Kingston Nursing Research Conference

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NETWORK

Thursday, March 12 2020
Donald Gordon Centre
421 Union Street
Kingston, Ontario

Presented by:

KGH Research Institute
Kingston Health Sciences Centre
Centre des sciences de la santé de Kingston
Providence Care
Queen's University
RNAO Kingston Chapter
St. Lawrence College

Acknowledgements

We gratefully acknowledge our collaborating organizations for their significant financial contribution in support of this conference as well as their support of planning committee members.

KGH Research Institute
Kingston Health Sciences Centre
Centre des sciences de la santé de Kingston
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The planning committee wishes to acknowledge and thank those who have provided displays and exhibits of interest to conference participants.

Displays

3M Canada
Coloplast
GE Healthcare
Hollister Ltd
Integra LifeSciences
McArthur Medical
Queen's School of Nursing Graduate Programs
Stryker

Educational Grants

KCCU
Kingston Community Credit Union

On behalf of the Kingston Nursing Research Conference Planning Committee collaborating organizations,

We welcome more than 30 speakers and poster presenters to share some of the exciting and innovative nursing research taking place in the Greater Kingston Area and we anticipate your experiences today have the potential to transform your practice.

This annual conference allows participants an opportunity to be engaged in the nursing research process and allows participants to immerse themselves in a wide variety of topics, which will enable the exchange of both current clinical practice and innovative research.

We are honoured to have 83 participants joining this forum, coming from clinical practice, academia, and leadership positions as well as nursing students, including a student from St. Lawrence College-Laurentian University, and 121 Queen's School of Nursing students dropping in for portions of the day.

Our event boasts three keynote presentations:

- Medical Assistance in Dying: Nursing roles in this end-of life option by Willi Kirenko;
- Indigenous Methodologies: Learning together with community by Mary Smith; and
- Machine Learning for Health: The next maker movement and why nurses need to be in the driver seat by Alex Hamilton.

We also have a symphony of informative talks and opportunities to network and experience invaluable professional development.

We wish to recognize the Kingston Community Credit Union for generously providing an education grant to support our conference. Please visit Nicolus Blunt at the KCCU display during the conference for information about KCCU services.

Thank you for joining us in what promises to be a most rewarding and extraordinary event.

Nicole Chenier-Hogan & Barb Patterson

Nicole Chenier-Hogan & Barb Patterson
2020 KNRC Co-Chairs

Presenters

- **Darlene Bowman, RN, BN, CNN(c)**, Health Literacy Specialist, Kingston Health Sciences Centre
- **Sarah Chambers, RN, BNSc, CHPCN(C)**, Patient Educator, Oncology Program, South East Lead for Patient Education, Kingston Health Sciences Centre
- **Megan Grundy, RN**, Kingston Health Sciences Centre
- **Rya Ibit, RN, BScN, CON(C)**, Clinical Learning Specialist, Oncology Program, KIDD 9, Malignant Hematology Day Unit & Cancer Centre, and Regional Lead for Nursing Education, Kingston Health Sciences Centre
- **Dr. Marian Luctkar-Flude, RN, PhD, CCSNE**, Assistant Professor, School of Nursing, Queen's University
- **Jennifer Perry, RN(EC), PhD, PHCNP**, Professor, St. Lawrence College
- **Suzanne Poldon, RN, BNSc, MNSc**, Kingston Health Sciences Centre
- **Katherine Poser, RN, BScN, MNEd**, Professor, St. Lawrence College
- **Andrea Rochon, RN, MScN**, PhD Student, School of Nursing, Queen's University
- **Stephanie Saunders,** 3rd Year Student, School of Nursing, Queen's University
- **Dr. Steven Smith**, Vice President, Health Sciences Research, Kingston Health Sciences Centre; Vice-Dean Research, Faculty of Health Sciences, Queen's University; & President & CEO, KGH Research Institute
- **Dr. Erna Snelgrove-Clarke**, Vice-Dean (Health Sciences) and Director, School of Nursing, Queen's University

Keynote speakers

- **Alex Hamilton, RN BScN MSc MBI**, Conduit Lab
- **Willi Kirenko, MN, NP-PHC, NP-Adult**, Private practice, Erie-St. Clair region
- **Mary Smith, PhD, MScN, NP-PHC**, Assistant Professor, School of Nursing, Queen's University

Posters

- Acquired Brain Injury (ABI), Mental Health & Addictions Collaboratives: Using shared-care model and discussion about sequential/concurrent care to address complex, unmet needs of adults with moderate-to-severe ABI complicated by mental health and/or addictions ***– Michelle Pangilinan, BA, Psych, BST, Providence Care Hospital***
- Best Practice Spotlight Organization: Our Candidacy Journey – ***Rebecca Covell, RN, Jennifer Kasaboski, RN, MScN, & Sarah Price, RN, Kingston Health Sciences Centre***
- Busting the Clot Burden: The Implementation of a Slow Thrombolytic Therapy Protocol in the Treatment of Acute *Mechanical* Valve Thrombosis – ***Crystal McQuillan, RN, BScN, CCN(C), MN, Kingston Health Sciences Centre***
- Challenges with *Recruitment* in Pediatric Procedural Pain Research – ***Jennifer Revell, RN, BScN, MScN Student, University of Ottawa & staff RN, Kingston Health Sciences Centre***
- Characteristics *and* Outcomes Association with Opioid Deprescribing in Long-Term Care in Ontario: A population-based cohort study – ***Andrea Rochon, RN, MScN, PhD student, School of Nursing, Queen's University***
- Collaborative Development of a Bereavement Pamphlet for Family and Friends in a Hospital-Based Palliative Care Unit – ***Ann Murray, RN, CPHCNC(C)(CAPCE), Providence Care Hospital***
- Development *and* Evaluation of the Canadian Certified Simulation Nurse Educator (CCSNE) Program – ***Marianne Luctkar-Flude, RN, PhD, CCSNE, Assistant Professor, School of Nursing, Queen's University***
- Does a Standardized Emergency Triage Protocol for Stroke Patients Arriving between 6 and 24 hours *Improve* Access to Endovascular Thrombectomy? – ***Laura McDonough, RN, BScN & Colleen Murphy, RN, BNSC, MHS, Kingston Health Sciences Centre***
- eVisits – ***Kathi Colwell, RN, Providence Care Hospital***
- Exploring the Needs of Parents at Post-secondary Institutions: Findings from a Cross-sectional Survey Capturing Parenting-related Experiences on Campus –***Tessa Ogilvie & Daria Okonski, 4th year BNSc Students, School of Nursing, Queen's University***
- Fast Track: Improving Early Access to Inpatient Stroke Rehabilitation – ***Kathi Colwell, RN, Providence Care Hospital***
- Optimizing the Use of Continuous Pulse Oximetry Within the Pediatric Population at KHSC – ***Megan Grundy, RN, Kingston Health Sciences Centre***
- The *Economics* of Self-Regulation as a Shift Worker to Counter the Slow Violence of Shift Work: A Case Study – ***Ruhi Snyder, RPSGT, CCSH, Kingston Health Sciences Centre***
- The *Shocking* Reality - Adolescents Living with Hypertrophic Cardiomyopathy – ***Crystal McQuillan, RN, BScN, CCN(C), MN, Kingston Health Sciences Centre***
- Writing Between the Lines: A Secondary Analysis of Unsolicited Narratives from Cancer Survivors Regarding their Fear of Cancer Recurrence – ***Stephanie Saunders, 3rd Year Student, School of Nursing, Queen's University***

KNRC

Agenda

0800 am
Registration, Continental Breakfast &
Poster Viewing
- *Please arrive early to ensure a prompt start*

0830 am
Welcome
- *Debra Campbell*

0835 am
Opening Remarks
- *Steven Smith*

0845 am
<u>Keynote Presentation</u>
Medical Assistance in Dying: Nursing roles in this end-of-life option
- *Willi Kirenko*

0930 am
The Proof is in the PH: Can Inpatient Single-agent, High- dose Methotrexate Treatment be Given as an Outpatient Model of Care to Facilitate Care Closer to Home?
- *Sarah Chambers & Rya Ibit*

945 am
Writing Between the Lines: A Secondary Analysis of Unsolicited Narratives from Cancer Survivors Regarding their Fear of Cancer Recurrence
- *Stephanie Saunders*

1000 am
Refreshment Break & Poster Viewing

1030 am
Supporting Successful Transitions from Hospital to Home: Using a health literacy transition of care model to reduce hospital reutilization
- *Darlene Bowman*

1100 am
Exploring How SANEs Practice Trauma-Informed Care
- *Suzanne Poldon*

1130 am
<u>Keynote Presentation</u>
Indigenous Methodologies: Learning Together with Community
- *Mary Smith*

1215 pm
Lunch Break

1330 pm
Development and Evaluation of the Canadian Certified Simulation Nurse Educator (CCSNE) Program
- *Marian Luctkar-Flude*

1345 pm
<u>Keynote Presentation</u>
Machine Learning for Health: The Next Maker Movement & Why Nurses Need to be in the Driver Seat
- *Alex Hamilton*

1430 pm
Refreshment Break & Poster Viewing

1500 pm
Characteristics and Outcomes Associated with Opioid Deprescribing in Long-Term Care in Ontario: A population-based cohort study
- *Andrea Rochon*

1515 pm
Optimizing the Use of Continuous Pulse Oximetry within the Pediatric Population at KHSC
- *Megan Grundy*

1530 pm
Simulated NCLEX Test Environment: A Pilot Study
- *Jennifer Perry & Katherine Poser*

1545 pm
Presentation, Poster & Student Awards

1550 pm
Closing Remarks
- *Erna Snelgrove-Clarke*

Oral Presentation Abstracts

KEYNOTE

Medical Assistance in Dying (MAiD): Nursing Roles in this End-of-Life Option

Willi Kirenko, MN, NP-PHC, NP-Adult

Willi Kirenko is a Nurse Practitioner in independent practice within the Erie St. Clair region of Ontario. She has been an RN for 40 years and is a graduate with both Primary Health Care (University of Windsor) and Adult (University of Toronto) Nurse Practitioner specialties. In June 2017 she began her role in improving access to Medical Assistance in Dying (MAiD) in the community setting. Passionate about improving access to this personal choice, Willi has also taken a leadership role with training and supporting other MAiD assessors and providers. She is a NP member with the Ontario College of Family Physicians MAiD Collaborative Mentoring Network, a board member of the Canadian Association of MAiD Assessors and Providers (CAMAP), and the moderator for the CAMAP Assessor Forum.

The Proof is in the pH. Can inpatient single agent high dose methotrexate treatment be given as an outpatient model of care to facilitate care closer to home?

Sarah Chambers, RN, BNSc, CHPCN(C) and Rya Ibit, RN, BScN, CON(C), Kingston Health Sciences Centre

Problem/Issue: Historically, patients receiving single agent high dose methotrexate required an inpatient admission. The regimen is complex, as it requires hyper-hydration and oral sodium bicarbonate to maintain urine alkalinization, as well as frequent patient monitoring including nursing assessments, bloodwork and urinalysis (pH). With the increasing organizational need for inpatient beds and a drive to promote care closer to home and patient autonomy, a working group was formed to assess if patients could receive this regimen as an outpatient model of care. One goal of this project is to allow patients receiving single agent high dose methotrexate to come in to an outpatient clinic daily for assessment but spend more time at home during off hours.

Methods: An environmental scan of other centres' models of care for single agent high dose methotrexate was completed. From the scan, it was identified that regimen details such as amount of hydration and sodium bicarbonate, as well as patient monitoring, was variable across organizations. This prompted a review of literature and comparison of evidence-based practice and KHSC current state practices. The working group process mapped and compared the current state inpatient model to visions for a future state outpatient model of care, ensuring necessary patient diagnostics, supportive care, and monitoring was included. The nursing leads for the working group considered risk assessments for ergonomics and fall prevention, nephrotoxicity, and other common toxicities, safety in the home and adult learning needs. They also evaluated the need for daily patient assessment criteria and monitoring and how the model would fit into a Monday to Friday clinic schedule. Once the initial plan was developed and approved, changes were made to the regimen to support patient assessment and monitoring criteria, hydration, and sodium bicarbonate dosing and scheduling. The nursing team created supporting documents such as CADD pump administration instructions, a daily step-by-step regimen instruction guide relative to clinic hours of operation and patient education resources and diaries. We developed patient eligibility and suitability criteria based on risk assessments and known toxicities for this drug. The nursing leads also evaluated the patient or caregiver workload involved to facilitate patient understanding and adherence to regimen requirements. This evaluation was validated through consultation with a patient and family advisor. A thorough learning needs assessment was completed with each patient, allowing for patient teach-back opportunities. After each trial, patient feedback was collected on patient education materials and they were adjusted as necessary before the next patient trial. Feedback was also collected from frontline nursing staff and adjustments to the next trial plan were made when required.

Results: To date, six trials involving three patients have been completed. Trials one to three included inpatient admissions modeling outpatient regimen and experience. Trials four to six have successfully been completed as a fully outpatient model of care. Positive patient feedback has been received from the patients that have participated fully in the outpatient model of care.

Conclusions: Despite small sample size, trials thus far have shown single agent high dose methotrexate can be given using an outpatient model of care with no adverse effects. Trials continue as the team evaluates the success of each trial and makes adjustments as necessary to support positive patient experience and safety in the home. This will hopefully drive future practice changes at Kingston Health Sciences Centre, facilitating more safe outpatient treatments and an increase in patient autonomy.

Writing between the lines: A secondary analysis of unsolicited narratives from cancer survivors regarding their fear of cancer recurrence

Stephanie Saunders, third-year student, School of Nursing, Queen's University

Problem/Issue: A survey study was conducted to examine the fear of cancer recurrence (FCR) in cancer survivors. Among those participants (n=1,002), 47 participants provided unsolicited narratives on their returned questionnaires. This secondary analysis aims to enhance our understanding about the reasons why cancer survivors provided unsolicited narratives on a questionnaire about FCR, to determine the characteristics of participants and if differences existed between the demographic, clinical variables and level of FCR between those who added narratives and to those who did not, and lastly, to identify the location and items on the questionnaire that garnered the most unsolicited narratives.

Methods: A mixed-methods analysis was used to examine demographic data, clinical profiles and FCR levels between participants who provided unsolicited narratives and those who did not using SPSS version 25. An interpretive description approach was used to examine the narratives and guide the emergence of themes.

Results: Participants who included unsolicited narratives (n=47) in their returned questionnaires were 66 years old (± 12 years), female (n=39), and diagnosed with breast cancer (n=29). Few demographic differences existed between the two groups. Participants who wrote unsolicited narratives had a difference in clinical characteristic including time since diagnosis, number of comorbidities and a diagnosis of another primary, recurrence or metastatic cancer, compared to the participants who did not provide narratives. There were three questions (Item 13, 17, 31) on the *Fear of Cancer Recurrence Inventory* that garnered the most unsolicited narratives. Emergent themes from the narratives included; telling the story of their post-cancer journey, contextualizing the FCR experience and using their voice towards change in cancer care.

Conclusion: Future implications for researchers could include creating questionnaires that have a space for participants to express their responses and add additional thoughts about the questionnaire. As seen in this secondary analysis, some participants might want extra space to provide context and clarification to their responses. Therapies for FCR could include expressive-type interventions as a subset of cancer survivors who could benefit from story-telling or journaling exercises. These types of interventions are easily implementable by nurses working with cancer patients.

Supporting Successful Transitions from Hospital to Home: Using a Health Literacy Transition of Care Model to Reduce Hospital Reutilization

Darlene Bowman, RN, BN, CNN(c), Health Literacy Specialist, Kingston Health Sciences Centre

Problem/Issue: Care transitions refer to the movement of patients from one healthcare provider or setting to another and are recognized as high risk scenarios for patient safety. Health literacy, an important social determinant of health, is a wide range of skills that allow people to act on information to live healthier lives. Low health literacy is associated with increased transitional care needs, higher rates of hospital utilization, and poor self-management skills, especially for those living with chronic disease. In Canada the highest rates of hospital reutilization are observed in those commonly admitted to general internal medicine (GIM) services with conditions such as heart failure, chronic obstructive pulmonary disease, and pneumonia. Patients and their caregivers have identified that transitional care from hospital to home is fragmented. They experience conflicting recommendations and often leave with inadequate or confusing information. Models of care that partner with patients to promote safe and effective transitions are crucial. The objectives of this study were (1) to examine the effects of a health literacy based transition of care (TOC) model on hospital reutilization for patients transitioning from hospital (a single acute care centre) to home, and (2) to identify potential health literacy related risk factors for hospital reutilization.

Methods: A tailored health literacy TOC model was co-produced with an interprofessional team. The model includes (1) a patient-and family-centred discharge summary (My Discharge Plan), (2) the use of health literacy strategies (plain language and teach-back) to enhance patient and family education, and (3) semi-scripted post-discharge follow-up phone calls. Using an iterative process over 18 months, the model was implemented with patients discharged to home from the GIM program at Kingston Health Sciences Centre. A mixed method approach was used to collect and analyze data.

Results: The main outcomes measured included hospital readmission within 30 days and ED revisit within 7 days of discharge. The follow-up phone calls allowed for the collection of secondary measures such as prevalence of post-discharge medication discrepancies and associated contributing factors. Process of care measures included preparedness for discharge, which was measured using the Care Transition Measure-3 (CTM-3). The CTM-3 measures the extent to which hospital providers prepared patients for discharge and participation in post-discharge self-management. The 30-day hospital readmission rate prior to implementation of the TOC model was 22.77% and post implementation was 17.51%. The 7-day ED revisit rate prior to the TOC model was 16.95% and post implementation was 11.69%. A total of 22.75% of patients experienced 1 or more medication discrepancies, defined as any difference between the discharge medication list and the medications a patient reports taking at home. Using the Medication Discrepancy Tool (MDT) 57.77% of discrepancies were categorized as patient associated and 42.23% were categorized as system associated. The health literacy TOC model was associated with higher CTM-3 scores.

Conclusions: Patients who participated in the full health literacy TOC model had lower rates of hospital reutilization. CTM-3 scores suggest patients and caregivers felt better prepared to transition home from hospital. A significant percentage of patients experienced transition associated medication discrepancies. MDT items are actionable at both the patient and system level, suggesting that this tool could be used to inform ongoing quality improvement efforts to ensure medication safety at times of transitions. Patient and caregiver insights gathered during this work should continue to inform the efforts of clinicians, hospital leaders, and policy makers working to improve transitional care and reduce hospital readmission rates. Spread of this health literacy TOC model should be explored.

Exploring How Sexual Assault Nurse Examiners Practise Trauma-Informed Care

Suzanne Poldon, RN, BNSc, MNSc, Kingston Health Sciences Centre

Problem/Issue: Sexual violence is an over-arching term describing sexual acts where consent is not freely given. Registered nurses employed as Sexual Assault Nurse Examiners (SANEs) provide care to help address the medical and legal needs of victims/survivors of sexual violence. Trauma-informed care (TIC) is an organizational approach recommended in the care of individuals who have experienced trauma. The purpose of this study was to understand how SANEs incorporate trauma-informed approaches in the care of adult and post-pubescent adolescent victims/survivors of sexual violence in Ontario, Canada.

Methods: The research question was addressed with a qualitative interpretive description approach. Sexual Assault Nurse Examiners employed in Ontario were purposively recruited to participate in semi-structured interviews. Eight consenting participants completed interviews, which were recorded using online teleconferencing. Interviews were transcribed verbatim and analyzed using qualitative data analysis as outlined by Miles, Huberman, and Saldana.

Results: Six main themes emerged: (1) the importance of understanding the patient's experience; (2) personalized connection: developing a safe nurse-patient relationship; (3) choice: the framework of how we do things; (4) re-building strengths and skills to support healing and post-traumatic growth; 5) a wonderful way to practise: facilitators and benefits of trauma-informed practice; and (6) challenges to trauma-informed practice. The main themes were expanded into sixteen sub-themes.

Conclusion: Overall, the findings help our understanding of how the principles of TIC are incorporated into the practise of a sample of SANEs. The results of this research indicate the need for support of providers who deliver TIC, and for education about TIC beginning in undergraduate curriculums. More research about this topic is warranted to strengthen the evidence base for trauma-informed practice in SANE programs and across health care settings.

KEYNOTE

Indigenous Methodologies: Learning together with community

Mary Smith, PhD, MScN, NP-PHC

Dr. Mary Smith holds a PhD in Nursing from the University of Victoria and is a Primary Health Care Nurse Practitioner in Ontario. Presently, she is also an Assistant Professor at Queen's University in the School of Nursing and is keenly interested in pursuing Indigenous renal and mental health research. This interest has been fueled through her own experiences as a live kidney donor and as a member of a First Nations community. She has also been a volunteer with the Kidney Foundation of Canada and continues to offer peer support within her own community, the Beausoleil First Nation. Dr. Smith has provided presentations throughout Canada, the United States and Australia on her experiences with kidney organ donation. Her recent doctoral research concerning kidney disease within a First Nation community has been accepted by the International Journal of Indigenous Health for publication during the fall of 2019. Thorough the Kidney Foundation of Canada's Allied Health Grant, Dr. Smith and her research team are inspired towards finding strength-based Indigenous solutions towards kidney health.

Development and Evaluation of the Canadian Certified Simulation Nurse Educator (CCSNE) Program

Dr. Marian Luctkar-Flude, RN, PhD, CCSNE, Assistant Professor, School of Nursing, Queen's University

Problem: The Canadian Association of Schools of Nursing (CASN) has recently outlined six competencies and related indicators for the Canadian Certified Simulation Nurse Educator (CCSNE) designation. CASN has also launched an online Canadian Simulation Nurse Educator (CSNE) Certification Program to support nurse educator competency development in simulation-based pedagogy, practices and technologies. Upon successful completion of four program modules, participants will be prepared to write the national certification exam to achieve the CCSNE designation.

Objective: To evaluate the CSNE program and its four educational modules, and to describe nurse educators' perceptions of the strategies employed, and their ability to meet the intended learning outcomes.

Methods: Four simulation educational modules were developed: (1) Theory and Design; (2) Facilitation; (3) Interprofessional Education; and (4) Evaluation and Scholarship. Modules were delivered online by experienced simulation nurse educators employing a variety of teaching strategies. Evaluation was conducted using an online survey and telephone interviews. Self-assessment rubrics were used to evaluate module and program competency indicators levelled by Benner's Five Stages of Clinical Competency.

Results: Feedback was generally positive; however, recommendations for improvement include better management of technology, and providing more feedback on a regular basis. Learner self-assessed competence improved related to the course learning outcomes and indicators. The first cohort of participants to complete the CSNE course wrote the first CCSNE certification exam in March 2019 and all were successful.

Conclusions: We demonstrated feasibility and acceptability of delivering an online nurse educator simulation certification course using a variety of synchronous and asynchronous activities. Results will inform modification of the modules to enhance learning across a group of nurse educators with different levels of clinical, teaching and simulation experience. The new CCSNE program is contributing to the development of a new cadre of nurse educators with knowledge and skill in the design, facilitation and evaluation of clinical simulation in nursing and interprofessional education.

KEYNOTE

Machine learning for health: the next maker movement and why nurses need to be in the driver seat.

Alex Hamilton, RN BScN MSc MBI

Alex Hamilton is a recent graduate of the Master of Biomedical Informatics (MBI, 2019) program at Queen's University and serves as a data analyst at Conduit Lab under the direction of Dr. David Maslove. At Conduit Lab, he uses machine learning and other computational techniques to derive insight from high-frequency monitoring data generated in the Kingston Health Science Centre (KHSC) Intensive Care Unit. Before his current role, he examined the feasibility of deep learning and other computer vision techniques for prostate cancer detection in transrectal ultrasound images as a student in Med-i Lab.

Since graduating from St. Lawrence College/Laurentian University (BScN, 2010) and Queen's University (MSc, 2017) he has worked in a variety of clinical roles, namely as a staff nurse and cardiac care coordinator in the KHSC Intensive Care Unit and cardiac programs. He has also worked as a lab and clinical instructor for baccalaureate nursing students at St. Lawrence College. After completing his undergraduate training, he started a local technology company, New Atom Technologies, specializing in mobile application development for health. Given the recent explosion in big data and interest in Artificial Intelligence (AI), the company is pivoting to analytics and data science consulting in the health care space.

Alex has a passion for health information technology and believes that the ability to manage and process big data is an essential skill for nurses and other health researchers. His interests in this space have led to the creation of Bedside.ai, a web community aiming to improve collaboration between the computer science and health communities and to expose clinicians to the skills needed for participation in the development and deployment of machine learning applications for the betterment of patient and operational outcomes.

Characteristics and Outcomes Associated with Opioid Deprescribing in Long-Term Care in Ontario: A Population-Based Cohort Study

Andrea Rochon, RN, MScN, PhD Student, School of Nursing, Queen's University

Problem/Issue: Residents of long-term care (LTC) facilities in Ontario are older, frailer, more vulnerable, and have higher care needs than their community-dwelling counterparts. They are also prescribed opioids nearly twice as often, despite opioids being associated with a number of negative outcomes, including emergency department visits and hospitalizations. Recent clinical guidelines have recommended deprescribing opioids when the risks of use outweigh the benefits. While recent research has focused on the deprescribing of other high-risk medications, (e.g. antipsychotics), there has been very little research conducted on the characteristics and outcomes associated with deprescribing long-term opioid therapy (LTOT) for residents of LTC facilities. In order to improve clinical decision-making, appropriate prescribing/deprescribing, safety, and quality of care for residents in LTC facilities, we need to determine the personal characteristics associated with opioid deprescribing and subsequent outcomes. Therefore, the overall purpose of this research study is to examine opioid deprescribing among residents of LTC facilities in Ontario, 65 years of age and older, receiving LTOT (an active prescription for three months or greater). The research questions which will be examined in this presentation are: 1) what is the proportion of residents of LTC facilities in Ontario who had their opioids deprescribed following LTOT between April 1, 2016 and March 31, 2018? and 2) what are the resident and facility characteristics of LTC facilities in Ontario who are deprescribed LTOT compared to those who continue on LTOT?

Methods: The study will be conducted using a population-based retrospective cohort design with a prospective follow-up. The study will use a subset of the routinely collected health administrative databases held at the Institute for Clinical Evaluative Sciences, including the Continuing Care Reporting System. Inclusion criteria for the cohort include individuals 66 years of age or older, residents of a LTC facility in Ontario, with a valid OHIP number, and an active prescription for one or more nonparenteral opioid(s) for greater than 90 days prior to the index date. Data analysis, including descriptive statistics of the resident and facility characteristic variables, will be conducted using SAS software.

Results: The data are currently being collected and analyzed, and the results of the analysis of the two research questions will be presented.

Conclusions: This study will provide an Ontario perspective of the resident and facility characteristics associated with opioid deprescribing for residents of LTC facilities. The results will allow for recommendations to inform safe, quality care, direct future research, and inform health policy regarding opioid deprescribing for residents of LTC facilities.

Optimizing the Use of Continuous Pulse Oximetry Within the Paediatric Population at KHSC

Megan Grundy, RN, Paediatric Registered Nurse, Kingston Health Sciences Centre

Problem: The Pediatric Department's current use of continuous pulse oximetry may be contributing to alarm fatigue amongst nursing staff, a strain on staffing ratio and a financial burden on the Paediatric Department. Anecdotal reports from front line staff are that continuous pulse oximetry has a high false alarm rate. False alarms lead to alarm fatigue resulting in delayed response or disregard of the alarms altogether.

Method: A retroactive review of admissions to the Paediatric Department was completed. Items analyzed included: (1) Percentage of patients that had a Patient Care Order for continuous pulse oximetry and (2) staffing ratios required to sustain current use of continuous pulse oximetry. A checklist was used to determine whether current alarms were true, false or unwitnessed/unknown, and if they required intervention. Parallel to these investigations, the front line staff completed a survey to better understand the current use and perceptions of continuous pulse oximetry.

Results: The retroactive review revealed that from September to February (period of highest acuity and patient volume) approximately 50% of patients had continuous pulse oximetry ordered which led to a 52% increase in staffing ratios. The checklist revealed that there was low alarm reliability, with only 13% of alarms being true alarms. The survey results confirmed that continuous pulse oximetry contributed to the alarm fatigue of front-line staff. Of those surveyed, 69% indicated that they had witnessed alarms ignored and 57% of these respondents stated that alarms were ignored frequently. Lastly, 81% believe that there is an over-reliance on the continuous pulse oximetry.

Conclusions: Based on the retroactive review, alarm reliability data and survey results, it is evident that the lack of a guideline has contributed to an over-reliance on continuous pulse oximetry that has caused alarm fatigue, an increase in staffing ratios, and fiscal strain. To combat these findings a working group was formed to create guidelines for the use of continuous pulse oximetry. The guideline was implemented on October 15th, 2019 with plans to review in early 2020.

Simulated NCLEX test environment: A pilot study

Jennifer Perry, RN(EC), PhD, PHCNP, Professor, St.Lawrence College; and
Katherine Poser, RN, BScN, MNEd, Professor, St. Lawrence College

Problem/Issue: NCLEX-RN success rates are influenced by both academic (study guides and preparatory materials) and non-academic (environment, mood) factors. Candidates' stress levels and test anxiety are especially heightened in high stakes testing, which may result in poor test outcomes for some test-takers. Simulation, including rehearsal, role play and interaction in high fidelity environments in nursing education, is recognized as an effective pedagogical approach. A search of the literature reveals that cognitive rehearsal, using an authentic simulated NCLEX-RN exam setting, including simulation of the high scrutiny security that is employed on exam day, and its effect on the high stakes test-taking experience has not been studied.

Research Question: Did participation in a simulated NCLEX test environment have an effect on participants' self-reported anxiety, preparedness and test performance at the time of the simulation, and during the NCLEX exam? Did the participants find it useful to have participated in the simulation in preparation for taking the NCLEX exam?

Methods: A repeated measures longitudinal design was used to determine perceptions of nursing students regarding test anxiety, preparedness and test performance before and after exposure to an optimally authentic simulated NCLEX test environment and exam, and again pre- and post-NCLEX exam. After obtaining Research Ethics Board approval, both qualitative and quantitative measures were used to determine whether nursing students' perceptions of their test anxiety and test performance change over time as a result of the test environment simulation, and whether the participants felt the rehearsal was a useful tool in preparation for the licensure exam.

Results: Data analysis is in progress. Interim analysis of participants' (n=16) data revealed that most reported moderate test anxiety. In days prior to the simulation, half reported they expected anxiety level higher than preparedness level; the average anxiety level was similar to the average preparedness level when all participants were pooled. At the second timepoint, participants' anxiety level going into the simulation dropped from a rating of 65 in the days prior to 45 in the simulation, while preparedness rating rose from 65 to 73. Participants rated themselves slightly more distracted by the test environment than they thought they would be, confirmed by their narrative account. Results at timepoints related to pre- and post- NCLEX are pending.

Conclusion: Preliminary data analysis of early timepoints indicates that a simulated NCLEX test environment did not have a negative effect on test anxiety or perception of preparedness. Analysis of data from later timepoints will reveal whether the rehearsal experience affected the true NCLEX experience.

Poster
Abstracts

Acquired Brain Injury (ABI), Mental Health & Addictions Collaboratives: Using shared-care model & discussion about sequential/concurrent care to address complex, unmet needs of adults with moderate-to-severe ABI complicated by mental health and/or addictions

Michelle Pangilinan, BA, Psych, BST, Providence Care Hospital

Problem/Issue – Catalysts were Ontario Neurotrauma Foundation (ONF)/ Institut national d'excellence en santé et en services sociaux (INESSS), Clinical Practice Guideline for the Rehabilitation of Adults with Moderate to Severe Traumatic Brain Injury (TBI) (2016) along with provider and user experience of gaps in the system resulting in unmet needs. Through a self-sustaining shared-care model, the initiative seeks to increase system capacity to address complex, unmet needs of individuals living with moderate to severe ABI complicated by mental health and/or addictions with presence of high risk factors.

Methods – A 20-member, multi-sector (hospital and community-based rehabilitation and mental health, addictions, corrections, and home and community care) and lived experience working group met frequently. Using change management strategies, a mechanism for addressing the complex, unmet needs of adults with moderate-to-severe ABI complicated by mental health and/or addictions was created. The group developed the referral process, inclusion and exclusion criteria, consent process and forms, and discussion format for the three Collaboratives covering the region. Performance Indicators were identified to track impact and membership "job descriptions" were developed for continuity of representatives on the Collaboratives. As a result of the working group, a 16 member regional initiative (ABI, Physiatry, Mental Health, Addictions, Housing, and Local Health Integration Network (LHIN) Home & Community Care Services) was created to address risks of adults with ABI and mental health/addiction.

Results – As a result of the working group, three Collaboratives have been implemented across the Local Health Integration Network. To date, 9 cases have been presented resulting in 80 recommendations being brought forward.

Conclusions – The shared-care model incorporating discussion about sequential/concurrent care leads to improved continuity and efficiency of care, along with enhanced provider understanding of services, mandates, roles, admission criteria, and how best to work with people with ABI and comorbidities. In addition, improved communication and enhanced collaboration is fostered amongst service providers. Addressing gaps in the system, Collaboratives provide a mechanism to generate effective ways to address the unmet needs of people identified as high risk with moderate to severe ABI and a comorbidity of mental illness and/or addictions. Clients consent presentation by the Lead Agency, consents are valid for 6 months and monthly updates are provided by the Lead Agency.

Best Practice Spotlight Organization Our Candidacy Journey

Rebecca Covell, RN, Jennifer Kasaboski, RN, MScN, & Sarah Price, RN, Kingston Health Sciences Centre

Problem: Kingston Health Sciences Centre is collaborating with the Registered Nurse Association of Ontario (RNAO) to become a Best Practice Spotlight Organization (BPSO). This partnership with the RNAO aims to create a culture of evidence based practice and collaboration. Preventing falls and Reducing Injury from falls and the Assessment and Management of pain best practice guidelines (BPG) were implemented. The overall objective of implementation was to increase patients' satisfaction of pain management while in hospital and to decrease the overall number of falls per patient days. Baseline data indicated that 57% of those surveyed reported pain "always well managed" while hospitalized and a fall rate 4.64 falls per 1000 patient days.

Methods: Implementation followed the steps outlined in the BPG knowledge to action framework. Practice gaps were identified, synthesized and a selection of appropriate recommendations were chosen and subsequently implemented. The chosen recommendations aim to facilitate knowledge translation, education and the delivery of effective evidence based care. These recommendations included the implementation of the following interventions:

- unit based safety huddles
- target toileting practices
- comprehensive pain assessment documentation
- staff education via in-time teaching, unit in-services and posters
- Development of patient and family resources on fall prevention and pain management

Quarterly chart audits and patient satisfaction surveys provide data that is used to support further change management strategies.

Results: Working from the quarterly professional practice audits it is apparent that new practices are being adopted, sustained and an overall improvement in the uptake of evidence based care practices.

Conclusion: The RNAO BPG's are resources that facilitate the delivery of effective evidence based care. This poster presentation will highlight the utilization of the RNAO implementation toolkit framework to effectively integrate the recommendations outlined in the best practice guidelines. This project's overall goal was to aim to build the culture of evidence based practice at Kingston Health Sciences Centre.

Busting the Clot Burden: The Implementation of a Slow Thrombolytic Therapy Protocol in the Treatment of Acute Mechanical Valve Thrombosis

Crystal McQuillan, RN, BScN, CCN(C), MN, Kingston Health Sciences Centre

Background: Acute valve thrombosis is a rare but serious complication of mechanical valve replacement surgery and is associated with high rates of morbidity and mortality. Acute valve thrombosis causes partial or complete obstruction of the valve area leading to valve dysfunction. This is characterized by abnormally high gradients across the valve on echocardiogram. Clinical manifestations depend on the severity of obstruction. Urgent diagnosis is essential to facilitate timely treatment and prevent patient deterioration. Treatment options include surgical intervention, anticoagulation and thrombolytic therapy (TT). Current guidelines recommend surgery for patients who are hemodynamically unstable or with contraindications to TT. Alternatively, TT, administered slowly, with treatment cycles guided by echo, has shown favourable outcomes with low risk for major complications when compared to other treatment modalities.

Purpose: To discuss the implementation of a protocol using slow TT for patients presenting with acute valve thrombosis at Kingston Health Sciences Centre.

Methods: A retrospective chart review was conducted to present the details of patients who underwent slow TT using a cyclical treatment of alteplase (TPA) and heparin infusions under echo guidance. The review included patient selection criteria, implementation of the protocol and an overview of patient outcomes. The review concluded that slow TT was a safe option and patients had no incidences of bleeding requiring intervention.

Implications to Practice: Raising awareness and education of the multidisciplinary team regarding TT for acute valve thrombosis is essential as it has been proven to have favourable patient outcomes. Patients experience a benefit in terms of risk of bleeding versus risk of surgical complications, reduced hospital stay and shorter recovery time, while the organization benefits from shorter length of stay and reduced costs by avoiding repeat surgical intervention. Cardiovascular nurses play a pivotal role in the safe implementation and patient monitoring during TT.

Challenges with Recruitment in Pediatric Procedural Pain Research

Jennifer Revell, RN, BScN, Kingston Health Sciences Centre , MScN Student, University of Ottawa

Problem/Issue: Nearly all children undergoing painful needle procedures experience pain. No research exploring pediatric procedural pain management practices at the study hospital had been previously conducted. A study as designed to examine the pain management practices that nurses were using for hospitalized toddlers during venipuncture. Despite a seemingly well-designed observational research protocol, no potential participants were identified, and the study was prematurely closed to enrollment.

Methods: Existing pediatric research literature was examined, and the research study settings were reviewed to identify possible explanations for the recruitment difficulties experienced during the study's screening process.

Results: Five main factors that contributed to the screening difficulty were identified: 1) recruitment strategies, 2) availability of the target sample, 3) changing clinical practices, 4) researcher availability, and 5) competing interests within the research settings. While it was ultimately hypothesized that the availability of the target sample and changing clinical practices were the most relevant factors for the study’s failure to recruit, components of each of these factors helped explain, at least in part, the recruitment challenges that were encountered.

Conclusions: When designing future studies, researchers should consider the effect of these five factors. Within the context of the initially proposed study, a similar research study that included more general inclusion criteria using a readily available sample and a retrospective rather than an event sampling approach to adapt to perceived changes in clinical practices was designed.

Characteristics and Outcomes Associated with Opioid Deprescribing in Long-Term Care in Ontario: A Population-Based Cohort Study

Andrea Rochon, RN, MScN, PhD Student, School of Nursing, Queen's University

Problem/Issue: Residents of long-term care (LTC) facilities in Ontario are older, frailer, more vulnerable, and have higher care needs than their community-dwelling counterparts. They are also prescribed opioids nearly twice as often, despite opioids being associated with a number of negative outcomes, including emergency department visits and hospitalizations. Recent clinical guidelines have recommended deprescribing opioids when the risks of use outweigh the benefits. While recent research has focused on the deprescribing of other high-risk medications, (e.g. antipsychotics), there has been very little research conducted on the characteristics and outcomes associated with deprescribing long-term opioid therapy (LTOT) for residents of LTC facilities. In order to improve clinical decision-making, appropriate prescribing/deprescribing, safety, and quality of care for residents in LTC facilities, we need to determine the personal characteristics associated with opioid deprescribing and subsequent outcomes. Therefore, the overall purpose of this research study is to examine opioid deprescribing among residents of LTC facilities in Ontario, 65 years of age and older, receiving LTOT (an active prescription for three months or greater). The research questions which will be examined in this presentation are: 1) what is the proportion of residents of LTC facilities in Ontario who had their opioids deprescribed following LTOT between April 1, 2016 and March 31, 2018? and 2) what are the resident and facility characteristics of LTC facilities in Ontario who are deprescribed LTOT compared to those who continue on LTOT?

Methods: The study will be conducted using a population-based retrospective cohort design with a prospective follow-up. The study will use a subset of the routinely collected health administrative databases held at the Institute for Clinical Evaluative Sciences, including the Continuing Care Reporting System. Inclusion criteria for the cohort include individuals 66 years of age or older, residents of a LTC facility in Ontario, with a valid OHIP number, and an active prescription for one or more nonparenteral opioid(s) for greater than 90 days prior to the index date. Data analysis, including descriptive statistics of the resident and facility characteristic variables, will be conducted using SAS software.

Results: The data are currently being collected and analyzed, and the results of the analysis of the two research questions will be presented.

Conclusions: This study will provide an Ontario perspective of the resident and facility characteristics associated with opioid deprescribing for residents of LTC facilities. The results will allow for recommendations to inform safe, quality care, direct future research, and inform health policy regarding opioid deprescribing for residents of LTC facilities.

Collaborative Development of a Bereavement Pamphlet for Family and Friends in a Hospital-based Palliative Care Unit

Ann Murray, RN, CPHCNC(C)(CAPCE), Providence Care Hospital

Issue: Our palliative care unit did not have a tangible resource for family and friends during final days, and immediate aftermath of the death of their loved one. We wanted to ensure, that as they journeyed through grief and bereavement, they had a reference to use days or months after losing their loved one.

Method: Investigated community groups that provide bereavement services. We did comprehensive literature review. Engaged the input of physicians, program manager, social worker, spiritual health practitioner, physiotherapist, occupational therapist, nursing, nursing student and volunteers on our interprofessional team. Team reviewed final draft for approval.

Results: Invoked great dialogue among the interprofessional team. Pamphlets were printed in colour and made available on display rack in central location on the unit. Tool can be used to educate new staff and be available for other units in the hospital.

Conclusion: Innovated team based improvement to provide psychological and spiritual support for families and friends of patients in our Palliative Care Unit. Nurses have a timely resource to physically hand to patient’s loved ones as they leave our unit for last time. Nurses now feel that they can end the relationship in a healthy and supportive manner. This also helps meet nurses need for closure.
This poster will illustrate the pamphlet and presents a model for other hospice palliative teams to model

Development and Evaluation of the Canadian Certified Simulation Nurse Educator (CCSNE) Program

Marianne Luctkar-Flude, RN, PhD, CCSNE, Assistant Professor, School of Nursing, Queen's University

Problem: The Canadian Association of Schools of Nursing (CASN) has recently outlined six competencies and related indicators for the Canadian Certified Simulation Nurse Educator (CCSNE) designation. CASN has also launched an online Canadian Simulation Nurse Educator (CSNE) Certification Program to support nurse educator competency development in simulation-based pedagogy, practices and technologies. Upon successful completion of four program modules, participants will be prepared to write the national certification exam to achieve the CCSNE designation.

Objective: To evaluate the CSNE program and its four educational modules, and to describe nurse educators' perceptions of the strategies employed, and their ability to meet the intended learning outcomes.

Methods: Four simulation educational modules were developed: (1) Theory and Design; (2) Facilitation; (3) Interprofessional Education; and (4) Evaluation and Scholarship. Modules were delivered online by experienced simulation nurse educators employing a variety of teaching strategies. Evaluation was conducted using an online survey and telephone interviews. Self-assessment rubrics were used to evaluate module and program competency indicators levelled by Benner's Five Stages of Clinical Competency.

Results: Feedback was generally positive; however, recommendations for improvement include better management of technology, and providing more feedback on a regular basis. Learner self-assessed competence improved related to the course learning outcomes and indicators. The first cohort of participants to complete the CSNE course wrote the first CCSNE certification exam in March 2019 and all were successful.

Conclusions: We demonstrated feasibility and acceptability of delivering an online nurse educator simulation certification course using a variety of synchronous and asynchronous activities. Results will inform modification of the modules to enhance learning across a group of nurse educators with different levels of clinical, teaching and simulation experience. The new CCSNE program is contributing to the development of a new cadre of nurse educators with knowledge and skill in the design, facilitation and evaluation of clinical simulation in nursing and interprofessional education.

Does a Standardized Emergency Triage Protocol for Stroke Patients Arriving Between 6 and 24 hours Improve Access to Endovascular Thrombectomy?

Laura McDonough, RN, BScN & Colleen Murphy, RN, BNSC, MHS, Kingston Health Sciences Centre

Problem/Issue: Highly selected patients who present beyond 6 hours of stroke symptom onset may now benefit from Endovascular Thrombectomy (EVT). In response to the extended time window for EVT, Kingston Health Sciences Centre (KHSC) Emergency Department (ED) collaborated with the Stroke Network of Southeastern Ontario to update the Acute Stroke Protocol (ASP). ACT-FAST, a large vessel occlusion screen was selected to triage patients arriving in KHSC ED between 6 and 24 hours of symptom onset. If patients have “positive ACT-FAST” screens, ED nurses directly activate the ASP. The ASP team then assesses EVT eligibility using advanced CT Perfusion software.

Methods: 1:1 education about the ACT-FAST algorithm was provided with ED nurses using a flexible approach for a busy ED. ED physicians received communication about the updated ASP. Unstructured interviews were conducted with ED nurses and physicians to gather feedback about the ACT-FAST and the new process.

The volume of patients presenting between 6 and 24 hours, ASP activations in ED, and EVT rates pre & post implementation in March 2019 were analyzed.

Results: Overall, feedback about the updated ASP was positive. ED nurses commented that ACT-FAST is “simple to use” and physicians commented that “most ASPs are being called appropriately.” Challenges mostly relate to uncertainty about stroke symptom onset time. The volume of patients presenting between 6 and 24 hours remained relatively the same. The number of ASP activations and the proportion that go on to receive EVT increased.

Conclusions: The Acute Stroke Protocol was successfully updated with the adoption of ACT-FAST for stroke triage in KHSC ED. A standardized Emergency Triage Protocol for stroke patients improved access to EVT as evidenced by relative increase in the ASP activations and EVT volumes. The learnings were incorporated in spread to all community hospital EDs in Southeastern Ontario.

eVisits

Kathi Colwell, RN, Providence Care Hospital

Problem/Issue

"Ontarians made nearly 900,000 virtual visits with health care professionals in 2018. And interest in virtual health care is growing every day – for eVisits, online consultations, email, and more. We hear from clinicians and patients the many reasons to improve and support more access to virtual care. For example, expanding access could enhance the quality of care for many people, especially for those living in rural and remote communities. So, what does it take to make it happen?" – Health Quality Ontario

The project aims to reduce avoidable in-patient transfers for out-patient follow-up visit at KHSC Stroke Prevention Clinic. We are trying aiming to reduce/minimize the time the admitted in-patients are away from rehab, decrease costs associated with transport services and allow patients (and family members) to participate in follow-up visits from the comfort of their inpatient room.

Methods

Building on a local study ("Home Virtual Visits for Outpatient Follow-Up Stroke Care: Cross-Sectional Study") we are piloting inter-hospital patient appointments. We are using the existing OTN eVisit platform. OTN eVisits are booked by the Stroke Prevention Clinic neurologist at KHSC, and Providence Care Hospital inpatient Charge Nurse and Unit Clerk coordinate the use of a purpose build eVisit Work Station on Wheels (WOW) to allow the physician to connect with the patient, for arranging telemedicine visits for admitted patients.

Results

We already note improved patient satisfaction, mitigation of patient fatigue, increased rehab therapy time and financial savings. For example, patients admitted to the stroke rehab unit spend an average of 2 hours for an out-patient appointment with the Stroke Prevention Clinic, meaning they do not could lose up to 120 minutes of rehab therapy time.

"The use of home video visits (eVisits) is a transformative change to the way we practice ambulatory health care and is long overdue. With eVisits, the patients are very happy, it is efficient for physicians and reduces the cost of out-patient healthcare. It's a win-win for everybody."

"We see this as further progress in our shared focus on patient-centred care at PCH and KHSC. The eVisit encounter is conducive to nature of follow up in the Stroke Prevention Clinic, offers opportunities on timing of the visit(s), and can make it logistically easier for family members to attend. Meanwhile, this approach has the potential to reduce interruptions of our patients' ongoing stroke rehabilitation by limiting missed therapy sessions and possible impacts of the transfer/travel time (e.g. patient fatigue and engagement levels)."

Through the pilot we are still tracking:

1. Number of transfers avoided / total planned, from Oct 1st there have been 16 eVisits at a cost savings of $120 per visit.
2. Therapy time not missed / total therapy time, preserving 32 hours for participation in therapy.
3. Patient satisfaction (brief 10-item survey), all very satisfied with the experience
4. Increased patient/family engagement
5. Less fatigue reported.
6. Physician/team satisfaction and adaptable workflow mapping.

Conclusions

We continue to support staff, physicians and patients through the pilot and document findings and lessons learned. We look to expand eVisits through education and collaboration with stakeholders and implement a long-term plan to sustain eVisits as well as analyze other areas of opportunities. At this time, we will continue and evaluate this model for the Stroke Prevention Clinic as a pilot project for another 5 months and evaluate other patient populations and clinics that could benefit (i.e. palliative care, rehab follow up)

Exploring the Needs of Parents at Post-secondary Institutions: Findings From a Cross-sectional Survey Capturing Parenting-related Experiences on Campus

Tessa Ogilvie & Daria Okonski, 4th year BNSc students, School of Nursing, Queen's University

Problem/Issue

Parents and caregivers of preschool-aged children attending and working within post-secondary institutions have low visibility and high needs as they struggle to nurture their families and thrive in their pursuit of scholarly and work responsibilities. The Queen's University Child Friendly Campus Initiative (QUCFC) was established in 2015 to improve access to new and existing resources, as well as cultivate a greater sense of community for parents and caregivers at Queen's University. The initiative is multi-faceted and targets three key pillars: *community, advocacy* and *sustainability*.

Methods

In order to achieve the QUCFC's overarching goal of creating a more child-friendly campus for parents and caregivers at Queen's University, a needs assessment survey was conducted between May-December 2017 to capture parenting-related experiences on campus and pose the research question, "how can Queen's University become a child friendly campus?" Past and present students, staff, and faculty who self-identified as parents or caregivers of young, dependent children (aged 0-4 years or preschool age) were invited to participate in a cross-sectional survey delivered through Qualtrics. A social media campaign was utilized to recruit participants through convenience sampling and quantitative and qualitative data were obtained. Descriptive statistics and thematic analysis were used to describe the data. The study was approved by the Health Sciences Research Ethics Board of Queen's University.

Results

Fifty-five responses were obtained from the survey (n=50 female, n=5 male). The median age of respondents was 34 years, students consisted of 53% of the sample and the majority reported having one or two children (68%). Very few respondents stated that they felt supported as a parent (14.5%) and provided further qualitative details to expand on their responses. Themes included needing more support for breastfeeding and pumping on campus, childcare, support from professors, increased financial benefits, improved access to infant change tables, quiet spaces and improved infrastructure on campus. Respondents also described their use of on campus resources and provided visionary ideas about how Queen's could be more inclusive and address their needs.

Conclusions

These findings are being used to inform future interventions offered to parents on Queen's campus and being shared with the larger academic community to promote dialogue about the needs of parents and caregivers of preschool-aged children attending and working within post-secondary institutions.

“Fast Track”: Improving Early Access to Inpatient Stroke Rehabilitation

Kathi Colwell, RN, Providence Care Hospital

Problem/Issue

Canadian Stroke Best Practice Recommendations (CSBPRs) and Quality Based Procedures (QBP) outline that stroke patients requiring inpatient rehabilitation should be assessed and referred to a specialized rehab team (on a geographically defined unit) as soon as possible. As per CSPRs, rehab should begin as early as possible after rehab readiness and medical stability are reached. As per QBP (expert advisory panel), the target acute care length of stay (LoS) and stroke onset to rehabilitation transfer time is 5 days for ischemic stroke and 7 days for hemorrhagic stroke. Stroke patients in the Kingston area experience longer time in acute care compared to QBP targets, including those transferring from acute stroke care to high intensity inpatient stroke rehab (2018/19 median onset to rehab time 13.0 days.)

Methods

The focus of the quality improvement project is targeted to improve the time from rehab referral to acceptance. In turn, we hope this will contribute to improved patient flow / reduced stroke onset to rehab admission times. Fast Track” AIM: For patients meeting the “Fast Track Criteria” referral to acceptance will occur in < 4 hours.

Results

“Fast Track” patients admitted successfully without an onsite assessment. All four patients achieved referral to decision under the target of four hours. Three patients were admitted within 5 days from onset. One patient held for a medical procedure after referral had been accepted. Each patient debriefed. No issues arising on admission.

Conclusions

Initial referrals completed using the ‘Fast Track’ process have been very successful. Ongoing communication and only minor procedural adjustments have been needed to date, with no patient safety issues arising. Team members satisfied with process to date and outcomes are on track to reduce wait time by 3 days for ~50% of rehab referrals that are anticipated to meet the “Fast Track” criteria. Next steps include continued data monitoring until process stable and collect data on “regular” referrals for comparison

Optimizing the Use of Continuous Pulse Oximetry Within the Paediatric Population at KHSC

Megan Grundy, RN, Kingston Health Sciences Centre

Problem: The Pediatric Department's current use of continuous pulse oximetry may be contributing to alarm fatigue amongst nursing staff, a strain on staffing ratio and a financial burden on the Paediatric Department. Anecdotal reports from front line staff are that continuous pulse oximetry has a high false alarm rate. False alarms lead to alarm fatigue resulting in delayed response or disregard of the alarms altogether.

Method: A retroactive review of admissions to the Paediatric Department was completed. Items analyzed included: (1) Percentage of patients that had a Patient Care Order for continuous pulse oximetry and (2) staffing ratios required to sustain current use of continuous pulse oximetry. A checklist was used to determine whether current alarms were true, false or unwitnessed/unknown, and if they required intervention. Parallel to these investigations, the front line staff completed a survey to better understand the current use and perceptions of continuous pulse oximetry.

Results: The retroactive review revealed that from September to February (period of highest acuity and patient volume) approximately 50% of patients had continuous pulse oximetry ordered which led to a 52% increase in staffing ratios. The checklist revealed that there was low alarm reliability, with only 13% of alarms being true alarms. The survey results confirmed that continuous pulse oximetry contributed to the alarm fatigue of front-line staff. Of those surveyed, 69% indicated that they had witnessed alarms ignored and 57% of these respondents stated that alarms were ignored frequently. Lastly, 81% believe that there is an over-reliance on the continuous pulse oximetry.

Conclusions: Based on the retroactive review, alarm reliability data and survey results, it is evident that the lack of a guideline has contributed to an over-reliance on continuous pulse oximetry that has caused alarm fatigue, an increase in staffing ratios, and fiscal strain. To combat these findings a working group was formed to create guidelines for the use of continuous pulse oximetry. The guideline was implemented on October 15th, 2019 with plans to review in early 2020.

The Economics of Self-Regulation as a Shift Worker to Counter the Slow Violence of Shift Work: A Case Study

Ruhi Snyder, RPSGT, CCSH, Kingston Health Sciences Centre

Problem/Issue: Shift work has been implicated in causing multiple comorbid conditions, including circadian disorders, mood disorders, metabolic disorders, cardiovascular disorders and cancer. Self-regulation in the form of high intensity interval training, diet and shift schedules was previously reported to help counteract the negative effects of shift work, such as anxiety, fatigue, low productivity and poor quality of life. However, there is a cost associated with self-regulation.

Methods: A 5-year (2011-2016) field self-case study of a sleep technologist working 12-hour nights included a log of sleep, shift schedule, sick and mental health days, vacation days, exercise and food intake during nightshifts and days off work. Timing and type of exercise and timing and type of diet was modified over the three years to include cardio, strength training and yoga done in minimal space in less than 40 minutes. The costs of the shift worker's intervention were tracked using T4 slips for salary reductions due to change from full to part time work. Receipts were also collected from personal coaching, gym memberships, personal training sessions, physiotherapy and chiropractor visits, as well as dental costs incurred due to loss of benefits.

Results: Shift schedules changed from full time with benefits (37.5 hours/wk.) to part time with no benefits (26.25 hours/wk.) over 3 years to increase recovery time and in conjunction with daily timed exercise (02h00 on night shifts and 15h00-18h00 on days off). A combination of regimented balanced diet, 12-hour fasting and guided daily meditation elevated mood, reduced fatigue and anxiety, increased productivity at work and improved work-life integration. Sick time was reduced from 9 days per year to 0 days. The cost of self-regulation included decrease in gross salary (>$85,000 to <$56,000/year) and increase in expenses to cover dental (>$1000.00/year), training for high intensity and prevention of injury (> $5000/ year), loss of paid vacation days (<$10,000) and loss of paid sick days.

Conclusion: Regular consecutive night shifts followed by at least 5 days off and a flexible day shift on a two week cycle reinforced with self-regulation in terms of daily timed exercise and meals, and a 12 hour fast led to better mental and physical health, reduced sick days, increased productivity and improved work life integration. The cost of the interventions increased while the salary decreased that makes this shift worker's process of self-regulation unsustainable. Future research on interventions to counteract the negative effects of shift work should also take into account the economic burden of the intervention itself.

The Shocking Reality – Adolescents Living with Hypertrophic Cardiomyopathy

Crystal McQuillan, RN, BScN, CCN(C), MN, Kingston Health Sciences Centre

Background: Hypertrophic cardiomyopathy (HCM) is the most common genetic cardiovascular condition. HCM affects the heart muscle and predisposes patients to risk of sudden cardiac death (SCD). It is characterized by increased wall thickness of the left ventricle, thereby predisposing the patient to the development of fatal arrhythmias. HCM is the most common cause of SCD in children, adolescents and young adults. Those individuals diagnosed with HCM are faced with life-altering decisions regarding treatment and prevention of SCD. For adolescents, these decisions can have a significant physical, emotional and psychosocial impact, which requires careful consideration of the risks and benefits of their treatment options.

Purpose: The purpose is to provide a review of the pathophysiology, diagnosis and multidisciplinary management of HCM and to discuss specific challenges of monitoring and treatment of this condition in the adolescent population.

Methods: A case study approach will be used to guide a discussion of the challenges faced by cardiovascular specialists in supporting and treating the adolescent population with HCM. The case involves a 17-year-old male with a known history of HCM who presented to Kingston Health Sciences Centre after surviving a witnessed cardiac arrest.

Implications to Practice: Decisions regarding treatment of a known diagnosis of HCM are multifactorial. It is important for cardiovascular specialists to understand the specific concerns impacting the adolescent population in order to provide quality patient-centred care.

Writing between the lines: A secondary analysis of unsolicited narratives from cancer survivors regarding their fear of cancer recurrence

Stephanie Saunders, 3rd Year Student, School of Nursing, Queen's University

Problem/Issue: A survey study was conducted to examine the fear of cancer recurrence (FCR) in cancer survivors. Among those participants (n=1,002), 47 participants provided unsolicited narratives on their returned questionnaires. This secondary analysis aims to enhance our understanding about the reasons why cancer survivors provided unsolicited narratives on a questionnaire about FCR, to determine the characteristics of participants and if differences existed between the demographic, clinical variables and level of FCR between those who added narratives and to those who did not, and lastly, to identify the location and items on the questionnaire that garnered the most unsolicited narratives.

Methods: A mixed-methods analysis was used to examine demographic data, clinical profiles and FCR levels between participants who provided unsolicited narratives and those who did not using SPSS version 25. An interpretive description approach was used to examine the narratives and guide the emergence of themes.

Results: Participants who included unsolicited narratives (n=47) in their returned questionnaires were 66 years old (± 12 years), female (n=39), and diagnosed with breast cancer (n=29). Few demographic differences existed between the two groups. Participants who wrote unsolicited narratives had a difference in clinical characteristic including time since diagnosis, number of comorbidities and a diagnosis of another primary, recurrence or metastatic cancer, compared to the participants who did not provide narratives. There were three questions (Item 13, 17, 31) on the *Fear of Cancer Recurrence Inventory* that garnered the most unsolicited narratives. Emergent themes from the narratives included; telling the story of their post-cancer journey, contextualizing the FCR experience and using their voice towards change in cancer care.

Conclusion: Future implications for researchers could include creating questionnaires that have a space for participants to express their responses and add additional thoughts about the questionnaire. As seen in this secondary analysis, some participants might want extra space to provide context and clarification to their responses. Therapies for FCR could include expressive-type interventions as a subset of cancer survivors who could benefit from story-telling or journaling exercises. These types of interventions are easily implementable by nurses working with cancer patients.

We hope you found today's agenda informative.

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