Among Patients Undergoing Day Surgery

Author: Dr. Maria Jaensson Senior lecturer /Associate Professor, Örebro University,
Registered Nurse Anesthetist, Programme co-ordinator, Specialist nursing- Anesthesia Care

Co-authors: Maria Hälleberg-Nyman, Ulrica Nilsson and Karuna Dahlberg

Presenter: Dr. Maria Jaensson



Maria Jaensson qualified as a nurse in 1988 and qualified as a Registered Anaesthesia Nurse in 1992. Maria completed her PhD studies in 2013 and she became an Associate Professor in Nursing Science in 2019.

For the past 5 years she has been working in the Institute for Health Sciences at Örebro University. Maria is a Programme Coordinator for education; Specialist Nursing - Anesthesia Care. Since September 2018, Maria also works as an educational developer with a focus on interprofessional learning.

Maria's research focuses on patient-centered care during postoperative recovery. Patients need to have education and support to make decisions and participate in their own care. Therefore, Maria is investigating how patients' health literacy skill impacts postoperative recovery. Another research area of focus is to explore and investigate learning in the operating room from student registered nurse anesthetists and clinical instructors' perspective.

Presentation

Background: Health literacy (HL) is a concept that includes the ability to assess, understand, and use information to maintain or improve one's health. The concept can be divided into three dimensions (functional, communicative and critical HL), ranging from basic to more complex skills, such as communication skills needed to interact with health care providers and to critically analyze information.

Limited health literacy skills are associated with lower educational level and lower income; poor overall general health, especially in elderly persons; difficulty in adherence to medication; and difficulty understanding health information. But the evidence is weak regarding whether a person with limited HL uses more inpatient and outpatient care.

Though day surgery is becoming the gold standard for many surgical procedures, it also necessitates that postoperative recovery is managed at home for patients. Research shows that patients may experience both a lack of support as well as feeling lonely with decisions that have to be made for a smooth recovery. There is, however, a lack of scientific knowledge as to how health literacy impacts postoperative recovery

Aim: To describe functional health literacy levels among patients in Sweden undergoing day surgery and to describe the association between functional health literacy (FHL) and health care contacts, quality of recovery (SwQoR), and health-related quality of life.

Research Design: This observational study was part of a multicenter randomized controlled trial. The inclusion criteria were > 17 years old, undergoing day surgery, having access to a smartphone and understand Swedish in speech and writing. The study was performed in accordance with the Helsinki declaration and ethical approval was sought (2015/262). Valid and reliable instruments were used to investigate the research questions.

Results: The result showed that 39.4 % reported limited FHL. These patients experienced significantly poorer postoperative recovery and also lower health-related quality of life than patients with sufficient FHL. There were no significant differences in the number of health care contacts between the FHL groups.

Limitations: Only functional health literacy was investigated and socio-demographic variables (income and educational level) were not collected.

Conclusion: Health literacy is a relevant factor to take into consideration when optimizing postoperative recovery for patients undergoing day surgery.

Implications for perianaesthesia nurses and future research: By highlighting that health literacy has an impact on postoperative recovery, the next step in improving pre-and postoperative care is to involve patients in shared decision-making and adapt the information in order to meet a variety in health literacy skills.

Future research may include both functional and critical & communicative health literacy. Also, to conduct interventional studies that facilitate health literacy skills.

Screening for Pediatric Preoperative Risk Factors Using an Evidence-Based Checklist to Manage Postanesthesia Respiratory Complications

Author: Dr. Myrna Mamaril DNP, RN, NEA-BC, CPAN, CAPA, FAAN, FASPAN



Myrna Mamaril is currently the Clinical Nurse Specialist for Perianesthesia Services at the Johns Hopkins Hospital in Baltimore, Maryland, USA. She has held various nursing and administrative roles in her career, such as Nurse Manager, Director of Surgery, Consultant, and Researcher.

Dr. Mamaril received her Doctor of Nursing Practice at the University of Alabama, her Master's degree in Trauma/Critical Care Nursing and a Business Certificate from the University of Maryland. Ms. Mamaril has held ASPAN leadership positions as President, Director for Clinical Practice and Research. Ms. Mamaril is a Fellow in the American Academy of Nursing and the American Society of PeriAnesthesia Nurses.

CAPT (Retired) Mamaril served over 25 years as a Nurse Corps Officer in the United States Navy Reserve - most notably as the Director of Nursing Service at the NATO Role III Multinational Medical Unit, Kandahar, Afghanistan.

Presentation

Evidence-Based Practice PICOT Question: Will screening for Pediatric Preoperative Risk Factors (PPRFs) for potential respiratory complications increase the frequency of PACU nursing assessments and airway interventions during a three month period of time? (P: Pediatric preoperative surgical patients with risk factors; I: Implement PPRF checklist to screen for children at risk for PACU respiratory complications; C: Compared to the current standard PACU nursing assessments and interventions; O: Frequency of PACU nursing respiratory assessments and airway interventions; T: Three-month period of time).

Introduction: Pediatric patients, who are recovering from anesthesia, are at significant risk for critical physiologic compromise due to residual effects of anesthesia, analgesic medications, and close proximity to the surgical procedure and may cause PACU adverse respiratory events. The primary purpose of this quality improvement (QI) project was to identify pediatric preoperative evidence-based risk factors using the pediatric preoperative risk factor (PPRF) screening checklist and communicate risk factors to the PACU nurse. The secondary purpose of the project was to determine whether using the PPRF checklist will impact PACU nursing assessments and/or nursing interventions.

Review of the Evidence: Search strategies using PubMed, CINAHL, Cochrane, Scopus, and Joanna Briggs Institute revealed 58 citations: 27 articles applied to the PICOT question. Chinn and Kramer's (2015) Model for Knowing and Knowledge Development was used for the QI conceptual framework.

Implementation Plan: One hundred patients in Pediatric Preop and PACU were observed for current nursing practice. Informed consent was obtained for Pre/Post Nurses' PPRF Survey. Nurses had PPRF training and post test administered with significant ($p < 0.05$) results. Then, one hundred pediatric surgical patients' medical records were reviewed by Pediatric PACU night nurses and risk factors were entered on the PPRF Checklist. The PPRF checklist was attached to the PACU handoff record and placed on the front of the pediatric patient's medical record as a way to highlight PPRFs for potential respiratory compromise. PACU nurses and the PI completed the PACU Data Collection Sheet noting type and frequency of PACU nursing assessments and interventions that correlated with the number of risk factors.

Results: The data was analyzed using independent t-test for pre- and post PACU assessments, interventions, and complications using SPSS version 24.

Clinical Implications: Using the PPRF checklist may help identify and quantify the risk for PACU respiratory complications. PACU nurses must recognize the "at risk" child, anticipate potential respiratory problems and manage the patient's emergence from anesthesia. Effective communication regarding type of preoperative risk factors is essential information. PACU nurses should anticipate life threatening respiratory emergencies and confidently intervene with the PALS algorithms and protocols for successful pediatric outcomes.

13:05 - 13:45

Tulum Suite

Good Arguments for Establishing an IV-Team

Author: Rikke Boa



Rikke Boa qualified as a Registered Nurse at Aarhus School of Nursing, Denmark in 1995. She became a Certified Registered Nurse Anesthetist in 2010 in the North Denmark Region. Since 2011, she has been employed at the Clinic for Anesthesiology, Child Diseases, Circulation and Women, Aalborg University Hospital, Denmark. Since then, Rikke has been working with a peripherally inserted central catheter (Piccline) team. At Aalborg University Hospital, the demand for Piccline has been rapidly increasing. In 2017, this triggered the need for establishing central venous catheter rounds performed by two nurses and one doctor respectively. They disclosed a need for further training in the wards, professional sparring about the use and choice of catheters, implementation of new catheter types and the establishment of an IV-team. Today the IV-team consists of eight nurses

and one doctor. In 2019, we have initiated a research project comparing two catheter types – Piccline versus Midline.

Presentation

Introduction: Bloodstream infections related to central-line catheters are among the most serious nosocomial infections. Catheter-related infections are associated with increased morbidity, mortality, length of stay and increased economic costs. If central-line catheters are handled correctly, the number of infections can be decreased.

Aims: To observe and closely monitor the central-line catheters with respect to infection, documentation and handling. To establish an IV-team performing central-line catheter rounds. To focus on the possibility of using alternative IV-access.

Methods: Sixty eight patients who had a central-line catheter were included. The IV-team focused on: number of catheter infections; whether the indication for the central-line catheter was relative or absolute; daily evaluation of reasons for maintaining the catheter; type, location, complications, documentation and daily care of the catheters. Furthermore, the nurses were asked what the IV-teams tasks should be.

Results: There were two infected catheters, equivalent to 0.5 – 5.4 per 1000 days of catheter. Central venous catheters showed a non-significant increase with regard to infection compared to PICClines. Patients with PICClines showed a higher CCI-score and mortality. 37% of the patients had a central-line catheter inserted on a relative indication. In 66% of cases, the type of catheter was documented, an increase of 49% compared to baseline. Documentation of the handling of the catheter and daily evaluation of reasons for maintaining the central-line catheter could not be retrieved in the electronic patient journal. Nurses suggested that the IV-teams tasks should be to provide information, education and engage in dialogue.

Discussions and conclusion: Establishing an IV-team seems to have resulted in an increase in documentation and an increased focus on care of the central-line catheters. With regard to relative indications for central-line catheters, the IV-team could prove to be an important driver in the promotion of less invasive options.

13:50 - 14:30

Cozumel Suite

Perianesthesia Nurses' Knowledge and Promotion of Safe Use, Storage and Disposal of Opioids

Authors: Jan Odom-Forren and Joni Brady

Co-authors: Mary Kay Rayens and Paul Sloan



Jan Odom-Forren PhD, RN, CPAN, FASPAN, FAAN received her PhD in nursing from the University of Kentucky, focusing on post discharge nausea and vomiting (PONV) and the relationship of PONV and pain. She has been a staff nurse and nurse manager in PACU and Director, Surgical Services. She is an international lecturer on perianesthesia issues and has published extensively. Her research interest is management of postoperative symptoms and opioid education for postoperative patients. Dr. Forren is past president of the American Society of PeriAnesthesia Nurses (ASPAN). She is a Fellow in the American Academy of Nursing and a Fellow in ASPAN. She is currently a co-editor of the Journal of PeriAnesthesia Nursing. She is author of 2 books: Practical Guide to Moderate Sedation/Analgesia; and Drain's The PACU: A Critical Care Approach. Dr. Odom-Forren has conducted research to determine Postoperative Symptom Management and Perianesthesia Nurses' Knowledge and Promotion of Safe Use, Storage, and Disposal of Opioids.



Joni Brady DNP, RN-BC, CAPA serves as Chair of the International Collaboration of PeriAnaesthesia Nurses Board of Directors. As a career perianaesthesia nurse, she joined a university-based anaesthesia pain medicine team during the 1990s and developed expertise in the application of multimodal opioid sparing treatment modalities, regional block analgesia, and integrative therapies. Joni has led clinical teams in the education, development and implementation of evidence based perioperative protocols that improve patient outcomes. She publishes nursing research, book chapters, and a recurring journal column and received a Washingtonian Magazine Nursing Excellence Award in 2013. Joni has a Doctor of Nursing Practice Degree in Nursing Administration from George Mason University in Fairfax, Virginia, USA. Board certified in pain management and ambulatory anaesthesia nursing, she advocates for interprofessional perioperative care team collaboration to improve knowledge and partnership that advances local and global surgical quality and patient safety.

Presentation

This oral presentation will focus on issues surrounding the opioid crisis and remedies that nurses in the perianesthesia setting can implement for prevention. The authors will incorporate the findings from the study with information that will aid perianesthesia nurses in knowledge and consistency of discharge teaching regarding opioids. The overall outline is as follows:

Opioids—Background

- Misuse, Storage, Disposal of Opioids: What We Know

 - Other setting

 - Perioperative setting

 - Interventions

- Misuse, Safe Storage and Disposal: Current Guidelines

 - Safe Use

 - Safe Storage

 - Safe Disposal

- Perianesthesia Nurses' Role: Practice Implications

- EBP Projects/Research Implications

Background: The Centers for Disease Control and Prevention (CDC) in the U.S. has declared the increasing abuse of opioids and opioid-related deaths an epidemic; 91 Americans die every day from an opioid overdose. A lack of knowledge among healthcare providers and patients regarding safe storage and disposal of opioids exists. Excess opioid pills are often stored in unsecured locations increasing the chance of diversion and associated risk of death from overdose. Seventy one percent of those who abuse prescription opioids obtain their pills from family or friends who have legitimate prescriptions. Nurses are well-positioned to teach patients about the risks of diversion, nonmedical use, and proper disposal of opioids. Research to develop safe post-discharge prescription practices after surgery is needed.

Aim: The overarching purpose of this study was to determine perianesthesia nurses' knowledge and patient/family discharge education for the safe use, storage and disposal of opioids in the ambulatory surgery setting; in addition, the authors also described the relationship of these concepts to each other and to demographic factors and summarized the themes of the qualitative analysis. The study was a mixed methods descriptive survey conducted using data from a cross-sectional survey of perianesthesia nurses who have responsibility for discharge teaching of patients after ambulatory surgery. An evidence based survey to determine Knowledge, Teaching Consistency, and Teaching Documentation was e-mailed to all American Society of PeriAnesthesia Nurses members which comprises approximately 13,000 nurses. A total of 1977 agreed to participate, and 1,632 were eligible and completed the survey. Responses to open-ended questions were analyzed. The three themes gleaned from the open-ended questions were: Variability in Educational Content, Reliance on Out-Sourced Information, and Lack of Standardized Information Regarding Diversion and Disposal.

Conclusion: We found that perianesthesia nurses are knowledgeable about opioids and a large majority discuss side effects of opioids with patients. A smaller number of perianesthesia nurses promote safe use, storage, and disposal of opioids, particularly with documentation sent home with the patient. For example, only one-third of perianesthesia nurses report they advise patients to properly store opioids over half of the time, and even fewer (27%) advise patients on how to properly dispose of leftover opioids (26.6%) over 50% of the time. This seems to be due in large part to lack of standardization and variability in available information about those practices. Perianesthesia nurses have an opportunity to develop an intervention that can be implemented at a national level to uniformly promote postoperative opioid safety and reduce misuse.

13:50 - 14:30

Tulum Suite

Holding it Together – Patients’ Perspectives on Postoperative Recovery when Using an E-Assessed Follow-Up

Author: Karuna Dahlberg

Co-authors: Maria Jaensson, Ulrica Nilsson, Mats Eriksson, Sigrid Odencrants

Presenter: Karuna Dahlberg, Mette Ring



Karuna Dahlberg is an Associate Senior Lecturer at the School of Health Sciences, Örebro University. She graduated as a Registered Nurse (RN) from Örebro University in 2003. In 2012, she received a Postgraduate Diploma in Specialist Nursing in Intensive Care as well as a Master of Sciences from Karlstad University. Karuna has been working at the Post-Anesthesia Care Unit and Day Surgical Unit at Örebro University Hospital. In 2018, she completed her PhD studies with the thesis “E-Assessed follow-up of postoperative recovery: development, evaluation and patient experiences.”

Karuna’s research area is in recovery after surgery. It includes research about digital follow up after day surgery as well as how health literacy and self-efficacy can impact recovery after surgery. Furthermore, Karuna is leading an international and national project mapping and exploring the role of the nurse working in the postoperative context.

Presentation

Background: Today the majority of surgeries are performed as day surgery. After surgery, patients are responsible for their own recovery and self-care is a central part of postoperative recovery after day surgery.

Aim: To explore patients’ experience of postoperative recovery after day surgery when using a mobile phone application (app) for follow-up.

Design: Qualitative interview study with a descriptive and explorative design.

Settings: Four day-surgery units in different parts of Sweden.

Participants: Eighteen participants who had undergone day surgery, ≥18 years of age and used a mobile app for follow-up on postoperative recovery after day surgery. Participants were purposively selected.

Methods: Interviews were individual and semi-structured. Thematic analysis as described by Braun and Clarke (2006) was used to analyze the data.

Findings: From the data, two themes and six subthemes emerged: 1) Give it all you've got, with the subthemes Believing in own capacity, Being prepared and Taking action, 2) The importance of feeling safe and sound, with the subthemes Feeling safe and reassured, Not being acknowledged and Not being left alone. The first theme, 'Give it all you've got', describes how participants themselves act and contribute to improve their recovery. The second theme, 'The importance of feeling safe and sound', describes the importance of support from next of kin and health professionals during the patient's postoperative recovery.

Conclusions: Recovery after day surgery is a complex process, in which the patient need to prepare for and manage their recovery. This study highlights that the importance of patients' own preparedness as is crucial for a smooth recovery. Also, to have an easy way to contact health professionals after day surgery, such as using digital follow up, may counteract a feeling of abandonment after surgery.

Implications for Perianaesthesia Nurses and Future Research: In perianesthesia nursing, it is important to acknowledge a patients' need for support during postoperative recovery. It is also important to support patients in their preparation for surgery since this preparation impacts the postoperative recovery is experienced. Further studies should explore how perianesthesia nurses can support patients to improve the pre-recovery phase in order to optimize postoperative recovery.

15:00 - 17:00

Cozumel Suite

The Gathering Of Nations Delegate Forum (interactive group discussions)



Facilitator: Mette Ring, ICPAN Education Chair

Mette Ring has been working as a Registered Nurse since 1980. After a few years of experience in clinical practice, Mette specialized as a Critical Care Nurse and a Nurse Anesthetist and is now working at Aalborg University Hospital in Denmark as a Nurse Anesthetist. Mette has a Master's degree in Learning Processes and have continues to work with different educational programs within the clinical practice setting.

Additionally, Mette is involved in voluntary work related to the nursing profession. When ICPAN 2015 was held in Copenhagen, Mette was part of the organizing group. Since 2018, Mette is a Board member of ICPAN as Education Chair.

The Gathering of Nations Delegate Forum is a traditional ICPAN plenary session. All the delegates from different countries meet to discuss perianaesthesia clinical practice, staff development, education, research and management issues. This year the session will be initiated by ICPAN President Joni Brady, who will present an update on current research in Complementary Care and Alternative Medicine. Together with Joni Brady, ICPAN Global Advisory Board Member, Hanneke van Kooten will present results from the international survey: Do you give a CAM?

ICPAN Global Advisory Board members from Australia, New Zealand, Denmark, Sweden and Holland will present different projects from clinical practice to be discussed by the delegates. The discussions will be facilitated to enable sharing of the findings with the delegates, fostering opportunities to meet and discuss possibilities for future collaborations.

At the end of the session Karuna Dahlberg from Sweden will present the results from her international survey: Education, Competency and the Role of the PACU nurse. Finally there will be opportunities to establish networking groups for nurses who are interested in starting and /or continuing to work with international projects in PeriAnaesthesia Nursing.

Thursday 7th November 2019	
08:30 - 09:30	Cozumel Suite

Keynote Address - Dr. Ulrica Nilsson, Professor of Nursing, Karolinska Institute, Sweden

Postoperative Recovery: What it is and How to Improve It



Ulrica Nilsson started her career as a Registered Nurse, in 1980, and a Specialist Nurse in Anesthesia, in 1985. She defended her PhD thesis in Medicine in 2003. She became an Associate Professor in Perioperative Nursing (2009) and a Professor in Nursing (2012) at Örebro University. In September 2018, she was appointed Professor of Nursing at Karolinska Institute, Sweden.

Ulrica Nilsson's research area is perioperative nursing / care with focus especially on postoperative recovery. Postoperative recovery aims to facilitate the assessment of postoperative recovery and the compilation of related data by developing and evaluating different patient-reported outcome measures (PROM) assessing postoperative recovery in children and in adults. Further aims are to develop effective procedures and secure technical solutions for postoperative follow-up that ensure patient safety and self-care, improve the quality of the postoperative recovery as well as making postoperative care more cost-effective.

Keynote Presentation

Postoperative recovery starts when surgery and delivery of anaesthesia stops, most often followed by transfer to a postoperative care unit. Full patient recovery takes much longer, perhaps best defined by the patient perceiving a complete return to their usual self or to their preoperative health status (or better). It can be a complex and fragile process, with physical, emotional, social, and habitual characteristics. Patient's comorbidities as well as sex, age, health literacy, physical and mental status are factors that can influence the quality of recovery. In order to optimize patients' postoperative recovery different evidence based person-centered caring interventions can be implemented. There is also great importance to systematic follow up of postoperative recovery using well-validated questionnaires that assess the whole spectrum of symptoms and discomfort experienced.

Exploring New Horizons in Oxygen Administration

Author: Dr. Paula Foran RN, FACPAN, FACORN, PhD.



Dr Paula Foran has a Graduate Diploma in Adult Education & Training awarded from the University of Melbourne, a Certificate IV in Workplace Assessment & Training, a Master's degree in Professional Education & Training and has received her PhD for her thesis, 'The Value of Guided Operating Theatre Experience for Undergraduate Nurses'. Paula has a number of publications to her credit including published articles and book chapters, and has been a guest speaker, and presented keynote presentations at national & international conferences.

Paula was awarded the 'Most Popular Presenter' for her keynote address at the International Collaboration of PeriAnaesthesia Nurses in Sydney in 2017 and the 'Best Oral Presentation' at the recent European Operating Room Nurses Conference in the Netherlands in 2019. She is the education officer (webinars) for the Australian College of Perioperative Nurses, a unit coordinator in the Master stream at the University of Tasmania and is a senior lecturer for Critical Care Education Service.

Presentation

Background: In previous times selected patients receiving regional, central blockade with or without sedation, and all post-operative general anaesthesia patients in PACU would receive assisted oxygenation therapy. However, the use of routine oxygen has been under some debate.

Discussion: It was believed that supplemental oxygen would aid in the elimination of anaesthetic gases and help meet increased oxygen demand associated with decreased blood volume or increased cellular metabolism. Recently, the free use of oxygen therapy is being questioned as some believe that in patients with normal respiratory function (an oxygen saturation >94% on room air) administration of supplemental oxygen may mask the symptoms of poor respiration function(1). In some cases, this masking has had tragic consequences(2).

Research also informs us that the effect of giving supplemental oxygen therapy to patients with a normal saturation of oxygen who have suffered a ST elevation Myocardial Infarction (STEMI) may actually be harmful by increasing infarct size (3).

In contrast, the WHO has recommended that adult patients who have undergone general anaesthesia with endotracheal intubation for surgical procedures should receive supplemental oxygen at a fraction of inspired oxygen of 80% and, if feasible, that this continue for 2-6 hours postoperatively to reduce the risk of surgical site infections (4).

Conclusion: This presentation will present evidence based research on the advantages and pitfalls of oxygen use in perioperative patients.

References:

1. Welle T, et al. Evaluating the need for routine supplemental oxygen in postoperative total joint replacement patients. *Journal Of Perianesthesia Nursing: Official Journal Of The American Society Of Perianesthesia Nurses*. 2013;28(1):21-5.
2. Department of Forensic Medicine Monash University. Victorian Institute of Forensic Medicine,. *Clinical Communiqué [electronic resource]: [Internet]*. 2017; 4(1). Available from: www.vifmcommuniques.org
3. Stub D, et al. Air Versus Oxygen in ST-Segment-Elevation Myocardial Infarction. *Circulation*. 2015;131(24):2143-50.
4. WHO. *Global Guidelines for the Prevention of Surgical Site Infections* Switzerland WHO Press, Switzerland; 2016.

**Civility & Respect: Enhancing Purposeful Communication
to Improve Staff Nurse Role Satisfaction and Safe Patient Care**

Author: Gloria Gia Luu



Gloria Luu completed a Bachelor of Science in Nursing in 1991 from San Francisco State University and a Master's Degree in 2007 from the University of Phoenix. She has been a Registered Nurse for 27 years, 23 years in PACU at the San Francisco Veterans Affairs Health Care System (SFVAHCS) since 1994 in various capacities.

Ms. Luu has been an American Society of PeriAnesthesia Nurses (ASPN) and PeriAnesthesia Nurses Association of California (PANAC) member since 1999 and has been volunteering for PANAC since 2010.

Gloria seizes learning opportunities, often pushing herself to step out of her comfort zone, out of the box and taking risk. She has completed an Evidence Based Fellowship at SFVAHCS on January 25, 2019 in which she presented this EBP project on "Civility & Respect: Enhancing Purposeful Communication to Improve Staff Nurse Role Satisfaction and Safe Patient Care" and is now sharing it with you!

Presentation

Problem: Workplace Incivility

Pre-operative and Post-operative areas: observed nursing staff incivility
Fractured teamwork
Passive communication
Multiple distractions contributing to workplace stress and sick leave

Goals:

To promote a healthy work environment.
To provide education on communication skills and self-care and other tools to improve workplace civility.

Aims:

Will introducing a workplace civility index enhance communication between nurses in a critical care hospital setting?
Will this improve role satisfaction and safe patient care?

Literature Review:

The perioperative arena is one of the most information-intensive, intricate and complex work environments in healthcare, requiring attention, vigilance, situational awareness, and it depends on sound communication to help ensure patient safety. Noise and other distractions have the potential to cause mental lapses, impair thought process, and divert attention away from tasks, increasing the likelihood of adverse patient events. Effective communication is a challenge in a health care environment, particularly with high stakes situations and close proximity of staff. This can lead to disrespectful communication and unwanted behaviors.

Increase workplace civility: empowerment and support, transparency.

Current Practice:

Competing agendas, different priorities, time-pressured environment.

Perianesthesia care unit is a busy workload environment.

Staff does not believe that their goals, thoughts, intentions, and feelings are of value.

Practice Change:

I taught Civility Respect Engagement in the Workplace Program on communication strategies, providing in-services to 75% of our PACU RNs.

- Strategy for meeting an objective
- Strategy for maintaining a relationship, self-respect

I made cueing cards on “Strategies of Cognitive Shield for Lateral Violence.

I created a “Resource List”

- Veterans Affairs Internally:
 - The Civility, Respect, and Engagement in the Workplace
 - Disruptive Behavior Reporting System
 - Prevention and Management of Disruptive Behavior Program
 - Employee Assistance Program
- Externally:
 - The American Nurse: Nurses, ANA work to address conflict
 - The ANA (2015a, 2105b, Standard 7 and Standard 12)
 - The Association of Perioperative Registered Nurses
 - The American Society of PeriAnesthesia Nurses
 - The Joint Commission Center

Challenges:

Big topic

Busy, fast pace critical unit

Short time frame to complete EBP class and intervention.

Holiday schedule/staff on vacation

Nurses need time to put into practice skills learned.

Implications for Practice:

These tools improve perception of workplace civility

Improves nurse role satisfaction and safe patient care

Creates a culture of nurse empowerment

Results:

Post WCI survey shown a 13% very uncivil to zero and a 75% civil/very civil to 100%!

Staff reported an increased use of respectful communication, higher role satisfaction, decrease tension in the unit, and less distractions.

Next Steps:

Continue utilizing VA CREW resources.

Unit level shared governance to improve nurses' work environment, satisfaction, and retention.

Implication for PeriAnesthesia Nursing Practice:

These tools improve perception of workplace civility

Improves nurse role satisfaction and safe patient care

Creates a culture of nurse empowerment

Perioperative Nurses' Experiences with Pediatric Emergence Delirium: A Pilot Study

Author: Allan J J Cresencia



Allan Cresencia joins us from the City of Angels - Los Angeles, California, where he currently serves as a clinician at Children's Hospital - Los Angeles for over 19 years.

Currently, he is a Certified Pediatric Nurse from the Pediatric Nursing Certification Board with professional experiences in the Pediatric Intensive Care Unit, Imaging Services (Radiology), and Post Anesthesia Care Unit (PACU), where he gained all his clinical knowledge. He continues to practice as a bedside nurse in PACU and ASC (Ambulatory Surgery Center).

He has served as a guest lecturer and faculty at such conferences as PANAC (Perianesthesia Nurses Association of California), ASPAN (American Society of Perianesthesia Nurses) and in November 2017, at ICPAN's (International Conference of PeriAnesthesia Nurses) 4th conference held in Sydney, Australia. He is also a Doctoral Student (PhD) at University of California Los Angeles (UCLA) School of Nursing.

Presentation

Aim: The purpose of this pilot study is to explore, describe, and analyze the experiences of perioperative nurses dealing with pediatric emergence delirium (PED) and how PED affects their quality of work and quality of life as nurses.

Background: Perioperative nurses are usually the first to witness the symptom clusters of PED. PED is a temporary state of unpleasant and disturbing behaviors that some pediatric patients exhibit immediately upon awakening from general anesthesia. Typical behaviors include thrashing, kicking, or flailing without any physical or mental awareness of the situation. Restlessness, combative behavior, and incoherence are also common. Perioperative nurses are the first healthcare providers to begin the systematic assessment to initiate the diagnostic process.

Method: The pilot study will utilize the qualitative descriptive research method, using Grounded theory techniques for data analysis. Perioperative nurses with more than 2 years' experience and have knowledge about PED are the target participants (N = 10). Professional participants will be recruited through word of mouth recruitment via professional colleagues. Professional colleagues will help distribute recruitment flyers and information letters regarding the study. Data collection using the

interview approach which can be face-to-face, telephone, or video (Skype or Zoom) will take place in a mutually agreed upon time, and/or location that is quiet, private, and conducive to an audio recording. The principal investigator will conduct the interview using a semi-structured interview guide. Data analysis will be done after each interview.

Results: Utilizing Grounded theory techniques for data analysis, preliminary findings from the five recruited participants (women, n = 4; men, n = 1) produced the following themes identified from the data analysis: (1) feeling the physical effects of emergence delirium; (2) feeling the need to get immediate help; (3) overwhelming fears, emotions, and stress; (4) feeling the need to protect self from injury; (5) observations about delirium behavior and symptoms; and (6) remembering safety measures for emergence delirium. Whether perioperative nurses are aware of it or not, the potential for harm or hurt is always present when providing care to a child who is experiencing emergence delirium. There is a real risk for injury - physically and emotionally, that perioperative nurses take on while trying to manage the care of a child experiencing emergence delirium.

Conclusion: The study is still in progress. The targeted number of participants (N = 10) is not achieved. Although initial results from data analysis offered promising results, data analysis of ten participants would provide a much richer supporting data for the themes identified.

Clinical Relevance: Perioperative nurses should be properly trained in managing the care of a child with emergence delirium. Identifying optimal safety measures for managing PED is an important topic for members of the health care team. There is so much to learn about the nurses' experiences managing the care of a child with emergence delirium. This pilot study is spearheading that learning.

Can We Do Better to Minimize Postoperative Patient/Family Anxiety in PACU?

Author: Xiao Wang RN, CPAN, MSN/MS



Xiao Wang is currently working at Department of PACU of UCSF Moffitt Long Hospital in San Francisco, California. As an experienced peri-anesthesia nurse, he has practiced in the peri- anesthesia area across both the USA and Australia for many years. Working in both a community/private hospital and a major teaching hospital/trauma center, a variety of peri-anesthesia experiences that he obtained has expanded his view and enriched his experiences on patient care. Achieving an excellence on patient care is his goal. He received his RN education in the USA and then Master of Nursing degree in Peri- Anesthesia in Australia. Currently, he is an active ASPAN member. He has also been involved in the organisation of seminars/conferences for ACPAN (ASPAAN) from 2013 -2016.

Presentation

Background: UCSF Moffitt Hospital PACU is a fast paced unit with 22 official adult recovery bays. Average daily cases are around 60- 70s. It has been a real challenge to guarantee a routine PACU visitation and offer a timely postoperative update without compromising patient privacy and disrupting PACU workflow. It is not unusual to observe a patient/family anxiously waiting to see their loved ones in PACU after a surgery including a timely postoperative update by the surgeon. PACU Nurses, being the patients' advocate, have an obligation to grant a proper family visitation based on PACU visitation policies. A timely follow up with the surgical team is crucial to ensure that a patient/family receive a postoperative update without delay.

Purpose: To improve and promote PACU family visitation by overcoming barriers concerning patient privacy, workflow disruption, or patient care interference and to ensure a patient/family receives a timely postop update from the busy surgical team in order to minimize postoperative patient/family anxiety in PACU.

Method: Current literature on evidence-based practice to support PACU visitation were reviewed. PACU nurses were asked to complete questionnaires regarding nurses' attitudes/concerns on PACU visitation including patient privacy and clinical workflow disruption and how often/efficient postoperative updates were provided in the PACU to a patient/family member by the surgical team.

Result: Current PACU visitation policy needs to be revised to respect patient's privacy and enhance PACU patient care and workflow. PACU nurses will continue to initiate/grant family visitation with a positive attitude and inform the surgical team in time regarding patient/family concerns.

Limitation: The survey would be an ongoing process and only reflects nurse feedback from one PACU of the UCSF health system.

Nursing Implications: It is clear that PACU family visitation and timely postoperative updates from the surgical team is a crucial way to minimize patient/ family anxiety in PACU. With a suitable unit-specific visitation policy supported by evidence-based practice, efficient e-communication with family and surgical team, continuing staff education and multidisciplinary team coordination, we could decrease patient/family postoperative anxiety, and improve PACU patient care and increase patient/family's satisfaction.

Riding the (end) Tidal Wave to CO₂ Monitoring: Using Capnography for Obstructive Sleep Apnea Following Anesthesia

Author: Kathryn Scully MSN, RN, CCRN, CAPA

Co-authors: Sally Schermer MBA, BSN, RN, CCRN, CPAN, CAPA, Erin Sever BSN, RN, Adrian Jones, BSN, RN, Parul Shah, RT, Catherine Hodgkins, MS, CRNA, Elspeth Stanley, MS, CRNA, Jessica Dunn BSN, RN, DNP Student and Jennifer Rickerby, MSN, RN, DNP Student



Katie Scully has been a practicing Registered Nurse for over 33 years with 15 years experience in critical care, 18 years in perianesthesia care, and holds current certifications in these specialties as well. She has also been an adjunct faculty member at George Mason University and Marymount University. She received a BSN from Villa Maria College in 1987 and an MSN from Georgetown University in 1992. She is currently the clinical educator at Inova Fairfax Medical Center (IFMC), a 927 bed regional medical center in Northern Virginia. In this role, she was awarded a fellowship grant to implement obstructive sleep apnea screening in the preoperative areas with corresponding capnography monitoring in the perianesthesia care units (PACU). This practice change is now part of the nursing fabric of practice in all six PACUs at IFMC. This work will be published in the Journal of PeriAnesthesia Nursing later this year.

Presentation

Background: The OSA patient is at risk for respiratory complications after anesthesia and this presents a challenge in their care and management for the PACU nurse. Early recognition and intervention can safeguard these patients from harm. At IFMC, new monitors capable of ETCO₂ monitoring were recently installed in the PACU areas, providing increased vigilance for the OSA patient. The purpose of our EBP project is to implement (ASPAN practice recommendation # 10) preoperative screening for OSA and use of capnography in the PACU, thereby, promoting optimum patient safety and outcomes for the OSA surgical patient.

Objectives/Project Goals:

1. Identify the undiagnosed, high risk patient with OSA preoperatively using the STOP-BANG screening tool.
2. The PACU RN will recognize hypoventilation via capnography and intervene to prevent respiratory complications.
3. Implement ASPAN Practice Recommendation # 10: OSA screening and use of ETCO₂ monitoring on patients with OSA. Our goal is to make this a standard of practice in the PACUs.

Methods: Preoperative patients were screened for OSA using the Stop-Bang screening tool. Patients having five or more positive factors were identified as high risk for OSA. In the PACU, capnography was applied to the identified patients. The audit tool was completed shortly after admission and again before discharge from Phase I. This checklist/audit tool tracked recognition of hypoventilation events, nursing interventions in response, and respiratory complications that required an escalation of care.

OSA patient teaching content was added to anesthesia discharge instructions to address follow up care and home care instructions.

This process was initiated over four weeks, in a staggered fashion, among three units.

Findings/Results: Data collection occurred over 10 weeks yielding 314 patients with OSA. Among these patients, 36% were identified as high risk (with a SB > 5.) Nurses used capnography with 75% of OSA patients and were able to quickly identify hypoventilation and intervene as needed.

Conclusions/Outcomes: Respiratory complications associated with OSA occurred in 10.8% (n=34) and were exhibited by episodes of apnea, low respiratory rate (< 8) and desaturations requiring further monitoring (n=14) or extended stay (n=16). Four patients required escalation of care to IMC/ICU units and were all undiagnosed, high risk OSA (SB scores of 5-8) with body mass index (BMI) > 35.

Implications for Practice: The perianesthesia nurse is in a key position to identify and advocate for the OSA patient. Our findings (consistent with the literature) indicate the high risk, obese OSA patient is especially vulnerable. OSA screening and capnography are easy to use tools to safeguard these patients. This process has been replicated in two other PACUs and has increased awareness of OSA among the multidisciplinary team.

How to Estimate Nurse-Patient Ratio to Accommodate Patient Flow Challenges in a Danish University Hospital

Author: Bente Buch



Bente Buch is a Registered Nurse in Denmark, working 25 years in PACU at Rigshospitalet, the Copenhagen University Hospital. Her focus from the beginning has been quality in perioperative nursing and during her nursing career, she developed quality goals for core topics such as Painscore less than 3, PONV score less than 1, POUR less than 400 cc and quality in patient handover to the ward. She measures and adjusts while educating nurses to give the best quality care to patients in PACU. Bente has been a lead educator to perianesthesia nurses in East Denmark for 10 years, while educating herself to Masters level (Adult learning).

About two years ago, she left the perianesthesia setting to become an EPIC analyst. Now her goal is working to develop easy electronic tools for documenting perianesthesia nursing, along with the possibility to extract data on quality in nursing for patients.

Presentation

Background: The presentation will show a case from a Danish university hospital in a Phase 1 recovery department. Caring for approximately 9000 patients a year from 11 different specialities, there is a need for a structured description of patient classification to maintain nursing standards, safety for patients, and quality in nursing.

When the goal is to maintain patient safety and quality in nursing, staffing standards in many Danish Recovery Departments, is an ongoing and major challenge. The development in Danish Recovery departments has gone from exclusively post-operative observation, care and treatment to a variety of preoperative and post-operative tasks. Patients who were previously observed in the Intensive care unit are today observed in Recovery departments and mixed with day surgical, observation patients and preoperative patients.

The lecture presents a tool that has been used for many years at Copenhagen University Hospital Rigshospitalet. The tool consists of three patient levels in the categories observation, monitoring, care and treatment. Individual nurses can use this tool to evaluate their own resources when busy with high patient flow. Managers' use of the tool to organize attendance and staff resources will be presented, in relation to the department's 24-hour variation and the size of the patients' surgical intervention.

The Safe Brain Initiative

Authors: Karina Jakobsen and Finn Radtke



Karina Jakobsen is the chief research nurse of the Safe Brain Initiative. She is a clinical nursing expert with years of experience in implementing delirium preventive strategies which includes a focus on patient centered outcome measures. Karina Jakobsen is a dedicated nurse anaesthetist with a Master's Degree in clinical nursing (MCN). The focus of her master's thesis was on improving patients' cognitive outcomes by guideline implementation in the clinical routine.

Her project received the "Best International Research" award at the World Congress of Anaesthesia (WCNA) in Budapest, in June 2018.



Dr. Finn M. Radtke is the chief researcher and founder of the Safe Brain Initiative.

As a senior researcher, lecturer and a consultant in anaesthesia and intensive care medicine, his main focus in research is directed at the prevention and detection of cognitive disorders and delirium as well as the implementation of protective strategies in the daily clinical routine. Besides being the founding member, he is the research lead and the steering group spokesperson.

Presentation

Background: Postoperative delirium (POD) is a serious complication with an incidence-rate of up to 50%. POD is associated with several deleterious clinical consequences such as short and long-term cognitive morbidity, increased short and long-term mortality and reduced quality of life. In 2016 we initiated a continuous quality improvement project called Safe Brain Initiative (SBI) at Naestved Clinic.

Aim: The aim of the SBI is to decrease the incidence of POD through 17 evidence based and guideline recommended non-invasive measures. The main hypothesis of the Safe Brain Initiative is that by implementing the SBI-core-recommendations, postoperative delirium incidence will be reduced in our clinical routine.

The ongoing quantitative quality development study is performed at Naestved Clinic, Denmark. It started in 2016 with the gradual implementation of the SBI core-recommendations as well as the monitoring of its impact on the incidence of POD. The core-recommendations are all non-invasive in nature and focus on the following measures:

- patient's orientation
- communication
- noise
- maintaining day/night rhythm
- pre-procedural pain assessment
- EEG
- stress
- fluid fasting
- delirium monitoring
- capnography
- anxiety
- pain
- anticholinergic load
- satisfaction with treatment
- continuous analgesia
- patient centered care
- PONV

Implementation: For the implementation process, we used the strategy recommended by the Danish Health Board. To promote continual improvement, we applied the PDSA-model. A patient case report form (p-CRF) was used for data collection, an online web-based Clinical Trial Management System (EasyTrial) was used for data storage. The Local Ethics Committee was involved with a waiver approval, and a submission to the Danish Data Protection Agency was approved. In this analysis, all patients in the database are included (N=5.337).

Results: The main outcome of our ongoing quality improvement initiative is a reduction of POD by 49 %; from 9.4% (424/4479) to 4.7% (40/858); $p < 0.00001$ (CI: $<0.00 - 0.00$)
The average percentage of patients included out of our daily routine increased from 77.0% (October 2017-September 2018) to 97.9% of cases October 2018 -January 2019

The most important result is that the incidence of POD in our clinical routine was significantly reduced by nearly 50% (from 9.4 to 4.7). In addition, this was achieved through a concerted research-based team effort. This proves that a reduction of POD, can very well be achieved, also in the clinical routine, by implementing a multi interventional approach. The high percentage of patients being included, as well as the continuous increase in the percentage of patients from our clinical routine, entering our data sample increased from an average of about 77.0% (October 2017 - September 2018) to 97.9% (October 2018 - January 2019). This was the result of our active feedback mechanisms, to the entire perioperative team through weekly meetings.

Implications for Practice: The SBI can be seen as an enhancer and accelerator of guidelines knowledge, transferred to the patient's bedside, thereby aiming to accelerate the shift towards patient-centered care and an improvement of postoperative outcome, as our results suggest. With multi-intervention, based on SBI core-recommendations, it is possible with a team-based approach over time, to reduce the occurrence of POD.

Code Blue: Improving Teamwork, Competency and Confidence Throughout the Perioperative Service Line

Author: Pamela Northrop

Co-Authors: Ayumi Fielden, Xavia Fuller and Laura Ortiz-Carter

Presenters: Pamela Northrop, Ayumi Fielden, Xavia Fuller and Laura Ortiz-Carter



Pamela Northrop MSN, RN, CPAN, CAPA is a Nurse Education Specialist at large teaching institution, Houston Methodist Hospital in Houston, Texas.

She has 8 years of experience in settings that include ICU and PACU; she has served as staff nurse, charge nurse and as a unit education resource nurse in various settings. Pamela is an active member in ASPAN and AACN and she has dedicated her nursing expertise to education of the perioperative and the critical care nurse.



Ayumi Fielden MSN, RN, CCRN-K, CPAN is a Clinical Nurse Expert at Houston Methodist Hospital in Houston, Texas. Her expertise includes ICU in a variety of settings as a staff and charge nurse; as well as in the PACU as a staff, charge nurse and educator. Ayumi Fielden holds a Master's degree in nursing education. She is a member of AACN and ASPAN regionally and nationally. She is an instructor for American Heart Association Basic Life Support, Advanced Cardiac Life Support and Pediatric Advanced Life Support instructor. She has been steadfast in the development of critical care/PACU programs to raise the level of critically ill patient care in the PACU at Houston Methodist Hospital. Ayumi is also in charge of the PACU nurse residency program for Houston Methodist Hospital.



Xavia Holmes-Fuller MSN-ED, RN, CCRN is the neuroscience service line nurse educator at Houston Methodist Hospital in Houston, Texas. Her expertise includes neurosurgery and Neurology, both acute care and ICU in a variety of settings as a staff, charge nurse and educator. Xavia holds a Master’s degree in nursing education. She is a member of AACN and AANN nationally.



Laura Ortiz Carter MSN, BBA, RN, CCRN has been a nurse for over 13 years in the Greater Houston Area. Laura received her undergraduate business degrees from the University of Houston and her undergraduate nursing degree from the University of Texas Health Science Center at Houston. Furthermore, she received a Master’s of Science in Nursing with an emphasis in Nursing Leadership and Administration as well as a Post Masters in Nursing Education from the University of Texas Health Science Center at Houston.

Through her career, she has worked in various educator roles, Intensive Care Units, Perioperative Settings, and in Obstetrics (OB), and is a Certified Critical Care Registered Nurse (CCRN). Currently, she is the OB Perioperative Coordinator and Educator at her facility as well as a nursing instructor at the University of Texas Health Science Center at Houston in the undergraduate program. She is an active member of the American Association of Critical Care Nurses.

Presentation

Introduction: Code Blue scenarios in the Perioperative setting are intricate and complicated due to high patient acuity, large patient volumes, and varying skills mix of staff members. The Perioperative Service Line includes the anesthesia preoperative evaluation clinic (APEC), pre- and post- op (AOD), operating room (OR), and post-anesthesia care unit (PACU). In these departments, staff from

throughout the Perioperative areas maybe present with the patients at any one time. When a Code Blue occurs the mixed skill set and knowledge base of staff can create confusion and delay appropriate treatment. The need for a standardized process that integrates Basic Life Support (BLS) and Advanced Cardiac Life Support (ACLS) was identified as perioperative stakeholders voiced concern over the knowledge and confidence levels of Registered Nurses throughout the departments.

Description: A program was created to address the need for increased teamwork, competence and confidence during a Code Blue amongst the nurses within the Perioperative Service Line. Literature supports the need for continuing education to occur during the two-year recertification window that BLS and ACLS provides. The perioperative departments have a low frequency of Code Blue episodes, yielding a high risk low frequency skill risk; therefore the need for practice opportunities was identified. Workshops were created that addressed the key concepts within the guidelines for ACLS and BLS as appropriate. Mock code blue scenarios were acted out by the instructors, and then participants were given the opportunity to practice several different scenarios until they felt comfortable.

Evaluation/Outcomes: The post- evaluation for performance and confidence was completed one month after the completion of the workshops. A mock Code Blue performance evaluation form was created and used for pre- and post- intervention. A confidence survey was administered using a 5-point Likert scale. These evaluations were used in combination to evaluate the program's effectiveness. The evaluation was presented as a Code Blue scenario on the participant's home unit. Competency in AHA guidelines for cardiopulmonary arrest increased from 34.4% to 92.2% amongst ACLS providers, and from 40.6% to 96% amongst BLS providers. Initially, the timely administration of chest compressions was only performed 64.3% of the time; post-intervention findings show that chest compressions were administered in a timely manner 100% of the time. Confidence levels amongst BLS providers remained the same pre- and post-intervention. However, there was an initial decrease in confidence after the primary mock code. With the knowledge gained and practices performed during the intervention, confidence returned to baseline during the post-evaluation. Overall, scores on team communication skills improved from 2.63% to 67.57%. During the hospital-wide annual competency check-offs, units that participated in the program only had 1.83% of nurses needing remediation in contrast to 5.29% of nurses on non-participating units.

**Validation of Assessment Tools to Assess for Sleep Disordered Breathing
or Obstructive Sleep Apnea in Pediatric Patients in the PeriAnesthesia Setting**

Author: Leilani Jankus

Co-authors: Jacqueline Tibbetts, Miriam Faunda, Martha Schneider,
Mary Ann Friesen, Scott D. Barnett and Carol Swamidoss Douglas



Presenters: Leilani Jankus and Jacqueline Tibbetts

Leilani M. Jankus MSN, RN, NE-BC, CPAN(USA), CCRN-K is a devoted clinical nurse, educator and leader for 35 years in both adult and pediatric settings. Patient safety is her passion and focus every single day. She is always searching for ways to decrease the amount of time it takes for evidence to reach the patients' bedside. She enjoys empowering her teams to create the place they want to work. This is her first research project as a primary investigator. In her free time she enjoys gardening, handcrafts and reading. She lives in Fairfax, Virginia, USA with her husband.



Jacqueline Tibbetts MSN, RN, CPAN (USA), RNMH, RGN, RM (UK). Born and raised in the United Kingdom and a passionate nurse for over 40 years, in a variety of fields, Jacqueline now lives in the USA. She currently maintains a clinical role in the Pediatric Surgery Center at Inova Children's Hospital, is chair of the education council and is an RN3 on the clinical ladder. Jacqueline is a Visiting Professor for Chamberlain University's online program and is pursuing a terminal degree with Chamberlain University.

Presentation

Introduction/Background: Patients presenting for anesthesia and sedated procedures must be assessed for risk of obstructive sleep apnea (OSA). This informs practitioners to adjust interventions for prevention of post-operative respiratory complications. Currently, OSA risk is assessed via the STOP-BANG before sedation or anesthesia. However, this tool is not validated for use in pediatrics as few pediatric-focused OSA published assessment tools are available.

Problem/Research Question: To validate a choice of OSA detection tools (STBUR and ST(1)OP-BANG) in pre-anesthesia pediatric patients in order to predict the need for intraoperative medication regimen adjustments, and for additional monitoring and assessment in the post-anesthesia setting.

Methods: We collected data over the course of 14 weeks on all patients without a current diagnosis of sleep apnea. We completed both assessment tools on each patient and noted the medications given peri-operatively. We collected information regarding peri-operative respiratory adverse events: airway obstruction, breath-holding, oxygen desaturation, hypercarbia, paroxysmal respirations, bronchospasm or laryngospasm.

Results: Results suggest both tools correlated well ($r=0.73$) and were excellent at screening patients with little or no OSA risk (Specificity, 96.1%). In a comparison of adverse events occurring in the PACU, the STBUR tool showed a higher degree of predicting those events at 37.5% and STOP BANG predicted at 22.7%, $p<0.3532$

Conclusion: The STBUR tool has a slightly better degree of predicting adverse events after anesthesia administration.

Implications for Nursing Practice: OSA is present in approximately 1 to 4% of the pediatric population. The screening assessment is now taking place on all pediatric patients in the Pediatric Pre-Operative area. An OSA positive screen alerts the anesthesia provider and the PACU charge nurse to make appropriate personnel assignments. Patients who screen OSA positive will also be placed on end-tidal CO₂ monitoring in the PACU until they are awake.

In patients presenting for general surgical procedures, early identification of patients requiring close monitoring is valuable in managing the quality of care and promoting safe practice.

A Study to Optimize the Postoperative Pain Care for Patients Undergoing Major Shoulder Surgery

Author: Dorthe Ramskov Henriksen



Dorthe Henriksen has worked as a nurse anaesthetist since 2014 at the department of anaesthesiology at Aalborg University Hospital in Farsø -Denmark. She graduated from nursing school in 1993 and she became a registered nurse anaesthetist in 2013. Between 1996 and 2004, Dorthe worked abroad, in the United Arab Emirates as a Staff nurse and Community Health nurse and in Sweden as a Staff nurse. When she returned to Denmark in 2004, she obtained employment in the Cardiac and Thoracic surgical ward. Since then she has worked intensively with pain management focusing both on standards in the paranaesthesia setting and with interdisciplinary cooperation. This ensures that pain management starts as soon as the patient enters the hospital and is an ongoing process until the patient has no further need of pain medication.

Presentation

Purpose of project: During several years of experience with patients undergoing major shoulder surgery: Total shoulder arthroplasty, partial shoulder arthroplasty or plate osteosynthesis for a fracture of the proximal humerus, it has been observed during clinical practice, that this group of patients often have major postoperative pain, and require a significant amount of analgesic, especially during the first 24 hours after surgery. Despite massive attention and intervention focused on pain management, it seems difficult to reach sufficient pain relief. Among other things, it leads to discomfort for the patient and prolonged rehabilitation and admission.

Aim: To optimize the postoperative pain care for patients undergoing major shoulder surgery.

Methodology: In light of the above, it was decided to examine if pain catheters: continuous or intermittent infusion during the first 24 hours post-surgery, resulted in improved pain relief compared to no catheter use.

The following measurements were taken:

- 50 patients with pre-operative interscalene brachial plexus block (ISB)
- 50 patients with pre-operative interscalene brachial plexus block and pain catheters with continuous infusion

- 50 patients with pre-operative interscalene brachial plexus block and pain catheters with intermittent infusion

The 150 patients were undergoing major shoulder surgery between September 2015 and November 2017

The following data was measured:

- Numerical Rating Scale (NRS) during admission
- Frequency of “as required”
- Days of admission

Results/discussion: Based on the postoperative NRS, the examination showed, that the patients in the catheter group had significantly better pain relief (NRS=0) during the first 24 hours after major shoulder surgery, than in the non-catheter group (75% and 25% respectively)). In addition to this, pain medication administration as required, both oral and intravenously, was reduced. In addition, the average admission days decreased from 3 to 2 days.

During detailed data research, the project resulted in many interdisciplinary considerations and possibilities: Instead of using a pain catheter, would a ISB, single shot, with simultaneous administration of intravenous dexamethasone perioperatively, reduce pain breakthrough

In September 2018, another study was started to include another 50 patients with use of ISB and intravenous dexamethasone

Implications and future research:

- Firstly, is it possible to find out which kind of pain management is the best treatment?
- What is the challenge for the ward staff of the different pain treatments?
- Long term advantages of pain control for patients?
- Is it of any importance in OR or in PACU what kind of pain management the patient is offered?
- Cost efficiency of different pain management strategies?
- The impact of this study on other patient categories in postoperative pain control – other types of operations?

References: V. Martinez and D. Fletcher. Dexamethasone and peripheral nerve blocks: on the nerve or intravenous? British Journal of Anaesthesia 113 (3): 338-40 (2014)

Management - Head Nurses' Perspective on Evidence-Based Nursing

Author: Magnus Flodberg RN, CCN, MSc (Nursing), MSc (Medical Management)



Magnus Flodberg has been a nurse since the spring of 2000 and an intensive care nurse since 2004. Since then he has worked at Karolinska University Hospital in Stockholm. He is now working as a nurse director in a functional area Pre- and postoperative care and pain service and will be starting his doctoral studies in nursing this fall.

As a nurse director, much of my work focuses on nurse retention and employer branding, simply being an ambassador for Karolinska. An overall strategy has been launched by HR to highlight the work that is being done at Karolinska and some of these are different film projects that you can view here:

<https://www.karolinska.se/viarkarolinska/>

Presentation

Introduction: Evidence-based nursing is a core competency for nurses, and is both an approach, and a work method. A Head nurses' primary focus is good nursing quality, and evidence-based nursing provides a higher nursing quality.

Purpose: To describe head nurses' perceptions of the leadership's influence on nurses' ability to provide good evidence-based nursing in a university hospital setting.

Method: A qualitative study with a phenomenographic approach. Fifteen in-depth interviews with head nurses at Karolinska University hospital, Huddinge were conducted. The interviews have been transcribed and analyzed by the author, and resulted in different themes.

Results: The themes that emerged during the analysis are: strengthening the profession, interpretation of context, creation of conditions, the challenge of implementation and structure. The nursing leadership group is unanimous that the hospital administrative leadership has a major impact on the nurses' ability to work according to evidence-based nursing. The leadership is of great importance in all categories, and without supportive leadership the possibility for evidenced based practice for nurses is reduced. Implementation is hampered by the shortage of nurses, which results in the focus being on opening hospital beds, and not nursing development.

Conclusion: Nursing leadership believes that evidence-based nursing is an important part of the nursing profession. The head nurses are unanimous that leadership has a decisive role in nurses' ability to practice evidence-based nursing. Some of the head nurses describe a lack of understanding of what university healthcare is. Nurses are encouraged to be active in the development of health care, and to keep up to date with new findings, but the head nurses themselves state that they are struggling to work strategically with evidence-based nursing. The nursing shortage complicates the work of the head nurses, as focus is largely placed on staffing issues instead of nursing development and implementation of the latest research.

Aromatherapy in the PACU

Author: Laura Martinez MSN, RN

Co-authors: Jill de la Vega BSN, RN, CCRN, Cheryl Gilliland BSN, RN,
Beth M. Nardi MSN, MHA, RN, CPAN, CAPA and Nicole Pierce MSN, RN



Laura is the Clinical Nurse Educator for the Adult and Pediatric Pre-operative and Post Anesthesia Care Unit at the University of Chicago Medicine since 2016. Laura earned her Master of Science in Nursing from Chamberlain University in 2014. She is currently the Chair of the Unit Based Council and a committee representative for the Clinical Technology Informatics Committee and the Nursing Research Council. She was previously a staff RN in the Trauma and Surgical ICU at Mount Sinai Hospital, a Level 1 Trauma Center as well as in the PACU of a community hospital. Laura served as Charge nurse, clinical preceptor and as a unit representative for Shared Governance.



Jill de la Vega, BSN, RN, CCRN received her nursing degree from the University of Illinois in Chicago in 2001. She began her career as a Registered Nurse at the University of Chicago Medicine in the burn/plastics ICU. She switched roles to a Patient Care Support Nurse after 10 years. Two years later, she landed in the post-anesthesia care unit (PACU) where she has happily spent the last 6 years of her nursing career. It was in the PACU where her interest in aromatherapy became serious. In 2005, she became a certified Aromatherapist, receiving her certification from Natural Options Aromatherapy.

Jill has been married for 14 years and has 3 children ages 12, 10, and 8. Jill loves animals and has 3 dogs, 5 fish, and a bearded dragon. An avid practitioner of Brazilian Jiu Jitsu, she trains and competes as a brown belt with her husband and children.



Cheryl S. Gilliland is a staff nurse at The University of Chicago Medical Center in Chicago, Illinois. She earned her Associate Degree in Nursing from Olive Harvey Community College in 2010 and went on to complete her Bachelor of Science in Nursing from Olivet Nazarene University in 2013. Cheryl has experience in the following areas: Telemetry, Pediatric and Adult PeriAnesthesia Care, ICU and Urgent care / Pain Clinic. She is a Daisy Award recipient. In addition, she is the Interprofessional Quality and Safety Committee Representative and Magnet Champion for the PeriAnesthesia Care Units at the University Of Chicago Medicine.

Cheryl was born and raised on the South Side of Chicago. Cheryl and her loving husband, Jimmy have seven children they love spending time with. They also have an energetic Labrador, FeFe. In Cheryl's free time, she enjoys bowling, playing cards, and vacations with her husband.



Beth Nardi is the Patient Care Manager of the Pre-operative and Post Anesthesia Care Unit at the University of Chicago Medicine, since 2012. Beth was a staff RN in the Pre-op/PACU at UCM from 2008 to 2012 and served as both Quality Resource Nurse and UBC Chair during this time. Beth's previous experience includes ten years in cardiovascular ICU at a community hospital in the Chicago suburbs. During this time, Beth served as Quality Resource Nurse, UBC Chair, and Lead Clinical ICU Preceptor. Beth was the Nurse Manager of SICU, MICU, and the Cardiovascular Telemetry Unit during this time. Beth graduated with an Associate in Applied Science in Nursing in 1998, earned a Bachelor of Science in Nursing in 2015, and earned both Master of Science in Nursing Informatics and Master of Health Administration degrees in 2019.

Presentation

Introduction: Post-operative nausea and vomiting (PONV) is one of the most common and distressing anesthesia related complications after surgery. Of the patients that experience PONV, 30% of patients experience vomiting while 50% experience nausea. High risk patients may have rates up to 80% (Odom-Forren, 2018). Patients need alternatives to the pharmacological interventions already provided. Aromatherapy inhalers with ginger, lavender, spearmint, and peppermint are a complementary, homeopathic, and a non-pharmacological option. Benefits of aromatherapy include reducing pain, eliminating/managing headaches, providing allergy relief, and anti-emetic properties (Stoicea, N., et. al., 2015).

Identification of the problem - Overview: PONV can lead to post-surgical complications and cause a delay in patient recovery. When patients are involved in their care, there is an increase in compliance of medical care, it increases their mental well-being, improves patient compliance with post-operative care, patient outcomes, and promotes recuperation.

EP Question/Purpose: The purpose of this study is to determine if the use of aromatherapy will reduce the incidence of PONV in patients post-operatively.

Methods/Evidence: Patients were asked if they would like to try an aromatherapy inhaler for potential PONV. The aromatherapy inhaler was then proactively dispensed to patients with onset of any nausea and/or vomiting (N/V) as a first line intervention. The PACU nurse completed the questionnaire and placed it in the designated locations. If the aromatherapy inhaler did not offer complete nausea relief, antiemetics were administered as ordered.

Significance of Findings/Outcomes: Of the 96 patients who participated in this EBP project, 62 (64.6%) received aromatherapy for PONV. 57 patients (91.9%) received the aromatherapy inhaler as a first line intervention. The majority of patients who received aromatherapy found it beneficial, with 71% (n=58) reporting either moderate or complete relief from PONV.

Implications for PeriAnesthesia nurses and future research: Aromatherapy is a branch of herbal medicine, in which the essential oils are absorbed into the body, resulting in strong physiologic, emotional, and psychologic reactions that are considered beneficial. Using non-pharmacologic treatment such as an aromatherapy inhaler reduces the patient's exposure to possible side effects, they may endure from IV/IM medications administered and increase their satisfaction with their post-operative care.

Friday 8th November 2019	
09:00 - 10:00	Cozumel Suite

**Keynote Address - Dr. Theofanis Fotis, Lecturer, School of Health Sciences,
University of Brighton, United Kingdom**

Harnessing the Future, Now!



Dr Theo Fotis has recently been named one of the Top 50 Healthcare IT leaders in Europe by the Healthcare Information and Management Systems Society (HIMSS Europe), the largest health IT membership organisation in the world. He is Principal Lecturer at the School of Health Sciences, University of Brighton/UK. As a nursing futurist, he is an active researcher in the area of Digital Health.

Dr. Fotis is a frequent visitor to Hong Kong and Saudi Arabia as a visiting lecturer and consultant respectively and he has a strong network of collaborators nationally and internationally both within his research field and in the disciplines of computing and engineering. In 2015 he coined the term 'Digital Nursing', to define a future workforce of health care innovators with the special knowledge and skills to utilise digital technologies for patient benefit. He is currently leading

a Digital Health Living Lab, where citizens, health professionals and industry are working side by side on health innovation through co-creation.

Keynote Presentation

Digital Health technologies are promising to have a profound effect on how health services are delivered, allowing people to manage their own health more effectively, providing effective ways of diagnosing disease, monitoring the impact of policies on population health, resulting to improved accessibility, affordability and quality of health care. Still the introduction of these technologies comes with challenges and experiences resistance and slow adaptation. The presentation will explore the current status of existing technologies, will answer the question of what the future of healthcare might look like, what the challenges are, and what nurses can do to harness the future now.

PACU Handover Timeout: Promoting Safe Care Transitions

Author: Denise Diane O' Brien DNP, RN, ACNS-BC, CPAN, CAPA, FAAN, FASPAN

Co-Authors: Kelly Schultz and Magnus Teig

Presenter: Denise O' Brien



Dr. O'Brien is a Perianesthesia Clinical Nurse Specialist at Michigan Medicine - University of Michigan, where she shares the clinical support for 7 perianesthesia care units with another perianesthesia CNS. She graduated with a BSN from the University of Michigan School of Nursing and received her MSN and DNP from Madonna University. Dr. O'Brien has been active in the American Society of PeriAnesthesia Nurses since its formation, serving on numerous committees and as President in 1994-1995. She is a past editor of the Journal of PeriAnesthesia Nursing, a member of the Journal's Editorial Board, and a peer reviewer for the Journal of PeriAnesthesia Nursing and the American Journal of Nursing.

Dr. O'Brien has written numerous articles and book chapters, co-edited ASPAN's Certification Review for Perianesthesia Nursing, and lectures on perianesthesia nursing topics nationally and internationally. She is a fellow of the American

Academy of Nursing and American Society of PeriAnesthesia Nurses.

Presentation

Background: In a Midwest academic medical center, an evaluation of the Postanesthesia Care Unit (PACU) handover process highlighted that it lacked standardized structure and process. Content discussed was highly variable, inconsistent, and key safety items were omitted. Key team members did not stay at the bedside for the entire handover process. It was believed that anesthesia providers spent an extended length of time at the bedside after giving report.

Process and Goals: With leadership approval, a multidisciplinary committee of key stakeholders was convened to establish goals and identify a standardized handover process. Goals included team members' presence at handover until completion, patient identification, key concerns called out, handovers led by PACU RNs, and adequate information transmittal.

Through our analysis of the current system, we concluded that a defined handover process needed to be developed and implemented. We chose to rebrand the care transition communication as a “PACU Handover Timeout.” Our analysis of the current state led to PACU RN empowerment to lead the development of structured content, establishing expectation of team presence, and improving electronic health record documentation of handover while reducing PACU RN documentation burden.

Key Process and Safety Metrics Results: Before and after data was collected related to: presence of surgeon/proceduralist at the onset of the handover timeout, patient identification, PACU RN timeout leadership, handover elements included, discussion of concerns, and presence at the end of the handover timeout. Additionally, data at one site compared metrics from the launch of the standardized PACU handover timeout to 1 year after the launch, noting decreases in case delays, adverse event reports, PACU length of stay, and handover times. Communication between PACU nurses and providers after the handover was completed increased as did patient identification compliance.

Sustainability of Standardized PACU Handover Timeout: Maintenance and sustainability plan includes an annual required learning module for all team members, observational data/information collected and sent to perianesthesia leaders; feedback provided to team members involved in the handover process, events reported via the reporting system will be followed up by leadership, and a perianesthesia/perioperative committee meets on a regular basis to determine current state and make corrective actions.

Keys to Implementation Success: Why was the implementation of the PACU Handover Timeout successful? From the beginning, PACU RN educators worked to ensure that all PACU RN’s received robust training and support, creating a learning module that outlined the importance of the handover process and the significance of the PACU RN as a leader and facilitator. Buy-in and support by the Surgical and Anesthesia departments were instrumental to ensuring that the handover process was adopted into practice. Focusing on the development of the process and not just content development greatly added to the adoption of the handover process.

And rebranding the PACU handover as a “Timeout” stressed the importance of all team members focusing on the handover process and being present for the entirety of the handover. All PACUs are implementing the revised handover timeout.

References: TJC 2014, Milby et al 2014, Potestio et al 2015, Weinger et al 2015

Consideration of Contributing Factors to Unanticipated Cardiac Arrest in the Cardiac Catheter Laboratory

Author: Heather Reynolds



Heather has over 20 years' experience in intensive care and anaesthetic nursing, culminating in a Doctor of Philosophy at Griffith University, Brisbane, Australia. She has presented internationally on dressing and securement of arterial catheters and has been a Research Fellow with the Alliance for Vascular Access Teaching and Research (AVATAR) at Griffith University, 2015-2017. Other achievements include publication of a Cochrane Protocol about dressings and securement devices to prevent complications with peripheral arterial catheters, and in 2017 at Royal Brisbane and Women's Hospital Department of Anaesthesia and Perioperative Medicine, published a procedural document with a care bundle for arterial catheters, collaboratively with intensive care. She also works as a Data Analyst for the Australian and New Zealand College of Anaesthetists' Data Committee. Heather is a Fellow of the Australian College of Perianaesthesia Nurses (ACPAN), and Chair of the Professional Standards Council.

Presentation

Background: The WebAIRS web-based anaesthetic incident reporting system for the Australian and New Zealand College of Anaesthetists has reported an unexpected complication of cardiac arrest during what was thought to be a straightforward TOE and cardioversion of short duration. Closer examination of the medical history and circumstances of the case show that thorough pre-operative assessment would have indicated a high-risk patient.

Aim: To analyse the incident reported to webAIRS regarding preoperative clinical/risk assessment and systems factors.

Methods: The incident narrative was cleansed, clarified and summarised. The incident details were then assessed for efficacy of preoperative assessment and the impact of the procedural location.

Results: The patient presented for TOE and cardioversion for atrial flutter. Background history stated asthma, obesity, anxiety, 'good' neck movement and Mallampatti 2/airway 2. Current medication was serepax, flecanide and flixotide. Chest was examined as clear with dual heart sounds, with no ankle oedema and oxygen saturations 98%. 6 puffs of ventolin were given pre-procedure. The patient was pre-oxygenated for 2 minutes with a Hudson mask with end tidal CO2 monitoring and a mouth guard in situ. Propofol TCI 1.0-2.0 with Hudson mask oxygen was commenced. After several minutes, oxygen saturations dropped to 91% then rapidly over 20 seconds to 50%. Cardiac rhythm deteriorated to ventricular tachycardia, 240 bpm.

A cardiac arrest was called and cardiac compressions were commenced by the cardiologist. Defibrillation achieved rate-controlled sinus rhythm. The patient was successfully intubated with a CMAC and bougie, and it was noted that the posterior aspect of the larynx was barely visible. Chest X-Ray revealed aspiration. The patient was transferred to ICU. Post incident discussion with the patient's partner revealed a history of a previous haemorrhagic stroke and difficult intubation.

Discussion: Anaesthetic assessment and clinical decision making is influenced by personal bias and cognitive ("thinking") errors which may result in incorrect courses of action¹. Additionally, anaesthetic teamwork happens in an environment characterized by time pressure and uncertainty about risks².

Conducting anaesthesia or sedation outside the operating room increases the risk of adverse events. These circumstances of a unique environment and teamwork remote from the operating theatre are important when analysing this incident.

Procedural lists in the Cardiac Catheter Laboratory would likely be subject to time pressure, with many patients scheduled for routine procedures with known risks. Thus, a patient with underestimated risks poses significant problems. In this incident, the anaesthetist was unaware of a difficult airway and a history of stroke at the commencement of anaesthesia. Additional risk was flecainide therapy for cardiac arrhythmia. Patients on flecainide with atrial flutter can develop a 1:1 AV conduction, with increased heart rate and possible sinus arrest. Bronchospasm and ensuing hypoxia would contribute to cardiac arrest. The patient's obese status together with a difficult airway are factors which increase the risk of aspiration, in particular during sedation.

Recommendations: It is proposed that anaesthesia staff in remote environments such as the Cardiac Catheter Laboratory should be specifically trained in the pre- assessment of patients, with particular experience in airway management and cardiopulmonary resuscitation³.

Developing a Position Statement to Address Surge Activity in PACUs in Ontario, Canada

Author: Linda Marshall-Masson RN, BScN

Co-author: Nancy Rudyk RN, BScN, MN

Presenters: Linda Marshall-Masson and Nancy Rudyk



Linda Marshall-Masson is the Clinical Educator at Trillium Health Partners at The Mississauga Hospital in the PACU and Day Surgery Unit. Linda's 25+ years of clinical experience includes critical care in Cardiovascular Intensive Care Unit, working as a Clinical Informatics Consultant, and as a Smoking Cessation Counsellor. Linda is on the Board of Directors for the Ontario PeriAnesthesia Nurses Association for the past 5 years. Linda's volunteering includes a wide variety of activities in her community, serving as a SickKids Foundation Ambassador, and co-founding the Mackenzie's Hope Trust Fund in memory of her daughter.



Nancy Rudyk is the Clinical Nurse Specialist in the PACU and Preadmission Assessment Unit at Mount Sinai Hospital, Toronto Canada. Nancy's previous clinical experience includes; Clinical Leader Manager of the PACU, Day Surgery and Preanesthesia Clinic at St. Michael's Hospital, Toronto and Clinical Nurse Specialist (CNS) in the Preanesthesia Clinic at the Hospital for Sick Children, Toronto. Nancy has been instrumental in the development of the advance practice nurse role in perianesthesia nursing. Nancy received the nursing excellence award as an Advanced Practice nurse in 2013. Nancy's clinical focus includes: patient/ family centered care in the perianesthesia environment, transition of care: interdisciplinary care reports and pain management.

Nancy is a part-time faculty advisor at the Daphne Cockwell School of Nursing, Ryerson University Toronto. She is an adjunct lecturer at the Lawrence Bloomberg Faculty of Nursing, University of Toronto. Nancy is on the board of directors for the provincial perianesthesia nurses association (OPANA).

Presentation

Background: The Ontario PeriAnesthesia Nurses Association (OPANA) is taking the lead to address ongoing patient flow issues affecting nursing, patients, and finances in Post Anesthetic Care Units in Ontario, Canada. Ontario hospitals have been challenged with occupancy issues, particularly during influenza season, but also with competing needs for critical care and acute care beds. The leaders of OPANA have recognized front-line nurses in the PACU are now additionally caring for patients who may not be post-anesthetic or post-surgery, or they have recovered from Phase 1 and no longer require the advanced knowledge and skills of a PACU specialized nurse. Surge activity has become the new norm, often with patients bed-spaced in PACU because there are no other alternatives. This affects patient flow and potentially, patient safety.

This presentation will provide a brief history of the evolution of PACUs in Canada, summaries from the literature specifically related to hospital occupancy and surge issues, and will include our findings from environmental surveys amongst our provincial and national PeriAnesthesia Nurse members regarding this phenomenon and current creative solutions being applied at their local hospital level. The current Canadian PeriAnesthesia Standards of Practice will be reviewed to determine if there is a need for a Position Statement to address surge activity and provide recommendations from expert PeriAnesthesia nurses at the Provincial or National level.

Perianesthesia Nurses from other countries also experiencing surge activity in their PACUs may look to this information for further insight and apply recommendations to their own practice settings.

Caring for Patients with PTSD/PTSS: A Unified Approach to a Global Phenomenon

Author: Meg Anne Beturne



Meg Beturne has been practicing nursing for 51 years. She is currently the Assistant Nurse Manager at the Baystate Orthopedic Surgery Center. She co-chairs Baystate Health's Magnet Certification Coach Initiative, chairs Community Outreach and is a member of Baystate's Diversity Council.

Meg received her Diploma in Nursing in 1968, Baccalaureate in 1999 and Masters in 2005. She holds dual certifications (CPAN and CAPA) and has been active on the MASPAN Board since 1987. She served as President of ASPAN from 2005-2006. Meg lectures nationally and internationally. She authored chapters in ASPAN's Core Curriculum, the Competency Based Orientation Manual and regularly contributes to MASPAN's Mayflower newsletter. She led Perianesthesia Nursing Delegations to China in 2007, Egypt in 2008 and South Africa in 2009.

Meg is passionate about her community work and has been an active member on many non-profit Board of Directors. She is a member of Black and Hispanic Nurses Associations, two Chapters of Sigma Theta Tau Nursing Honor Society, the American Nursing Association, the Massachusetts Association of Registered Nurses and National Association of Orthopedic Nurses.

Meg was recipient of ASPAN's Outstanding Achievement Award in 2011 for mentoring and diversity.

She was a finalist in the Nursing Excellence GEM Awards in 2013 for Volunteerism and Service and also the recipient of the Children's Study Home Rachael Caren Merriam Founder's Award in 2019.

Presentation

Background: PTSD/PTSS is a mental condition that is a world-wide phenomenon that has an overwhelming incidence which affects eight million adults annually. It is considered to be an anxiety reaction to trauma of any kind and it can truly happen to anyone. Although risk factors such as culture, personality and age are very important to consider, there are many correlations and brain dynamics that are also implicated. Certain populations such as veterans and professionals dealing with those

experiencing shock are more vulnerable. PTSD/PTSS involves the inability to recover from initial symptoms of exposure to trauma in a natural way with the subsequent characterizations of nightmares, intrusive recollections and emotional detachment. It is the knowledge and skills of a healthcare team that enables susceptible patients to safely move through the perioperative continuum of care. The collaborative approach begins in the Pre-Admission Evaluation Unit where the nurses and anesthesia providers scrutinize a patient's history and physical, medication profile and vulnerabilities.

This information, along with symptomology is helpful for the anesthesia team in formulating the individualized plan of care. Attention is given to patients undergoing at-risk surgeries such as cardiac, back and trauma as well as those spending time in the intensive care unit and those who have received a cancer or any life-threatening diagnosis. The PACU nurses then take on the roles of educator, assessor, navigator, quality and safety monitor as well as psychological and spiritual guardian. Despite the challenges and problems encountered in the care of these patients, there are also solutions and even successful outcomes when a unified team approach is utilized and a patient is treated as a holistic human being.

As perianesthesia nurses, we should feel empowered to learn, grow and develop in our care delivery so that we are able to quickly articulate the nursing diagnoses and related interventions for this patient population. As we share our experiences across the world, best practices will emerge and create a formula whereby patients with PTSD/PTSS will experience hope for the future; one which incorporates mental awareness of triggers/challenges and the strategies to utilize in order to overcome them. That is what this lecture will offer to you: knowledge to amass and skills to hone for the betterment of patients and caregivers everywhere!

POSTER ABSTRACTS

“Code Silver” in PACU: Are we prepared?

Author: Pamela Northrop

Co-authors: Ayumi Fielden and Xavia Holmes-Fuller

Introduction: Incidents of workplace violence in the healthcare setting have increased by 23% in the United States since 2015. The Joint Commission reports that violent crimes in hospitals are increasing with most shootings occurring with the motive of revenge, suicide or mercy killings. Active shooter events in the healthcare setting present unique challenges due to the potentially vulnerable state of our patients and an environment full of emotionally charged individuals and family friendly open units. Operating Room (OR) suites and critical care units are considered some of the most vulnerable areas in regards to active shooter activity. Despite the increase in workplace violence incidents, unit-based active shooter trainings have been limited to individual review of materials and generalized plan of action.

Description: Hospitals have the “Code Silver” alert system, but do nurses and ancillary staff know what to do if this occurred in their specific unit? The Post Anesthesia Care Unit (PACU) at a large teaching hospital, serving as a critical care unit and as part of the OR suite environment, was identified as an ideal unit for Code Silver training. A gap analysis revealed that 91% of staff in the PACU did not feel safe at work from active shooters. An interdisciplinary team was formed that included hospital security, unit leadership, risk management, and educators. This team presented a unit-specific in-service that addressed the specific plan of action necessary for the unit. Security presented the master plan for Code Silver in the hospital. Video was used to show a re-enactment of what a Code Silver event looks like within a hospital environment. Also, an open forum was performed allowing for education on nurse-specific patient care responsibilities during active shooter situations. Staff were encouraged to voice their concerns and thoughts with the security team. After this was completed, a unit walkthrough was completed to identify potential weak points and areas for barricade within the PACU.

Evaluation/Outcomes: Staff were prepared for implementation of Code Silver procedures in their specific PACU environment. After completion of the in-service, 89% of the staff reported that they felt like they were adequately prepared to respond to a Code Silver as compared to only 18% pre-intervention. The briefing with security personnel did create awareness of potential weaknesses in the system as well as creating an awareness of areas for improvement in security measures. Due to this awareness, 78% of the staff reported still feeling unsafe in their work environment. The staff were able to submit a variety of suggestions for ways to improve the safety on their specific unit to leadership, including improved security measures such as badge access to the unit. This program will be implemented throughout the institution on a unit-specific basis to ensure that all staff members are prepared.

Reducing Failure to Rescue Events in the PACU: Improving Assessment Skills to Detect Subtle Changes in Post Anesthesia Patients

Author: Ayumi Fielden

Co-authors: Pamela Northrop, Laura Ortiz and Holly Rodriguez

Introduction: Post Anesthesia Care Unit (PACU) Registered Nurses (RNs) typically specialize in the care of specific patient populations unique to their unit within the hospital. However, PACU RNs are required to float to other PACUs within the institution, and it is expected that they can provide competent care for a variety of surgical procedures and patient acuities. An innovative program was created to address the unique challenges faced within the environment of the large academic medical center. This program prepared RNs to assess and intervene with varying acuities of patients in the PACU regardless of the surgical procedure and their home unit specialty.

Relevance/Significance: PACUs world-wide have seen an increase in patient acuity, complexity, and surgery case volume. The importance of PACU RN competency in concise and complete assessment skills is increasing as patient acuity has increased exponentially over the years. Also, an ongoing lack of hospital bed space necessitates a varying acuity level of patients to be cared for in the PACU for an extended time period. Research has shown that patients exhibit subtle changes in physical assessment findings hours before going into cardiac arrest. A gap analysis indicated that PACU RNs were only performing focused assessments, thus increasing chances of missing those subtle changes in the patient, resulting in failure to rescue events.

Strategy and Implementation: A program was developed to enhance the knowledge and confidence in the clinical ability of the PACU RNs to care for a varying acuity of patients and surgical procedures performed. The curriculum includes various topics such as: assessment and interventions of deteriorating patients, device management, hemodynamics, interpretation of acid-base balance, ventilator management, and post-surgical complication management to address fundamentals and advanced concepts of critical care and perianesthesia nursing. The program was offered over a total of four days. All of the content was repeated in high-fidelity simulation to enhance learning and reinforce a systematic approach of complete physical assessment of patients. Debriefing was performed after each simulation and participants provided self-reflection regarding their experience. The Rescuing A Patient In Deteriorating Situations (RAPIDS) tool was used to measure program effectiveness in regards to participants' ability to assess and intervene in deteriorating patient condition scenarios.

Evaluation/Outcomes: The baseline RAPIDS score was obtained during the first high-fidelity simulation in mixed skill sets of RNs currently working in a variety of PACUs. The average score of participants was 12.4 out of 40 possible points. The post-intervention score was obtained during the last day of high-fidelity simulation after all of the didactic content was presented. Average scores post-intervention increased by 57%, demonstrating significant improvement in the participant's ability to assess for subtle changes in patient condition and to implement appropriate interventions to prevent further deterioration in the patient.

Implications for Practice: This revolutionary program focusing on the unique needs of PACU patients is beneficial as an educational offering to PACU nurses. It can be used within nurse orientation and residencies to increase confidence and develop critical skills related to the care of the post-surgical patients worldwide.

Competition as a Driver for Continuous Learning

Author: Ulla Laursen

Co-authors: Lene Höegh Christensen and Charlotte Hyllested

Introduction: North Zealand Hospital is a 400-bed hospital in the Capital Region of Denmark. The hospital has, since 2007, worked with quality improvement projects supported by the Institute of Healthcare Improvement. The culture for improvements in the unit is thereby grounded in the Model for Improvement (MFI).

Seventeen thousand procedures are performed yearly and the hospital provides a variety of surgical services ranging from gynecology, abdominal, orthopaedic and ENT surgery. In PACU the nursing staff are mostly highly qualified with 10-15 years' of experience, but new staff arrives regularly. The unit facilitates pre- and postgraduate education services for different professions, such as RN, CCNP, CRNA's and paramedics.

Most of the patients have been going through surgery, but we see an increased number of patients coming to the unit, for pre-operative stabilization or insertion of blockade before surgery. The patient population is getting older and present more complexity due to increased morbidity. As a result, procedures for nursing care in PACU changes rapidly. Being able to upgrade on what presently is characterized as best practice, becomes essential.

Aim: The aim of our intervention was to establish a learning culture where searching for new knowledge and motivation for continuous learning became an integrated way of working for improvement in clinical practice. Ten years ago, the quiz was developed for this purpose.



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Method: To keep up with the increasing need for continuous learning, a key role model and the nurse lead of the ward identified the quiz as one possible driver for continuously updating knowledge and expertise. During the 10 year period, the MFI has become the method for quality improvement, and has been used to reveal and describe essentials for good perioperative competencies. The unit uses a driver diagram to reveal opportunities for improving systems to encourage continuous learning. The quiz is still a strong driver to continuously update knowledge on practices. The quiz has been tested through several PDSAs.

The chance of winning a prize is usually a strong motivation in the Danish culture. Combining the competition with a homemade cake as an award, makes the quiz popular. It's called "Hygge".



Intervention: The key role model has two homemade cakes as an award. One is given for the best answers, and one just for attending the quiz. It's noteworthy that it's impossible to answer the questions without searching through guidelines, new literature or product information from medical companies. When the quiz is due, the staff can find the correct answers in a folder, including all relevant material.

Outcome: The quiz is very popular. The correct answers are requested and discussed. The quiz is also a driver for quality improvement work in the unit and implementation of new working procedures. By using job satisfaction surveys, we see staff responding positively to opportunities for continuous professional development.

Implications for practice: Competition is a driver for increased motivation among all staff regarding continuous learning. An "old" intervention proved sustainable.

Improving Patient Satisfaction by Reducing Preoperative Waiting Time

Author: Aleli Garcia Cabali

Co-author: Emylou Paras

Background: In April 2018, the Ambulatory Press-Ganey (PG) Patient Satisfaction on Ambulatory Surgery was at a low of 83.1%. Looking further, the item that focused on pre-procedure waiting time was lowest at 44% due to an average wait time of 136 minutes. Historically, at our institution, all gynecologic surgery patients were instructed to arrive two hours prior to their scheduled surgery time to ensure preoperative activities were completed. Patients were waiting longer than they expected and were dissatisfied with their experience.

Project Aim: This quality improvement (QI) project was aimed at reducing wait time in the preoperative area by 50% and to improve Press Ganey Ambulatory Surgery Patient Satisfaction to 86.9% by September 30, 2018.

Methods: After several discussions with staff and leadership to identify the appropriate patient arrival time, it was decided to test patients' arrival at one hour prior to surgery start time. Guidelines and patient workflow were created and shared with the nursing staff. All gynecology surgical patients were instructed to arrive one hour prior to their procedure. Time data was collected on 656 adult patients scheduled from May 2018 to September 2018 inclusive. The monthly average preoperative wait time was tracked. Any delays in moving a patient to the Operating Room (OR) were tallied. PG scores were tracked for overall patient satisfaction and patient satisfaction with waiting time before a procedure.

Outcomes: We achieved a significant reduction in preoperative waiting time from a monthly average of 136 minutes to 89 minutes in 5 months (a 35% decrease). The patient satisfaction scores for wait time before procedure increased from 44% to 70%. The most common reasons for longer wait times were due to OR cases going over their scheduled time and surgeons arriving late to the unit. The September 2018 overall PG patient satisfaction survey score was 87.2%, exceeding the 86.9% goal.

Conclusion: Reducing the preoperative wait time resulted in a significant improvement in PG Patient Satisfaction for ambulatory gynecology surgery patients. Based on this project, arrival time should be modified to one hour and thirty minutes to increase patient satisfaction in ambulatory surgery patients.

Implications for PeriAnesthesia Nurses and Future Research: Patient Satisfaction is an important quality outcome for ambulatory surgery. Factors affecting patient satisfaction such as causes of delays in the OR should be addressed to improve efficiency and timely delivery of care. Future projects could include the impact of nurse staffing, surgeon arrival time in the preoperative area, OR scheduling and requirements for surgery on preoperative waiting time and patient safety. Further work to improve patient satisfaction and safe patient care in ambulatory surgery is recommended.

Development and Pilot Testing of a Breathing-Controlled App for Anesthesia Induction

Author: Abby V Hess

Background: Surgery can produce high anxiety for pediatric patients and their families. Multiple research studies have demonstrated that children experience the highest preoperative distress when the anesthesia mask is placed on their face during inhalation induction. When attempting mask placement, children may become fearful, uncooperative, or combative. High anxiety during anesthesia induction has been associated with negative post-operative outcomes (e.g. emergence delirium, higher pain, separation anxiety, night terrors). A recent Cochrane review by Manyande et al. reported that there is a low level of evidence to support the efficacy of currently used non-pharmacologic interventions. There is a need for a cost-effective, highly engaging, non-pharmacologic solution to alleviate anxiety during inhalation induction. The principal investigator of this study was awarded an innovation grant to develop a novel breathing-controlled gaming app and a breathing sensor that interfaces with standard anesthesia equipment. She partnered with designers and engineers to develop this innovative device. The design thinking process (research, ideation, refinement) was used for device development. Patients, families, and clinicians were consulted during all phases of the design process. The innovative “Zoo Adventure” app facilitates a positive interaction with the anesthesia mask preoperatively (~4-5 minutes of game play) and during inhalational induction.

Aims: The primary aims were to test patient/family receptiveness to using the breathing-controlled app preoperatively and patient cooperation during inhalation induction. We will discuss the design thinking process (used commonly in innovation) that was used to develop the breathing-controlled app, the study findings and share a video demonstrating the patient experience.

Methods: A pilot group of 21 typically developing patients age 4-10 years old were offered the opportunity to play the breathing-controlled game using a tablet in the preoperative area. After playing the preoperative levels, patients were asked if they wanted to play the next level of the game during anesthesia induction. Parents were present for induction. Induction compliance was scored using the validated Child Induction Behavioral Assessment (CIBA) tool (smooth/moderate/difficult).¹

Results: All 21 families agreed to participate in trialing the game preoperatively. 20/21 children chose to play the next level of the game during induction. The average age was 6.8 years (std. dev. 1.8 years). All 20 children accepted the mask on the first attempt to place it. 19 children had “smooth” inductions (calm and cooperative); 1 child had a “moderate” induction (crying, but cooperative with mask). No children exhibited “difficult” (resistant) behaviors during induction.

Discussion: This study demonstrates high patient/family receptiveness to using the breathing-controlled app. Children ages 4-10 showed excellent cooperation with the mask preoperatively and during induction. Clinical efficacy testing is in progress. We anticipate having clinical efficacy data available to present at the conference.

Conclusions: The breathing-controlled app offers a novel non-pharmacologic intervention for preoperative mask introduction and for engaging children in the induction process. Through incorporating the ideas of all key stakeholders involved in the induction process, the design-thinking process enabled successful design of the app.

References: 1. Winterberg et al., Anesthesia & Analgesia. 2018.

The Pain Nurse Specialist

Author: Johanna McCamish

The pain nurse specialist plays a positive role in the patients' pathway. This is a role that makes a difference and works within a multi disciplinary team to improve practices, support nurses on the floor, but overall to work closely with the patient to reduce pain and improve patient outcomes.

Within the service I work, we have the following: an acute pain team that works 7 days per week, a complex team available 2 days a week, and chronic outpatient clinics.

A team of nurses, anaesthetists, a psychologist, a pharmacist, and a physio work together to provide support to the patient.

This poster shows how, in New Zealand, our pain service is run and the role that it plays in patient care.

Improved Perioperative Handoff Through Informatics

Author: Vicki Byas

Co-authors: Laura Martinez and Cassandra Pryor

Background: Handoff communication is a Joint Commission National Patient Safety Goal that went into effect in 2006. Ineffective communication between healthcare providers can lead to sentinel events and may be the primary reason for errors in healthcare (Nether, 2017). In our perioperative area we use the electronic medical record (EMR). "Using an embedded EMR report for handoff can improve communication by ensuring all care team members have access to the most up-to-date information."

Objectives of Project: Our objective was to identify a seamless electronic way to use the EMR for a proper handoff. This report can be used for handoff through the patient's visit in the perioperative setting, which begins at the patient's arrival.

Process of Implementation: Input from pre-operative, operating room, anesthesia, and the post-anesthesia care unit staff was reviewed to identify the critical elements for hand-off in the perioperative setting. Intraoperative information is often recalled from memory leading to omission of critical data or incomplete information during the patient handoff. Upon reviewing the literature, we find that many of the reasons for missing information is that information is illegible on paper documentation. We consulted

the nursing informaticists to determine if we would be able to use a pre-existing report template or if we possibly needed to create one. Using the critical elements previously identified, we formulated the template. We then asked for feedback at our unit based council meetings with the staff. Once we agreed on the template, we rolled it out in our area and are currently evaluating its effectiveness.

Statement of Successful Practice: A handoff tool was developed that is comprised of the critical elements previously identified by staff and information documented in the EMR. This tool contains the essential information that may be lost as the patient progresses through the perioperative care continuum.

Implications for Advancing the Practice of PeriAnesthesia Nursing: As we move forward and the information of our patient's care is documented in an electronic format, we should be able to use it to its full potential and provide safe effective patient care.

Fast Track to Rapid Recovery

Author: Barbara Harris

Co-authors: Ashleigh Arcaro and Chea Wallace

Background: Nurses in a high-volume outpatient orthopedic surgical unit found that patients were being discharged from the operating room (OR) to Phase I, despite meeting Phase I discharge criteria. Standard practice on the unit allowed for the patient to stay in Phase I for an average of one hour, prior to transfer to Phase II. This "sacred cow" practice resulted in staff shortages, OR turnover delays, increased patients' length of stay (LOS), and increased LOS cost.

Objectives of Project: The goals of the project were to decrease ambulatory surgical patients' post-operative stay, improve peri-operative throughput, reduce OR hold occurrences, reduce nursing staff workload, and decrease the cost of patients' LOS.

Process of Implementation: Baseline data was collected for a seven-month period which revealed an average Phase I stay of approximately one hour. A unit specific Fast Track protocol for all patients receiving monitored anesthesia care (MAC) was created, based on the hospital's Fast Tracking Ambulatory Surgical Patients policy, ASPAN Practice Recommendation 8, and White's Fast Tracking Scoring System. Over 100 staff members were trained. Initial implementation included two surgeons for a six-week duration. Of the six weeks, there were two weeks without Fast Track eligible patients. During this time, weekly huddles were held to discuss obstacles and successes. After the initial six-week period, additional surgeons were rolled into the program, and huddles were scheduled monthly.

Statement of Successful Practice: A knowledge assessment was given pre and post-implementation to all peri-operative staff. The pre-implementation assessment revealed a deficit in familiarity with the hospital's policy and ASPAN Practice Recommendation 8, as well as a resistance to attempting implementation. Pre-implementation, staff felt the patient population in question stayed longer than

necessary in Phase I, resulting in delayed OR to Phase I transfers, as well as delayed Phase I to Phase II transfers. Post implementation, staff demonstrated knowledge of the policy, practice recommendation, and reported an overall ease of transition into the new protocol. Five Phase I RNs volunteered for cross training in Phase II, which increased both ease of patient throughput and interdepartmental communication. Anesthesia reported less narcotic and benzodiazepine use, resulting in shorter recovery times. Data evaluation revealed reduced patient LOS by an average of 60 minutes by eliminating Phase I, maintaining Phase II LOS at an average of 54 minutes, increasing staff satisfaction by building a team environment and decreasing Phase I hold time overall. These improvements decreased the cost of patient LOS by average of \$2,000 per patient event, totalling \$46,000 over the four-week implementation period.

Implications for Advancing the Practice of Perianesthesia Nursing: Utilization of the Fast Track protocol improves efficiency and maximizes resources without compromising patient safety and satisfaction.

Implementing an Algorithm for Improving Patient Experience with Procedural Delays or Prolonged Pre-Procedural Stays

Author: Abigail Kathleen Mejorada Acosta

Background: Delays in the perioperative area have been a historical issue in the hospital. On time starts for the first cases in the OR and Endoscopy is being improved by management. However, subsequent cases end up with waiting times that can last from a few minutes to hours. Peri-anesthesia patients can have prolonged wait times. This has led to patient discontent and family displeasure. Consequently, this has led to frontline nursing and ancillary staff dissatisfaction because this renders difficulties to the therapeutic relationship. Staff may also feel helpless or unable to resolve the situation. A referral was made to the Perioperative Clinical Practice Council (PCPC) to mitigate this. The PCPC addressed this using FOCUS-PDCA and a task force.

Objectives of Project: To develop an algorithm for improving patient experience with procedural delays or prolonged pre-procedural stays that peri-anesthesia staff can use in pro-active delay mitigation or service recovery.

Process of Implementation: Through every phase of the patient-staff interaction, factors for delay and its pro-active mitigation were identified, summarized into a workflow analysis, and chronologically placed on a timeline, from pre-admission to procedural day. Collaboration within the department and with external offices ensured that the ideas and workflow of all stakeholders were considered. The final algorithm is a clinical workflow diagram; a tool that RNs refer to when managing prolonged stays. Roles and expectations are clearly stated, with actions from delay-mitigation to service-recovery. We encouraged transparency, ensuring the patient is part of deciding how their experience is made better. Discussions with staff, clarified the scope, purpose and goal of the project during huddles, meetings and education days. Posters of the workflow diagram were placed in areas easily seen by staff and patients.

Statement of Successful Practice: An Algorithm for Improving Patient Experience with Procedural Delays or Prolonged Pre-Procedural Stays was developed by the PCPC. This specifically noted points of interventions during the different phases of patient engagement from pre-anesthesia to post-anesthesia where staff can impact the experience related to delays or prolonged stays. Staff and patients had ready access to this information. Staff now knew how to handle prolonged stays and delays and patients were aware of their options.

Implications for Advancing the Practice of Perianesthesia Nursing: The algorithm was primarily aimed at improving patient experience and led to engaging staff and patients and their families in handling the occurrence of delays in the department. It gave staff a blueprint on exactly what to do at every step of their workflow when confronted with a situation that may lead to a delay. Collaboration amongst the units and with external offices gave staff experience in multi-disciplinary process improvement. This algorithm can also be adapted, in the future, for other service-recovery issues.

Implementing Guidelines for Updating Family of Patients in the PACU

Author: Abigail Kathleen Mejorada Acosta

Background: The family of patients in our PACU may not see the patient for an hour or more after Phase I is finished, the patient is transferred to the floor or to a Phase II outpatient unit. Pediatric patients and those with extenuating circumstances get a visit from family. Other families of PACU patients may not get an update during the entire PACU stay.

Objectives of Project: To implement consistent standards in family visits and updates for patients in the PACU. Within 6 months of implementation, this project will increase patient and family satisfaction by increasing the number of updates families receive regarding their loved ones from less than 10% to at least 80% within a year.

Process of Implementation: Evidence-based guidelines were drafted and presented to the practice council. After meeting with Outpatient Services, Concierge and Security, changes were made. These were revised from visitation to updates because there were cases when a visit may not be feasible, for example, patient preference, emergent issues in the PACU, etc. Guidelines were explained to the patient and family. They were advised to designate a main update recipient. The Concierge and Security staff clarified processes on visitation and traffic into the unit. Handover of the contact number of the update recipient is ensured in case of non-feasibility of a visit.

Statement of Successful Practice: After a year, only 18% of patients in the PACU did not have documentation of an update and were mostly cases done on-call, in the middle of the night. Currently, an annual evaluation has shown a trend of increasing compliance with the update process.

Implications for Advancing the Practice of Perianesthesia Nursing: Patient engagement and communication with their family members is valuable in ensuring patient-centered care. We were able to implement guidelines that addressed this and at the same time enhance the workflow of the units and stakeholders involved in the process. We had limitations of having a small, open unit, with privacy concerns. A previous push from the Clinical Manager to implement visits was unsuccessful. By using a structured process, collaborating with all stakeholders involved, this project succeeded.

Implementing a Safety Pause in PACU Handover

Author: Abigail Kathleen Mejorada Acosta

Background: Handover communication is an essential part of safe patient care. In a unit like the PACU, we depend on quality report from the OR team to initiate our interventions for the patients we receive. Historically, OR RNs who are pressed to achieve increasingly stringent turnover times have been in a hurry to finish handover to the PACU RN, regardless of the patient stability upon admission to the PACU. This has led to staff dissatisfaction and unsafe patient care conditions.

Objectives of Project: To implement a safety pause in the PACU in 100% of handovers from units transferring patients to the PACU.

Process of Implementation: A pre-survey was done which revealed that all PACU RNs feel strongly about the need to implement a safety pause. After approval by the practice council, education was done for two weeks for PACU, OR, Endoscopy, DI and Cath Lab staff. Literature on safety pause was made available. Upon arrival, the RN with the patient helps to settle and attach the patient to the monitor. Unless there are urgent interventions needed, the PACU RN assigned to the patient states: "I'm ready for report. Let's identify our patient." The handover report then commences.

Statement of Successful Practice: Within a month of project initiation, all the units handing over care of patients to PACU staff have started to comply with a safety pause. Initially, the PACU RNs and PCPC members had to coach individual RNs on the need for a safety pause. Currently, a survey being done has noted 100% compliance from a stratified sample of handover reports done in the PACU.

Implications for Advancing the Practice of Perianesthesia Nursing: The safety pause quality improvement project has emphasized the principle of safety despite efficiency. In units like ours which measure patient stay in minutes, the push to do everything faster can sometimes blind clinicians to the unintended consequences of speed. Implementing a pause allowed the RNs to focus on the information being communicated during verbal report. This has also made PACU RNs cognizant of our behavior when we handover the patient to the floor and Phase II, ensuring that the receiving RN is able to focus on the information, before we commence bedside report.

Head of Nursing Development; a Pathway to Excellent Nursing for the Perioperative Patient

Author: Sandra Månsson

Co-authors: Anna Björne and Jenny Persson

Background: Since 2017, every care unit at Karolinska University Hospital has a position called Head of Nursing Development (HOND) who works strategically to cover and develop the nursing care in Karolinska's three key assignments: Health care, Research and Education. The assignment also includes implementation of evidence-based nursing.

The patient area Perioperative Medicine and Intensive Care (PMI) perform anesthetic, perioperative and intensive care for all adult patients in the hospital. PMI's three Heads of Nursing Development are specialized nurses within the three different competences. Through a close collaboration we unite our competences to thrive for an excellent nursing care to the patients.

Perioperative nursing care needs a high level of specialization, but the strategic overview in the nursing context has been lacking. Traditionally, we have been working in our different units with no possibility or forum to influence the continuity of nursing outside the unit. Through our collaboration we have a unique opportunity to create a coherent perspective on the patient's complete perioperative care during the hospital stay. We can for example, identify topics or routines in need of improvement or development. Due to our mandate we are capable of working long-term to improve the patients care by uniting our three nursing specialties.

As HONDS we are working systematically and continuously with specific parameters with a known negative impact on patients' outcomes and experiences, such as hypothermia, postoperative pain and bladder distension. This is done by audits of medical data records and the use of quality registries. We have recently initiated a survey with patient reported experience measures, that we use in various groups of patients to identify further areas of improvement.

Together with the Heads of patient care units, we are developing nursing care and nursing competencies to ensure the competency level necessary for nursing professionals in the different units. This is possible due to co-operation with universities, usage of competence stepping-stones and continuous work with different education activities. We also have the privilege of coaching and supervising nurses with defined responsibility for developing certain areas of care with impact on our patients. The nursing process is on a high academic level due to our network of nurses with Ph.D qualifications who are available to support us with their expertise.

Today the patient-centered knowledge doesn't stop at the border of the unit, or within our specialties. Together we are creating a pathway for our patients in the perioperative journey to provide safe, high-quality and excellent nursing care.

Postoperative Comfort in Eye-Operated Children the First Day After the Discharge from Day Surgery. A Survey

Author: Helle Kahl Andersen

Background: In our department we have children who have had eye-surgery performed, such as strabismus, cataract, removal of small tumors, etc. The children are from 2 to 15 years of age and we have 5-10 children per week. Before discharge, we inform the children and/or their parents about precautions after the procedure, requirements for eye dripping as well as information about urination before bedtime. We give them a written suggestion for analgesic treatment and an acute telephone number for the eye department.

We want to know how the children feel when they have returned home. Among other things, we want to know about pain, eye drops and their experience of our information including the electronic book provided.

We have studied the literature in the field with the following keywords: Outpatient; surgery; ambulatory surgery; same-day surgery; eye surgery; child; ophthalmic, follow-up in Cinahl, Embase and Pubmed without result.

Material and Methods: Upon arrival at the ward, the parents and/or the child were asked if they would be willing to participate in the study. If they are willing to participate, they will be asked to provide their email address, and a link to the survey will be sent the day after the operation. We expect to include approx. 50 participants.

Results: The study is in progress.

Lost in Transition? - "Take the time"

Author: Charlotte Hyllested

Co-Authors: Lene Höegh Christensen, Ulla Laursen, Helle Teglgard and Jakob Nors

Background: North Zealand Hospital is a 400-bed hospital in the Capital Region of Denmark. Since 2007 the hospital has worked with quality improvement projects supported by IHI, and the culture for improvements in the department is thereby grounded in Model for Improvement (MFI). Yearly, the hospital provides 17,000 procedures in a variety of surgical services from gynecology, abdominal, orthopaedic and ENT surgery. An increase in morbidity and complexity in the patient population, requires more attention on thoroughness in handover processes. Time for personal interaction between staff and time to transfer patient information often has a low priority. Being able to structure information and rapidly connect interpersonally becomes even more essential. Transfer of patient care information from the OR

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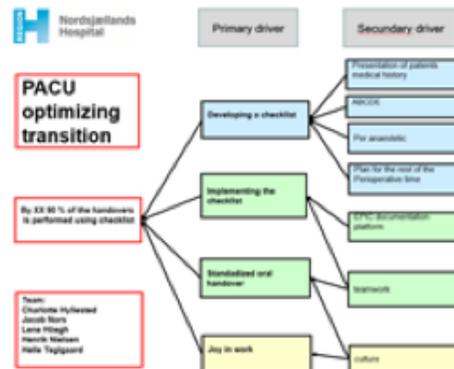
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to the PACU is often provided by highly experienced staff. As a result, no standard for handover processes has previously been used.

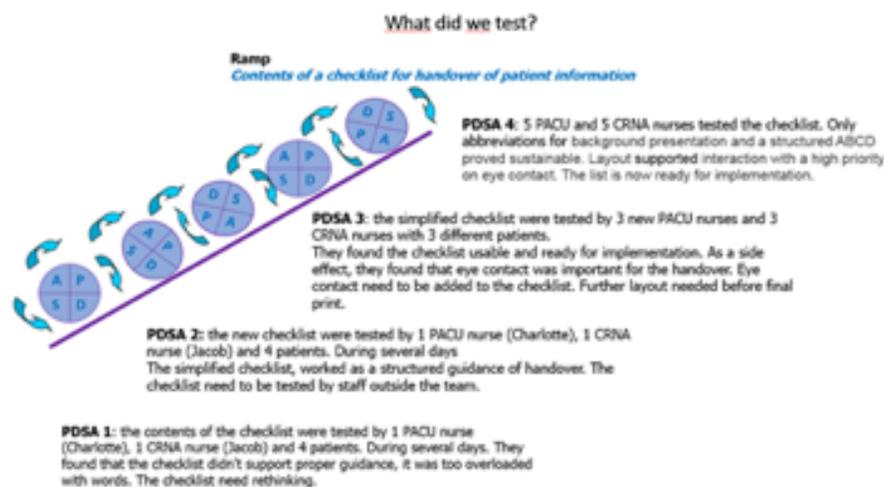
Problem: The complexity of the patients makes transition from OR to the PACU fragile. Risk for loss of vital information is a challenge for patient safety. Staff in both specialties reported poor communication and lack of interpersonal relations.

Aim: The aim of this project is that by January 2020, 90% of the transitions are done using a checklist.

Method: The nurse lead of both wards allocated nurses from OR and PACU to participate in an improvement team. They were supported by the department's improvement advisor. Using MFI, initially the group created a driver diagram to identify opportunities for improvement.



The team tested content and layout of a transition checklist using PDSAs



The PDSAs revealed several opportunities for optimizing the checklist.

We tested the checklist containing an initial time-out procedure - making sure that the nurses are ready for patient information handover before reporting - and a background presentation with a structured ABCD approach. Poor handover guidance by the checklist was reported and simplifying the list combined with better eye contact interaction revealed a breakthrough for better communication. As a result, the

checklist became flexible instead of controlling and supported by clinical judgement on important parameters, was essential. Layout supported interaction with a high priority on eye contact. After tests, the group considered how to implement the checklist, considering different approaches according to individual ways of learning.

Intervention: Implementation of the checklist “take the time”

Take the time

Time Out
Eye contact
Monitor connected
Oxygen attached
EPIC ready
The list is not comprehensive and has to adapted to the individual patient
Patient presentation
A
B
C
D
Special concerns/comments
Postoperative plan

Outcome: An unexpected outcome - staff reported that now they experience that colleagues from the other unit were more prepared and engaged in the transition.

The major change was that the mutual expectations for the hand over is now in balance. Furthermore, there is now an interaction and a shared mental model of how to take care of our patients.

Implications for practice: Eye contact is the most important change. Cultural change is possible. Work satisfaction “joy in work” increased.

Music Listening in the PACU in Patients Undergoing Adenotonsillectomy Surgery

Author: Deborah Scalford

Introduction: In the pediatric population, music has been utilized in the hospital setting to relieve anxiety and distract from painful procedures. There is limited information related to the influence of music and pain management in pediatrics. Music listening as an intervention in children who have had Adenotonsillectomy surgery is a tool to address adjuncts to medication for pain relief.

Identification of the problem: Adenotonsillectomy surgery is a painful procedure. In the pediatric population it may be difficult to manage the pain associated with this procedure. Common practice

to relieve pain associated with Adenotonsillectomy consists of pain medications, including narcotics. The literature supports the use of music in the health care environment as a way to individualize care and decrease pain and anxiety. It is an inexpensive alternative to provide a complimentary and holistic approach to patient care.

EBP Question/Purpose: Does the use of music have a positive effect on pain and anxiety in the PACU after Adenotonsillectomy for children 5 to 10 years old? We will examine patient, family and nurse satisfaction.

Methods/Evidence: Before the child went into surgery, a preoperative nurse asked the child and/or the parents his/her favorite type of music. Patients/families had a choice of music from a number of music listening stations. The nurse obtained an iPod (Apple Inc, Cupertino, CA) and speakers and or headphones. Once patients arrived in the PACU and after initial assessment, the music was started. Surveys were used to collect information on anxiety, patient/family and nurse satisfaction at the conclusion of the PACU stay.

Significance of Findings/Outcomes: 64% of patients/families agreed that music calmed their child in the PACU. 72% of staff agreed that using music is a good way to decrease pain and anxiety for patients. 80% of both patient/families and staff would recommend music listening to others in the PACU. Our findings indicate that music listening is a useful non-pharmacological intervention for pain and anxiety in this population.

Implications for perianesthesia nurses and future research: This information supports the use of alternative options, specifically music listening, for pediatric pain and anxiety management in the perianesthesia setting. Our follow-up study will examine expanding the use of music listening to other patient populations.

Mass Casualty Incident Response: Flexing PACU's Muscle

Author: Elizabeth Resweber

Purpose: Mass Casualty Incidents (MCIs) have greatly impacted hospitals across the United States. These unplanned traumatic events place extraordinary demands on hospital systems. Frequently, casualties from MCI events arrive unannounced via EMS and personal vehicles. Each casualty could require a health care team of 10 professionals with a skillset including critical care, trauma, radiology, laboratory, social work, and requiring effective communication across all services. Any number of traumatically injured patients could overwhelm any level-one trauma center.

Methods: Our Emergency Preparedness Department has led the development of mass casualty response plans for each department throughout the institution. The PACU's close proximity to the Operating Room (OR) provides easy access to anesthesia and surgical staff and is an ideal location to cohort patients requiring surgical intervention. All PACU staff are ACLS/PALS certified, however, staff do not routinely care for hemodynamically unstable trauma patients. To reinforce this skillset, we have implemented

monthly simulations focused on hypovolemia and shock. The PACU participates in regular hospital-wide emergency preparedness drills, including a full-scale table-top exercise utilizing the Command Center and all available resources.

Results: The PACU has conducted 14 trauma simulations with 92 total attendees since July of 2017. These simulations have strengthened PACU nurses' trauma assessment and resuscitation skills. Additional learner engagement includes interdisciplinary Emergency Preparedness drills to identified opportunities for improvement. These simulations have elicited improved confidence around MCI preparedness in the PACU.

Conclusions and Implications: The PACU has the capacity and resources to act as a staging area for the operating room to support an MCI. Continued staff education and MCI drills empower nursing staff to feel confident and prepared to support many casualties of varying acuity levels. Therefore, the PACU is a viable option to support capacity management by providing ICU-level care for traumatically injured patients, alleviating ICU flow obstructions.

Interactive Text Notification of Arrival Times for Pediatric Surgery Patients

Author: Linda Cunningham Lawler

Co-author: Susan Kamerling

Background: Parents of pediatric patients admitted from home for surgery historically were directed to call for their arrival time between 3:30-6:00 p.m. the last business day prior to surgery. Calls are automatically directed to a 3 minute recorded review of need to know information prior to speaking with an agent to receive their arrival time and respond to any questions.

Identification of the problem: Press-Ganey comments and verbal feedback from families revealed dissatisfaction and frustration with the call system due to prolonged wait times in the calling queue and/or being disconnected after listening to the recorded message if the calling queue was full.

Objectives: Implement an interactive text notification system for surgical arrival times.

Improve the efficiency of the arrival time call.

Improve patient satisfaction.

Provide accurate and consistent pre-procedure instructions.

Promoting Safety through Leadership Presence and Staff Engagement

Author: Dekeisha Howard

Co-author: Elizabeth Carroll

Purpose: Improve the structure and engagement of the PACU safety program. There was no unit safety structure or well-defined processes. The purpose of this initiative was to create influential leadership to escalate safety concerns and develop quality and harm process improvement initiatives.

Relevance/Significance (Why): Developing a safety forum, which included leadership presence and unit-based staff engagement with a well-defined structure, enhances communication, teamwork and leads to an enriched Just Culture of safety. Group development of a mission statement and role description and responsibilities promotes increased engagement and commitment of team members. Interdisciplinary involvement is essential to influencing change at all levels of the unit and improve harm outcomes.

Strategy and Implementation (How): Developed a PACU multidisciplinary safety team and safety quality organizational structure. Safety tactic was to identify and react to system defects, improve teamwork and communication systems, and foster a strong unit culture of safety. In 6 months, we went from 2 to 10 unit-based safety coaches, trained in the science of safety. The team developed a mission statement, roles and responsibilities. Leadership presence was added to increase accountability and to collaboratively enhance RN professional development. These systems afforded team members to work to their maximum potential because they had well defined expectations, and direct leadership support. Implementation of the safety team offered a standardized approach to identifying, reviewing and learning from potential and actual safety defects. Leadership presence accomplished by alignment with all unit harm prevention leads to impact outcome metrics. Safety team forum met monthly, providing consistent staff engagement in safety.

Evaluation/Outcomes (So what): Developed and operationalized K cards for harm prevention indicators, increasing unit harm prevention engagement, overall bundle compliance, and safety metric outcomes. As of Dec 8th, 2018 we are 420 days PIVIE and 263 days falls harm free. Safety reporting trends led to revised system for identification and placement of parent/caregiver bands, zero safety reports since inception of new system.

Incidence and Severity of Catheter Related Bladder Discomfort in Non-Urological Patients in the Post Anesthesia Care Unit

Author: Heidi Bach

Co-authors: Karin Kaasby, Sussie Løfqvist and Birgitte Schantz Laursen

Introduction: Catheter related bladder discomfort (CRBD) secondary to an indwelling urinary catheter is a well-known problem in the Post Anesthesia Care Unit (PACU). Patients with CRBD tend to be distressed and agitated, complaining of an urge to void or discomfort in the suprapubic region, thus reducing the quality of recovery and increasing the stay in PACU. The incidence of CRBD has been reported to be between 47 - 90%. However, previous studies have been conducted primarily on urological patients with Foley catheter sizes of 16-20 Fr.

Aim: The aim of this study was to identify the incidence and severity of CRBD amongst non-urological adult postoperative patients, in the PACU, with catheter sizes of 10-18 Fr. within ten surgical specialties.

Method: In 2016, 439 consecutive patients were included. Incidence and severity of CRBD were assessed at arrival and 1 hour after arrival. The severity was assessed by a 4-point scoring system: 0=comfortable;

1=slightly uncomfortable on questioning; 2= discomfort reported spontaneously by the patient; 3=highly uncomfortable – the patient is agitated, complaining loudly, or trying to remove the catheter.

Results: A total of 401 patients at arrival, and 387 one hour after arrival, were assessed. Incidence at arrival was 17.2%(69) of which 5.5%(22) scored 1, 9.7%(39) scored 2 and 2%(8) scored 3. One hour after arrival the incidence was 19.1%(74) of which 10.1%(39) scored 1, 8.5%(33) scored 2 and 0.5%(2) scored 3. When comparing incidence between men and women, male gender showed a significantly higher risk of developing CRBD at arrival (OR 3.15; P<0,000 95% CI (1.78-5.59)), and one hour after arrival (OR 2.34; P<0,002 95% CI (1.38-3.99)).

Discussion: The incidence is lower than previously reported, probably due to the patient group and the size of the catheters. It suggests a need to use as small a catheter as possible. Like previous studies, this study confirms that men experience significantly more discomfort, whatever sized catheter is used.

Standing Up to Falls

Author: Ebony Mathews

Co-author: Laura Martinez

Purpose: The purpose was to decrease the fall and the falls with injury rate in a high-risk area with a rapidly changing population in the Prep and Recovery area.

Relevance/Significance: Falls in the Prep & recovery area are always a challenge because the patient has a rapidly changing status, due to the procedure and the sedation that may have been administered. Falls are a safety issue that impacts patient care and nursing practice. Staff education is key in order to identify patients at risk for falls and for fall prevention (Guwaldi & Keller, 2009; Jorgensen, 2011; Seifert, 2011). If a patient falls during a visit to the hospital it may be detrimental to them. The fall is not always with an injury, however the patient may have limited range of motion or activity. If the fall is with injury that may lead to a prolonged hospital stay that was unplanned.

Strategy & Implementation: Patients that had suffered a fall or a fall with injury were identified and we reviewed their chart and gathered information to determine how the fall or fall with injury could have been prevented. A literature search was completed with minimal results. This lack of information prompted the unit to create a Falls Committee to identify and implement initiatives that would achieve our goal of decreasing our fall rate. We also contacted similar patient care areas of the hospital to assess their best practices and identify which, if any, could easily apply to our unit. It was determined that we were not able to chart High Falls Risks Interventions if the patient's risk score did not meet a specific threshold; however, this score did not account for changes in mental status, alertness, and mobility following anesthesia and surgery. As a result, chart audits revealed that the fall risk assessment was not being accurately scored following procedures, resulting in patients not receiving high fall risk status. This prompted an educational intervention, with each nurse given a mock patient to score and feedback provided. We implemented a unit-specific, nurse-driven protocol for this patient population.

The protocol involves the nurse completing the Fall Risk assessment, whether it was before or after the procedure. Then if the patient did not score a 0, the nurse implemented the appropriate interventions. Education was then provided to all staff nurses in the Prep/Recovery area.

Evaluation & Outcomes: Nurses feel they have more autonomy dealing with patients at risk for falls. Since the start of the new Falls Interventions in November 2017, the Procedural Prep/Recovery unit has outperformed the NDNQI 25th percentile every quarter.

Implications for Practice: The Falls Assessment has expanded the intervention list- “to reduce falls.” This assessment empowered the nurses to be able to apply interventions that they felt applied to their patients. The Falls Risk assessment is now not just another number. Nursing staff understand the importance of implementing safety interventions whether the patient is being cared for before or after their procedure.

Postoperative Outcome in High Risk Patients After Gynecologic Cancer Surgery

Author: Sandra Månsson RN, CCN, MSc (Nursing)
Head of nursing development Pre- and postoperative department
Karolinska university hospital Stockholm, Sweden

Background: Every year, gynecologic cancer affects millions of women all over the world and for a majority, surgery is a part of the initial treatment. Postoperative morbidity increases the risk of mortality, impaired function and reduced quality of life, both short- and long term. Some patients have an elevated risk of perioperative mortality and morbidity which defines them as high risk and requires a meticulously planned care.

Aim: The aim of this study was to investigate the postoperative course among high risk patients after gynecologic cancer surgery regarding morbidity, mortality, re-admission, intensive care and length of stay in hospital.

Method: A quantitative retrospective non-experimental study with data collected from a surgical planning tool and medical records.

Material: One hundred and twenty high risk patients (defined by ASA classification, surgical procedure and perioperative course) were investigated after gynecologic malignancy surgery in Karolinska University Hospital in Stockholm, Sweden.

Ethics: No ethical approval was required according to guidelines regarding studies at this academic level, though the study was approved by the medical head of unit. Looking at medical records must be considered a serious risk of violation of the patient’s privacy, which must be addressed with the greatest attention and utmost caution. The author considered the ethical challenges and took proper precautions.

Results: The morbidity of the patients was evaluated with Clavien-Dindo and POMS (postoperative morbidity survey). A total of 89% had complications defined using Clavien-Dindo, whereof 22,5% were classified as \geq grade III a. POMS was evaluated on day three, five and seven postoperatively. There was a significant frequency of positive domains with some variation amongst the days regarding affected organs. Ten patients had multiple (≥ 5) complications and suffered from the most severe complications, requiring critical care and repeat surgery.

The author defined further symptoms and conditions that did not meet the criteria according to Clavien-Dindo or POMS but brings suffering and difficulties to the affected patients. None of the patients died from complications. The one-year mortality was extensive, which could be explained by advanced disease. The median length of stay was 7.5 days. A total of seven patients required intensive care. Fourteen patients were readmitted within one week after discharge.

Conclusion: The results showed a high frequency of postoperative morbidity, which indicates a need of further development and investigation of care and quality of care for perioperative high-risk patients.

Differences in Perceptions of Competence and Self-Efficacy between Operating Room Nurses and Nurse Anesthetists

Author: Karin Falk-Brynhildsen

Co-authors: Maria Jaensson, Brigid M. Gillespie and Ulrica Nilsson

Background: In the Operating room environment, it is most important how individuals experience specific knowledge and how they solve the complex tasks in perioperative practice, to enhance safe clinical practice. The purpose of this study was to compare perceived competence and self-efficacy (SE) among Swedish operating room (OR) nurses and registered nurse anesthetists (RNAs), and to evaluate the relationship between SE and competence, gender, age, and years of experience. In a comparative cross-sectional design, an online questionnaire was sent to the members of the Swedish Association of Health Professionals (n 2,902). With n=1,033 responses, a response rate of 39% perioperative nurses was achieved (505 OR nurses and 528 RNAs). A Swedish translation of the instrument Perceived Perioperative Competence Scale-Revised (PPCS-R) measuring perceived competence, and the General self-efficacy (GSE) scale was used. OR nurses showed significantly higher scores on two of the six PPCS-R subscales, foundational knowledge and leadership as well as GSE scores compared with RNAs. The RNA group showed significantly higher empathy scores compared with OR nurses. Among the OR nurses, professional development made the strongest contribution to SE and proficiency among the RNAs. This result indicates differences in perceived competence and SE between OR nurses and RNAs and also suggests that gender may be an independent factor affecting self-efficacy and proficiency among the RNAs.

Implications for practice: Based on our findings the presentation may provide a positive impact, highlighting the importance of reflecting on and to measure self-reported perioperative competence

and SE, thus allowing both the team and the individual to identify areas where education and training are necessary to ensure safe care. The findings can also be an opportunity for managers and leaders using the results to strengthen and improve perioperative care to enhance safe clinical practice.

Analysis of the Risk Factors Associated with Hypothermia in Surgical Patients at a University Hospital

Author: Min Ji Lee

Co-authors: Kwang Hee Park, Hye Won Shin, Min Kyung Park and Na Rae Baek

Purpose: Despite perioperative warming of surgical patients to maintain the body temperature, patients still experience hypothermia. The present study aimed to determine the hypothermia occurrence status in surgical patients and to identify the risk factors that affect the development of hypothermia in our hospital.

Methods: A total of 6561 records of adult patients aged 18 years who were admitted to the recovery room after surgery at 'S' University Hospital in Gyeonggi-do between January 2017 and December 2017 were collected. Logistic regression was used in the analysis.

Results: The incidence rate of hypothermia was 24.05% in this study. The significant variables that affected hypothermia were sex, age, body mass index, American Society of Anesthesiologists (ASA) class, department, surgical posture, operation time, and body temperature at the end of surgery. Female sex (odds ratio [OR] = 1.513), old age (OR = 1.013); low body mass index (OR = 1.066); ASA class 3 or higher (OR = 2.130); among the departments, as compared with the urology department, the gynecology (OR = 1.697), orthopedics (OR=2.603) and neurosurgery departments (OR = 2.810); among the surgical postures, as compared with the supine position, the prone (OR = 1.558), lateral (OR = 2.525), and lithotomy positions (OR=1.590); long operation time (OR = 1.153); and low body temperature at the end of surgery (OR = 17.509) were identified as the risk factors.

Conclusions and discussion: In conclusion, for female patients aged 60 years or older, with a body mass index of 23.7 kg/m² or less, with ASA class 3 or higher, with surgical postures (prone, lateral, and lithotomy position), and with operation time of 2 hours or longer, we suggest differentiated nursing strategies based on the consideration of patient and surgical characteristics, and active heating to maintain the body temperature during surgery.

I'm Afraid! Children's Experiences of Undergoing Anesthesia

Author: Lisbet Andersson Ph.D. student 1, Katarina Karlsson Ph.D 2, Pauline Johansson Ph.D3, Sofia Almerud Österberg Associate professor 4

1. Faculty of Health and Caring Science Linnaeus University, Växjö, Sweden
2. Faculty of Caring Sciences, Work Life and Social Welfare, University of Borås, Sweden
3. Faculty of Health and Caring Science Linnaeus University, Department of medicine and Optometry, Kalmar, Sweden
4. Faculty of Health and Caring Science Linnaeus University, Växjö, Sweden

Purpose of Project: To be anesthetized is a stressful experience for children. Children are most anxious about the anesthetic and not the surgery itself. If a high degree of anxiety exists preoperatively, it results in a lower degree of co-operation from the children during the anesthesia induction. Preoperative programs can allow children to understand the anesthesia induction procedure. However, there is little research evidence about children's own experiences about undergoing anesthesia. Therefore, in this study, the aim was to explain and understand the meaning of undergoing anesthesia as experienced by children.

Methods: A lifeworld hermeneutic approach was used. The data were collected through observations and interviews with 23 children, aged 4-13 years, who required various elective minor surgery in four Swedish hospitals.

Preliminary results of this ongoing study: Experiences of anxiety is central for the children and the interpretation of the meaning of undergoing anesthesia formed the basis for the following themes: Being powerless: The children experience anxiety of being deprived of power and not being able to protect their body from painful procedures and thoughts of disaster can arise. Struggling for control: The children attempt to establish control by using different strategies, for example, trying to dispel thoughts. Seeking for comprehensibility: Despite varied information, it is difficult for the children to fully comprehend what it means to undergo anesthesia. There is also ambivalence about how much information is needed. Too much information can be seen as a threat, but if too little information is given to the children, comprehension can be reduced and the anxiety can increase. Seeking for security: Parents stand for central security and become a shield against the threat. The children want both parents to be present as it would provide a double and strengthened security against the threats as they can complement each other and thus reduce the anxiety. The staff are part of the care but are more in the periphery regarding security. It is important that the staff are positive and praise the child.

Preliminary comprehensive understanding: By having to face the unpredictable, a struggle arises to be able to keep their bodies intact from the external threat that exists in the operating room. The threat cannot be fully counteracted but can be alleviated by protection.

The data is undergoing analysis and will be ready for presentation at ICPAN 2019.

Factors affecting Organizational Loyalty of Peri-Anesthesia Nurses in South Korea

Author: Jebog Yoo

Purpose: The purpose of this study was to investigate the relationships between emotional intelligence, job satisfaction, organizational commitment, and organizational loyalty among peri-anesthesia nurses in South Korea.

Methods: The participants were 221 peri-anesthesia nurses at 3 university hospitals. Data were collected by a self-report questionnaire in 2016 and analyzed using SPSS 20.0 window program. This study consisted of 46 items including 5 items of demographic variables.

Results: There was significant different organizational loyalty in general characteristics of nurse's position ($F=14.37$, $p<.001$), clinical employment periods ($F=6.87$, $p<.001$), peri-anesthesia career ($F=4.36$, $p=.005$). Emotional intelligence, job satisfaction and organizational commitment were positively correlated with organizational loyalty ($r=.445$, $p<.001$; $r=.532$, $p<.001$; $r=.781$, $p<.001$, respectively). The factors related to organizational loyalty were emotional intelligence ($B=.187$, $p<.001$), organizational commitment ($B=.682$, $p<.001$) and clinical employment period ($B=.199$, $p=.004$). Explanatory power was 65.7% in the regression model. Organizational commitment was the most significant predictor of organizational loyalty.

Conclusion: Based on the results of this study, it is necessary to develop the emotional intelligence program to improve the job satisfaction, organizational commitment and organizational loyalty among peri-anesthesia nurses. We also provided evidence for institutional policy to improve emotional intelligence and job satisfaction among peri-anesthesia nurses in south Korea.

Key words: Peri-Anesthesia Nurses, Emotional intelligence, job satisfaction, organizational commitment, Organizational loyalty

The Use of Mentholated Popsicle to Manage the Elderly Patient's Thirst in the Immediate Postoperative Period: Randomized Clinical Trial

Author: Marilia Ferrari Conchon

Co-authors: Lígia Fahl Fonseca and Cristina Maria Galvão

Physiological mechanisms of detection and control of thirst in the elderly surgical patient occur differently than in adults and children, which justifies the investment in conducting studies on strategies that can provide relief of this symptom with use of cold temperature and small volume. The aim of the study was to compare thirst intensity and discomfort of elderly patients who savoured a mentholated popsicle with the thirst of elderly patients who received the usual care in the immediate postoperative period. This is a randomized controlled clinical trial in parallel with two groups, conducted in a post anesthesia care unit of a public teaching hospital in southern Brazil. The sample consisted of 50 elderly patients in the immediate postoperative period, who were allocated in two groups, 25 in the control and 25 in the experimental group, without follow-up losses. Inclusion criteria were: patients aged ≥ 60 years; being fasting; verbalizing thirst and having been approved in the assessment of Safety Protocol of Thirst Management.

Patients with restrictions to ingestion or swallowing, as well as those who self-referred a peppermint allergy, were excluded. Patients assigned to the control group received usual routine care of the institution where the study was conducted, which consists in maintenance of fasting. Patients assigned to the experimental group received a 20 ml mentholated popsicle. Primary outcomes of interest were thirst intensity and discomfort, both of which were assessed initially (T0) and again (T1) after 20 minutes of the intervention or usual care. Thirst intensity was measured using a Numerical Scale (zero means no thirst and 10 the greatest thirst ever experienced by the patient), and thirst discomfort by Perioperative Thirst Discomfort Scale (score of zero to 14 points, being zero the absence of discomfort and 14 corresponds to the most intense discomfort related to thirst). Median of initial thirst intensity and discomfort (T0) was 6.0 for the participants assigned to the experimental group, 5.0 for thirst intensity and 6.0 for thirst discomfort for the participants assigned to the control group. The Mann-Whitney test was used evaluating differences in medians, comparing changes in Numerical Scale and in Perioperative Thirst Discomfort Scale between the experimental group and the control group (final value minus initial value). Results of the randomized clinical trial demonstrated that there was a statistically significant decrease in thirst intensity ($p < 0.001$) and discomfort ($p < 0.001$) of elderly surgical patients, after twenty minutes of tasting the mentholated popsicle when compared to thirst intensity and discomfort of the patients who received the usual care, in the immediate postoperative period. The benefit provided by the mentholated popsicle may be explained by the action of cold temperature associated with menthol in activating anticipatory mechanisms, especially Transient Receptor Potential Melastatin 8 and Ankyrin 1, which when activated, lead to pre-absorptive thirst satiety, without the need to ingest large volumes of fluid. Considering the shortage of evidence on strategies for thirst management of the elderly surgical patient, mentholated popsicle is an innovative and safe strategy, and may become a method of choice for use in clinical practice.

Evaluation of a Safety Protocol For the Management of Post-Operative Thirst

Author: Natiely Haila Motta

Co-authors: Isadora Pierotti, Leonel Alves do Nascimento, Marilia Ferrari Conchon and Ligia Fahl Fonseca

Introduction: Thirst is a discomfort of high prevalence during the period of anesthesia recovery. Its intensity can be measured by numerical and analogical scales ranging from zero to ten, presenting high values in the immediate postoperative period. Even with this scenario, thirst is undervalued and under-treated. The usual practice of care during this period is the maintenance of absolute fasting for fear of adverse effects, especially bronchoaspiration. In order to modify this scenario, the Safety Protocol for Thirst Management (SPTM) was validated, aiming at raising the level of safety for the management of thirst, contributing for the decision making on whether to give the patient a strategy for relief.¹

Objective: Evaluate the correlation of medications, anesthetic technique, and clinical conditions that influence the time of patient approval in the Safety Protocol for Thirst Management in the Post Anesthesia Care Unit.

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Design: Quantitative, analytical, and longitudinal study conducted in Southern Brazil.

Method: We studied a non-probabilistic sample, of 203 adult patients in the immediate postoperative period. The SPTM was applied every 15 minutes for one hour. The normality of the data was calculated by the Shapiro-Wilk test. A Kruskal-Wallis test was used to determine differences between populations followed by a one-way (ANOVA) test for paired rankings. The level of significance was set at $p < 0.05$.

Results: The sample consisted of 103 men (50.7%) and 100 women (49.1%), with a mean of 37 years, and ASA II classification predominance in ASA II in 120 patients (59.1%). Median of liquids fasting time was 13 hours and 30 minutes and for solids, median of 14 hours and 25 minutes. The anesthetic technique was divided into four categories; blockade (42.9%), general anesthesia (25.1%), sedation and blockade (19.7%) and general anesthesia and blockade (12.3%). General thirst prevalence was 67.7%, and mean intensity of 6.38. Fentanyl, morphine, rocuronium, and sevoflurane increased disapproval in the protocol by up to 30 minutes ($p < 0.05$). General anesthesia ($p < 0.0001$) and level of consciousness (95.4%) presented higher disapproval rates in the first minutes of evaluation.

Conclusions: Anesthetics and general anesthesia delayed protocol approval, however, after 30 minutes, 75.4% of patients were approved. Level of consciousness was the main criterion for disapproval. Even though there is scientific evidence that thirst can be safely treated in the post operative period, there is still insecurity among nursing professionals regarding the ideal moment to administer a method of relief. The Protocol identified crucial clinical conditions that make it impossible for the patient to receive the strategies and demonstrated that thirst can be satiated early with safety regardless of the anesthetic technique to which they have been submitted. In this context, it is possible to intervene safely in the management of thirst and to reduce liquids fasting time in this period, greatly contributing to patient's comfort.

Key-words: Thirst; Period of Recovery from Anesthesia, Clinical Protocols.

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Vasopressin Hormone, Osmolarity, Intensity and Thirst Discomfort after Ice Popsicle

Author: Thammy Gonçalves Nakaya

Co-authors: Lígia Fahl Fonseca, Ernane Torres Uchôa, Marília Ferrari Conchon and Aline Korke Arrabal Garcia

Introduction: Perioperative thirst is a symptom of high prevalence and high intensity, described by patients as a stressor that can lead to feelings of weakness and suffering. Cold temperature strategies, such as ice popsicles, have been shown to be more effective to alleviate this discomfort when compared to water at room temperature. It is known that this strategy reduces the subjective characteristics of thirst, such as intensity and discomfort. However, there are no studies that explore the hormonal profile with the use of cold strategies for reducing thirst.

Objective: To understand the physiological effects of ice popsicles on the plasma concentrations of vasopressin and osmolarity, intensity and discomfort of thirst.

Method: Quasi-experimental, pre and post-test, performed in a laboratory of clinical analysis in Brazil. The sample consisted of nine healthy male volunteers, between 18 and 40 years of age and without comorbidities. Inclusion criteria included fasting for 12 hours, abstaining from alcohol for 24 hours, not performing physical activity for 60 minutes and not brushing their teeth/rinse their mouths before the collection. They received 2% hypertonic saline solution intravenously for two hours to induce additional thirst. The dependent variables were plasma vasopressin, plasma osmolarity, thirst intensity and discomfort, collected before and after infusion of the solution every 15 minutes. The treatment variable was the 20ml ice popsicle, offered to the volunteer three times every 15 minutes.

Results: Popsicle intake did not result in a statistically significant reduction in vasopressin ($F = 0.876$ and $p = 0.428$). However, there was a reduction in the hormonal physiological profile of vasopressin from 7.1 pg/ml to 5.8 pg/ml after the first two interventions. This corresponds to a decrease of approximately 20% in the hormone profile. The concentration of plasma osmolarity during the procedure changed from 270.65 (initial baseline osmolarity) to 286.51 mOsm/kg (final osmolarity), but without statistical difference ($F = 2.207$; $p = 0.09$). Ice popsicles significantly reduced the intensity ($F=10.00$ and $P=0.001$) and discomfort of thirst ($F=10.528$; $P < 0.001$) between the moments after intervention.

Conclusion: There was a reduction in the intensity and discomfort of thirst after the use of the 20ml ice popsicle. There was no statistical difference for vasopressin and osmolarity between moments. However, there was a reduction in the hormonal physiological profile of vasopressin when receiving treatment during the first 30 minutes of intervention. It is hypothesized that this effect of ice popsicle is related to anticipatory mechanisms that stimulate the oropharyngeal cavity, through thermoreceptors, osmoreceptors and swallowing. After receiving the strategy of relieving thirst, therefore, the anticipatory mechanism, generated temporary physiological hormonal reduction of vasopressin. And this issue should be researched further with a larger number of subjects.

Clinical Evaluation of the Safety Protocol for Thirst Management in the Immediate Postoperative Period

Author: Carla Regina Lodi de Mello

Co-authors: Abigail Dias Rodrigues, Marília Ferrari Conchon, Isadora Pierotti, Lígia Fahl Fonseca and Leonel Alves do Nascimento

Introduction: Thirst is defined as the conscious desire to drink water, and can be influenced by social factors, customs, pathologies, individual habits of water intake and also by clinical conditions and external factors. In the perioperative period, different factors contribute to the onset of thirst, such as prolonged fasting, anesthetic medications, blood loss and orotracheal intubation. Although it has a negative repercussion on the surgical experience and is a symptom of high prevalence, it remains an under-evaluated and undertreated symptom by health professionals. The Safety Protocol for Thirst Management (SPTM) was developed and validated to evaluate safety in the administration of a perioperative thirst relief method. It assesses Consciousness Level, Airway Protection (Coughing and Swallowing) and absence of Nausea and Vomiting. It is an essential clinical tool that provides safe subsidies for health professionals to decide whether or not to administer the relief method.

Objective: To evaluate the rate, reasons and moment of approval of the Safety Protocol for Thirst Management during the first hour of anesthesia recovery postoperatively.

Method: Descriptive, cross - sectional, quantitative study performed at a Post Anesthesia Care Unit of a philanthropic hospital in Brazil, in the North of Paraná. The population consisted of patients of both sexes, submitted to elective and emergency surgeries, aged 18 to 70 years. In the immediate postoperative period (POI) the SPTM was applied every 15 minutes in the first hour of anesthetic recovery and evaluated regarding patient's approval and disapproval in the protocol.

Results and discussion: The final sample consisted of 98 patients. The predominance was: female (55.1% n = 54), ASA 2 (52% n = 51), anesthesia technique of Blockade (43.9% n = 43) and orthopedic surgery (38.8% n = 38). The mean age was 41 years (SD = 12.3). The fasting time of fluid in the preoperative presented median of 11:37 hours (IQ 8: 56-3Q 13:45). The prevalence of thirst was 81.6% (n = 80) and mean intensity was 5.6 (SD = 3.1). The percentage of approvals in the PSMS evaluation increased gradually according to the five moments of evaluation (35.8%, 49.4%, 60.5%, 71.6%, 71.6%). The criterion of level of consciousness presented greater disapproval in all moments of application of the SPTM (55.5%, 44.4%, 29.6%, 21%, 18.5%). The level of consciousness is closely linked to approval in other safety criteria and is one of the most important mechanisms in the prevention of bronchopulmonary aspiration of gastric contents.

Conclusion: It was observed that in 30 minutes of anesthesia recovery, 60.5% of the patients presented safe conditions to receive a thirst relief strategy. Thus, with the evaluation of the SPTM the patient is assessed in an individualized and systematized manner, allowing the health team to act intentionally to reduce thirst, ensuring a safe anesthetic recovery and freedom from discomfort.

Keywords: Thirst; Perioperative Nursing; Clinical Protocols.

Patients' Experiences of Pain Treatment in Relation to Pancreatic Surgery

Author: Marianne Birke Englid

Co-authors: Birgitta Åkesdotter Gustafsson and Leena Jylli

Background: Patients suffering from pancreatic tumours undergo surgery more often than before. As chemotherapy and radiation have minimal effect on pancreatic cancer, surgical resection is the only treatment. Still very little is known about how these patients experience postoperative pain management.

Aim: The aim was to describe patients' experiences of postoperative analgesia in connection with their pancreatic surgery.

Methods: Narrative interviews were conducted with 12 respondents, 5 women and 7 men and analysed with qualitative content analysis.

Results: Two themes emerged: 1. Experiences of having an EDA for pain treatment and 2. Experiences of transition from EDA to oral pain treatment, including eight subthemes. Some patients described that they were worried about the preoperative insertion of the epidural catheter. However, they were surprised to be pain free when waking up after surgery and anaesthesia. Some patients experienced numbness and loss of sensation, troublesome itching, pain and fatigue. Following cessation of epidural treatment and having transitioned to oral opioids, some of the patients experienced pain, nausea and fatigue. Some of them hallucinated. Those patients that experienced pain described that they felt lonely and wished for a nurse to be available for support and timely pain relief.

Conclusions: Patients experienced pain relief after pancreatic surgery if the epidural treatment worked without problems. The transition from EDA to oral opioid treatment was problematic to some patients including pain breakthrough, nausea and fatigue. The nurse should take patients seriously, engage with the patient and provide support and reassurance, and act proactively to prevent pain breakthrough.

Analysis of the Perioperative Thirst Concept

Author: Leonel Alves do Nascimento

Co-authors: Aline Korke Arrabal Garcia, Marília Ferrari Conchon, Thammy Gonçalves Nakaya, Isadora Pierotti, Luisa Arietti Andriotti, Marcos Venícios de Oliveira Lopes and Ligia Fahl Fonseca

Introduction: Thirst is one of the most pressing sensations perceived by a human being and generates intense and prolonged discomfort. Subjective symptoms such as perioperative thirst, however, still remain undervalued by the health team, mainly due to lack of evidence regarding their identification, measurement and methods of relief.

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Objectives: To elaborate a diagnostic structure by analyzing the concept of Perioperative Thirst.

Method: A qualitative study focused on conceptual analysis, based on the model proposed by Walker and Avant (2011)¹, using the following steps: concept selection; determination of the objectives of the conceptual analysis; identification of possible uses of the concept; determination of critical or essential attributes and antecedent and consequent events of the concept. In order to carry out this concept analysis, an integrative review was carried out in the literature.

Results: In the perioperative period thirst has a high incidence and high discomfort in all age spans, from children to the elderly having submitted to different surgical procedures and anesthetic techniques, negatively affecting the surgical process. The analysis of the concept of perioperative thirst will support the development of a diagnostic structure of this concept. The analysis of the concept of perioperative thirst will result in the elaboration of its concept, antecedent and consequent factors, making possible the proposition of this diagnosis for the Nursing community. In this analysis, thirst was selected as an uncomfortable symptom, described by the health literature as a complex and multifactorial symptom, involving physiological, motivational, affective, environmental, cultural and individual differences such as gender and age². The core of the perioperative thirst concept is then composed of visceral and behavioral attributes, comprised of dry mouth and willingness to drink water.

Background and consequent events of the concept: The factors that can trigger thirst in a surgical patient are classified as osmotic or hypovolemic. Small changes in blood osmotic concentration are able to activate the mechanisms that generate thirst, whereas changes in blood volume also activate thirst, but in a less sensitive way than osmolality.

Conclusions: The analysis of the concept of perioperative thirst allowed us to observe that research regarding thirst of the surgical patient is recent and little is discussed in the literature and clinical practice. Analyzing the concept of thirst has brought greater subsidies for the elaboration of the Perioperative Thirst Diagnosis.

Contributions / Implications for Nursing: The perioperative thirst concept as a nursing diagnosis will imply improvement of care for the surgical patient, by making explicit the knowledge of this symptom. Recognizing that this group of patients is exposed to experiencing it, the team may include perioperative thirst in their care plan, adopting strategies for their relief.

Descriptors: Perioperative care, Nursing Diagnosis, Thirst

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Mentholated Chewing Gum for the Relief of Preoperative Thirst: Randomized Clinical Trial

Author: Aline Korke Arrabal Garcia

Co-authors: Rejane Kiyomi Furuya, Marília Ferrari Conchon, Edilaine Giovanini Rossetto, Rosana Aparecida Spadotti Dantas and Lígia Fahl Fonseca

Introduction: Thirst is one of the most intense and stressful experiences for the perioperative patient. There is scientific evidence that mentholated chewing gum may be a viable strategy to reduce it.

Objective: To compare the effectiveness of mentholated chewing gum with the maintenance of fasting (usual care) in reducing the intensity and discomfort of the surgical patient's thirst in the preoperative period.

Method: Experimental analytical, randomized controlled clinical trial, in parallel. The population was composed of patients from 12 to 65 years of age in the preoperative period and the sample of 102 participants randomized in control group - CG (usual care) and experimental group - EG (mentholated chewing gum). The participants were followed for ten minutes, and those in the experimental group chewed the mentholated gum for ten minutes in a natural rhythm. The intensity of thirst was measured using a Numerical Verbal Scale (NVS) ranging from 0 (no thirst) to 10 (very intense thirst). The discomfort of the thirst was evaluated by the Perioperative Thirst Discomfort Scale (EDESP), which presents 7 attributes and its final score ranges from 0 to 14.

Results and Discussion: The medians of the initial intensity of thirst were 5 for CG and 6 for EG, and from initial discomfort of 8.5 for CG and 6.5 for EG, with homogeneity between groups in relation to variables (Mann-Whitney). The study showed that the group that used the mentholated chewing gum presented a significant improvement ($p < 0.05$) in both intensity and final discomfort of the thirst, with Cohen's d moderate effect (0.60 and 0.79 respectively). When comparing the experimental group with the control, the variability in intensity and discomfort (final minus initial) when the intervention was used was significantly reduced ($p < 0.05$), presenting a d Cohen with moderate (0,77) and strong effects (0.82) respectively. The Spearman Correlation test showed that the variability in both the intensity and the discomfort of the thirst had a positive and strong relationship ($r = 0.841$, $p < 0.001$) and these had a positive and strong relationship with the group variable ($r = 0.778$ and 0.831 , $p < 0.0001$) respectively. Positive results may be due to mechanical and chemical stimulation of the salivary glands, increasing the salivary flow and humidifying the oral cavity. In addition, the chewing gum selected presents menthol, which is responsible for the activation of the receptor located in the oral cavity called TRPM8, leading to a feeling of satiety and aliestesia. A third factor may have been the presence of xylitol in the gum composition which has a pleasant endothermic effect, producing a refreshing sensation in the mouth.

Conclusions: The use of mentholated chewing gum was effective in reducing the intensity and particularly the discomfort of the surgical patient's thirst in the preoperative period. This strategy is deemed feasible for the management of pre-operative thirst, easy to employ, of low cost and with great acceptance by the patients. The innovative approach represents a paradigm change for perioperative professionals as well as humanized care to patients.

No Need For A Plumber, The Pipes Are Working Just Fine: An Evidence Based Practice Change to Decrease Length of Stay in Ambulatory Surgery

Author: Stella O Oloruntoyin

Background: The Ambulatory Surgery Care Unit (ASCU) is an outpatient department, providing episodic care for patients who may be discharged home on the same day of surgery; known as Phase II patients. Prior to August 2016, all phase II patients were required to void prior to discharge which contributed to increased length of stay (LOS).

Practice Question: Does eliminating voiding criteria among Phase II patients, who did not undergo urology or lower abdominal procedures, reduce LOS?

Methods: The Johns Hopkins Nursing Evidence-Based Practice model and process were used to guide this project. We conducted a comprehensive literature search using the following keywords: eliminating voiding criteria in Phase II, reduction in LOS in Phase II, postoperative voiding, and ambulatory surgery discharge criteria. All relevant articles (N=39) were leveled and graded.

Practice Recommendation: Based on the evidence synthesis and current practice recommendations, discharge criteria were revised to exclude voiding as a requirement for most Phase II patients. Phase II patients who did not undergo lower abdominal or urology procedures were no longer required to void prior to discharge, except in cases as directed by physician.

Strategy and Implementation: Physicians were engaged and agreed to the outcomes identified in the evidence synthesis and expressed support for the proposed practice change. In August 2016, nursing staff were formally educated regarding the new practice change. Once the practice change was implemented, patients and families were educated to call the surgical service if no voiding occurred 6-8 hours after discharge. Beginning in September 2016, all patients in Phase II were no longer required to void prior to discharge unless they underwent urology or lower abdominal procedures or deemed necessary by physician or nursing assessment.

Evaluation and Outcomes: Prior to the change, the average length of stay for Phase II patients was 1 hour and 58 minutes. Following implementation, the average length of stay for Phase II patients was measured quarterly. For the initial two quarters, the average LOS was 1 hour 42 minutes and 1 hour 41 minutes respectively. Over the next seven quarters, LOS decreased dramatically; all were below 1 hour 30 minutes, with two quarters less than an hour, at 59 minutes and 58 minutes respectively. No symptoms of difficulty voiding have been noted on routine post-operative follow-up phone calls to patients.

Implications for Practice: Voiding criteria before discharge was unrealistic due to individual physiologic functioning, lengthy “nothing by mouth” states, combined with low intravenous infusion rates during surgery, and preoperative voiding. The sustained reduction in LOS for Phase II patients can improve the use of hospital resources, increase patient satisfaction and decrease nursing care time. With the initiated changes, the ASCU provided safe and effective nursing care and experienced high-quality outcomes for Phase II patients.

Intraoperative Clonidine for Prevention of Postoperative Agitation in Children Anesthetized with Sevoflurane: The PREVENT AGITATION Randomized Trial

Author: Mona Kildahl Jensen

Background: Postoperative agitation is a frequent (incidence 10-80%) and stressful condition for a child, family and healthcare providers and prevention would be of benefit.

Purpose: The aim was to assess the effects of intraoperative intravenous clonidine on the incidence of postoperative agitation, pain and adverse events.

Methods: Multicenter, placebo-controlled, double-blinded, randomized clinical trial, including children aged 1-5 years anesthetized with sevoflurane. Including follow-up at 24 hours and 30 days.

Intervention: Clonidine 3 micrograms per kg.

Control: Equal quantity of isotonic saline.

Both in identical vials and administered intravenously approximately 20 minutes prior to completion of surgery.

Primary outcome: Proportion of patients with one or more episodes of postoperative agitation.

Secondary and exploratory outcomes: Postoperative pain relief (morphine equivalents, time to first opioid administration), adverse events, and nausea and vomiting, shivering and time to discharge.

Results: Clonidine reduced significantly the proportion of children with one or more episodes of postoperative agitation (46 versus 86 children; RR 0,56, 95% confidence interval 0,43 to 0,73, $p < 0,0001$). Clonidine significantly reduced the use of opioids (0,46 versus 0,70 morphine equivalents) and prolonged the time to first opioid administration in the PACU (105 versus 60 minutes), with no difference in adverse events. Clonidine also reduced PONV (25 versus 43 children; RR 0,58, 95% confidence interval 0,38 til 0,89, $p = 0,012$). However, Clonidine prolonged the time to discharge from recovery (135 versus 105 minutes). None of the patients needed to be treated for hypotension or bradycardia.

Interpretation: Intraoperative intravenous Clonidine, 3 micrograms per kg, can reduce postoperative agitation, postpone and reduce the use of opioids and reduce PONV in the recovery room, in healthy pre-school children anesthetized with sevoflurane, but with a prolonged recovery time.

Education, Competence, and Role of the Nurse Working in the PACU: an International Survey

Author: K. Dahlberg¹, J. M. Brady², M. Jaensson¹, U. Nilsson³, J. Odom-Forren⁴

¹School of Health Sciences, Faculty of Medicine and Health, Örebro University, 70182 Örebro, Sweden

² Perianesthesia Nursing Consultant; ICPAN Chair, Alexandria, VA, USA

³ Division of Nursing, Department of Neurobiology, Care Sciences, and Society, Karolinska Institute, and Perioperative Medicine and Intensive Care, Karolinska University Hospital, Stockholm, Sweden

⁴College of Nursing, University of Kentucky, Lexington, KY, USA

Background: There is no international consensus regarding the education and role of the nurse working in the PACU. Nurses with different competencies, education and training provide PACU care, and the role and tasks that can be carried out by the nurse differ across the globe. This issue has been illuminated by the International Collaboration of Perianesthesia Nurses, Inc. (ICPAN) during delegate forum discussions held at past ICPAN conferences (2015 in Copenhagen, Denmark and 2017 in Sydney, Australia).

Aim: The aim of this research project is to describe the education, competence, and role of nurses who work in the PACU in 11 countries having an established perianaesthesia specialty nursing organization and membership on the ICPAN Global Advisory Council (GAC).

Methods: A web-based survey was distributed to the ICPAN GAC member or other representative of the organization (n=11): ACPAN (Australia), BRV (Belgium/Netherlands), NAPANc (Canada), FSAIO (Denmark), FANA (Finland), Hellenic Perianesthesia Nursing Organisation (Greece), IARNA (Ireland), PNC of NZNO (New Zealand), ANIVA (Sweden), BARNA (United Kingdom) and ASPAN (United States of America). Participants were asked to respond to the survey based on routines and policies in the country that their organization represents.

Results: Preliminary results show that perianesthesia nursing is recognized as a professional nursing specialty in 6/11 countries and that 8/11 have established national guidelines or practice standards for perianesthesia nurses. The Netherlands, Ireland and Australia have a formal education program for perianesthesia nurses. The nurse is often the only profession stationed in the PACU except in Sweden where there is a nurse assistant stationed in all PACUs. Nurses perform many tasks autonomously however this differs between countries.

Conclusions: Education, guidelines, other professions working in the PACU, and tasks performed by the nurse differs between countries. This knowledge can be used in international collaboration to further develop education and training for nurses working in the PACU.

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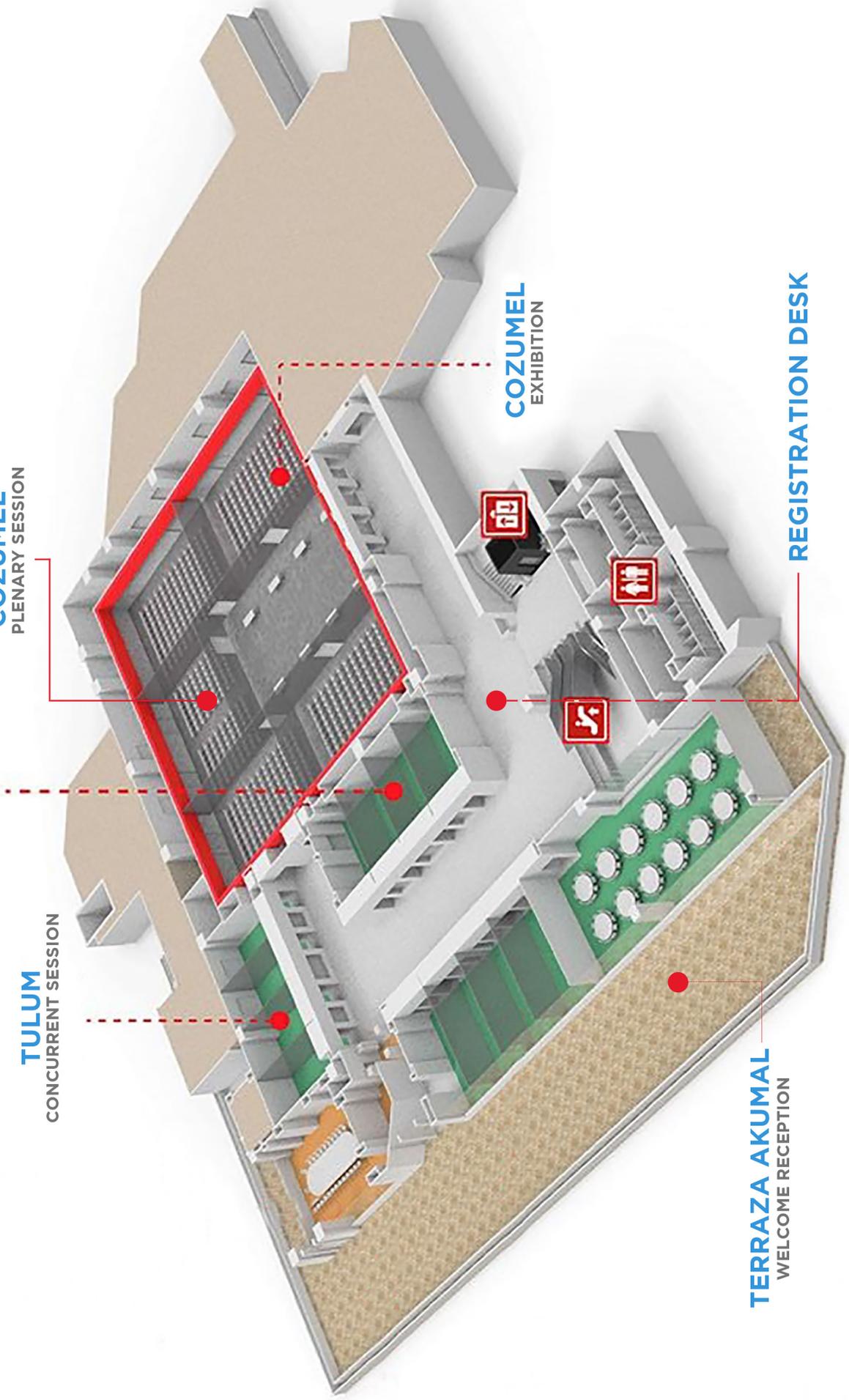
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REGISTRATION DESK

TERRAZA AKUMAL
WELCOME RECEPTION





International Collaboration of PeriAnaesthesia Nurses ICPAN

Promoting Global Excellence in PeriAnaesthesia Nursing