Engaging Veteran Residents With Dementia In Meaningful Activities To Reduce Responsive Behaviors And Improve Quality Of Life

Presenter: Ria Spee

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Canada

Abstract

Background: Engaging cognitively-impaired residents on a secure unit in meaningful activities is challenging for health care providers. To reduce responsive behaviors and improve resident's quality of life, an interprofessional team composed of nursing, recreational therapy, and social work explored opportunities for residents engage in more diversional activities with staff, companions, and family members over a one month period.

Methodology: With short-term funding for a Late Career Nurse (LCN) from the MOHLTC, we used a train-the-trainer and role modeling to train staff, companions, and family members in how to use available resources to engage veteran residents resources. The project was evaluated by tracking participant engagement, auditing documentation of behaviors and PRN medication usage, and conducting a satisfaction survey. The interprofessional team communicated frequently throughout the project to reflect on progress and decide on appropriate actions to move the project forward.

Outcomes: The activity cupboard was unlocked, refurbished, reorganized, and moved to a more accessible location. The Activity Aides were introduced to a new weekly schedule/log book and trained/ encouraged to use more of the resources. Companions were most receptive to the opportunities provided to engage residents in meaningful activities and regularly initiated group and one-to-one activities with residents on the unit. We have shared results with family members and companions in a unit newsletter and created a resident-family activity log sheet to be deposited in a secure Drop Box on the unit for ongoing evaluation and suggestions.

Conclusions: We received positive feedback and suggestions from staff, families and companions. Results from the satisfaction survey, which indicate that this initiative is having a positive impact on resident's quality of life will be reported. Companions and family members have become more aware of, have more access to, and are using more resources to engage residents. Staff reported that residents are in a better mood during the day and sleep better at night. The chart audit showed a decrease in the number of episodes of responsive behaviors and use of PRN antipsychotic medications over the previous month. The educational project has raised awareness, increased opportunities, and enhanced team and family communication.

Developing And Evaluating Multimedia Patient Education Tools To Better Prepare Prostate-Cancer Patients For Treatment (Randomized Study)

Presenter: Krista Dawdy

Krista Dawdy[1], Katija Bonin[2], Steve Russell[1], Agnes Ryzynski[3], Tamara Harth[4], Christopher Townsend[5], Stanley Liu[6], William Chu[6], Patrick Cheung[6], Hans Chung[6], Gerard Morton[6], Danny Vesprini[6], Andrew Loblaw[6], Xingshan Cao[7], Ewa Szumacher[6]

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Abstract

The purpose of this study was to determine the effectiveness of multimedia educational tools to improve CT planning preparation for Intensity Modulated Radiotherapy (IMRT) for prostate cancer. Many patients are not prepared when given verbal preparation instructions to have a full bladder and empty rectum for their IMRT and require being rescanned, which results in additional costs for the patient and the hospital. A pamphlet and video outlining the proper preparation for prostate IMRT was created to decrease additional scans and the associated costs, while increasing patient satisfaction. A controlled, randomized experimental group study was conducted to examine the effectiveness of the multimedia tools (the video and the pamphlet), as compared to the pamphlet only, in preparing patients for their planning CT appointment. We found no statistical difference between the multimedia group and the pamphlet group in patients' preparedness for their appointments and the rescanning rate. However, patients in the multimedia group indicated that they felt more prepared about their treatment after watching the video and stated that they would recommend the video to other patients with prostate cancer. Furthermore, patients who had to wait longer for their planning CT appointment felt less prepared by the materials than those with a shorter wait time. We recommend reducing wait times between appointments as much as possible to increase patients' preparedness for the planning CT. We conclude that providing multimedia treatment information and minimizing wait times increases patients' feelings of preparedness leading to a more positive treatment experience and reducing costly rescans.

Intraosseous Access For Anesthesiologists – Establishing A Novel Simulation-Based Resident Education Program

Presenter: Pablo Perez d'Empaire

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Canada

Abstract

BACKGROUND: intraosseous (IO) access has been shown to be a useful and safe alternative to intravenous access during resuscitation; its early use has been recommended in the advanced trauma and cardiac life support guidelines. Anesthesiologists are often expected to bring expertise in vascular access and yet we identified a deficit in their education in this technique. The objective of this study was to determine the perception of an educational intervention to improve the knowledge about the use of IO access in anesthesia.

METHODS:This was a prospective observational study. Learners were surveyed before and after an educational intervention that included a didactic lecture and a practical hands-on simulation session using a battery-powered IO needle driver in anatomical models. Learners were twenty first year anesthesia residents with no previous training in IO access. The survey used a number of Likert scales to evaluate knowledge about and willingness to use IO access during resuscitation.

RESULTS: the survey response rate was 16(80%) and 11(55%) for the before and after educational session respectively. Close to all the residents (94%) agreed that IO skills should be part of anesthesia residency training. After attending the educational session more residents were able to describe the indications for IO access (90% vs. 38%), more residents were able to describe the equipment needed to place an IO (82% vs 38%). In addition, having the opportunity to perform hands-on IO insertion in anatomical models improved the knowledge about the steps to insert an IO increasing the number of residents able to describe it (91% vs 19%) as well as locating the anatomical sites for IO insertion (91% vs 31%). Following the educational intervention a large proportion of residents expressed they would move to an IO insertion earlier (82% vs 31%)

CONLCUSIONS: incorporating and educational session for IO insertion to the junior anesthesia resident's curriculum can improve the understanding of this technique that is crucial in resuscitation situations and it is recommended by the advanced trauma and cardiac life support guidelines. After the implementation of the educational intervention the number of residents that were familiar with the IO procedure and indications increased. Further and larger studies would be needed to explore how this knowledge translates into clinical practice outcomes. Further sessions are planned to extend this program to other learner groups.

Context: Much Ado About - What, Exactly?

Presenter: Justin Mausz

Justin Mausz[1], Walter Tavares[2], Sandra Monteiro[1], Meghan McConnell[1]

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Abstract

Introduction

Simulation-based learning is an example of learning in context in which clinical contexts are recreated in controlled settings. While widely regarded as effective, unanswered questions exist about what elements of the clinical context must be recreated in simulated settings to promote authenticity, with current thinking often deemphasizing physical realism. We therefore sought to explore contextual influences on performance in a 'context-rich' clinical setting: paramedicine.

Methods

We followed constructivist grounded theory principles and recruited paramedic students and currently practicing paramedics to participate in one-on-one, semi-structured interviews. We asked the participants to describe a recent experience in which they attempted to resuscitate a victim of sudden cardiac arrest.

Results

Thirteen paramedic students and fourteen paramedics provided a total of thirty interviews, yielding over twenty hours of audio data for analysis. We iteratively identified three interrelated themes describing contextual influences: the event – its physical characteristics, circumstances and people present – the conceptual response – the cognitive processes and challenges encountered – and the emotional response – the degree of emotional engagement in the resuscitation. We identified a crosscutting theme related to how to simulate these events in which the participants stressed the importance of realism during simulation. Collectively, our results suggest a complex and dynamic interplay between the physical, conceptual and emotional domains of context with implications for simulation fidelity.

Conclusion

In contrast to other conceptualizations of context and fidelity, our results suggest that conceptual and emotional responses occur as a result of physical features in the practice environment, arguing in favour of authenticity in simulation.

How Patients' Voices Are Shaping The Future Of Healthcare

Presenter:

Agnes Ryzynski[1], Susan Desousa[1], Thiago Moreira[1], Jordan Tarshis[1], Anita Sarmah[1], Ari Zaretsky[1], Craig Duhamel[1], Ruth Milikin[1]

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Canada

Abstract

BACKGROUND:
Patient voices in undergraduate medical education are too rarely heard. Standardized patients (SP) may not represent the experience of an actual patient. It was decided at a corporate level to directly involve actual patients in healthcare education.
At the Sunnybrook Canadian Simulation Centre, medical students interview SPs during a simulated preoperative anaesthesia assessment. Actual patients have been introduced into this day with the goals of providing feedback about the students' performance using the lens of their personal experiences. Real patients engaging students in a safe learning environment encourages reflection on practice and provides feedback from true healthcare consumers.

SUMMARY OF WORK :
Several patient volunteers were carefully selected and received instruction regarding process and delivery of feedback prior to engaging with 250 University of Toronto medical students. The simulated preoperative assessment continued to use an SP as the "patient", while the patient volunteer role-played a family member of the SP. Following the pre-operative interview, the patient volunteer discussed his/her real-life pre-operative experience addressing concerns, system gaps, and positive aspects. Students were then given the opportunity for questions and feedback.

LEARNER FEEDBACK:
Three key themes emerged from the volunteers' feedback:
1) students need to simplify their language, avoiding medical jargon 2) active listening skills require improvement, 3) students confidence and professionalism were high.
Medical student feedback was excellent. They felt it contributed to their professional development by providing an opportunity to experience patients' perspectives and anxiety before surgery.
77% of students indicated they will change their practice, specifically with respect to body language, active listening, increased sensitivity, empathy and mindful communication.

IMPACT:
Introducing this interactive opportunity with real patients has highlighted unperceived gaps for 3rd year medical students and provided novel opportunities for public engagement in health professions education. Patient voices can have a profound impact in educating future physicians.

Comprehensive Educational Model To Decrease Sunnybrook Surgical UTI Rates And Reach Strategic Quality And Patient Safety Targets

Presenter:

Agnes Ryzynski[1], Claude LaFlamme[1], Mahsa Sadeghi[1], Grace Groetzsch[1], Darrel Sparkes[1]

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Canada

Abstract

BACKGROUND: Based on National Surgical Quality Improvement Program (NSQIP) data, Sunnybrook Health Sciences Centre was not reaching highest level of performance regarding catheter associated urinary tract infections (CAUTI). As a consequence, Sunnybrook set a target to decrease its CAUTI incidence by 60% by April 1st 2016. To further isolate the source of this issue, Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis was conducted. The results highlighted an education gap concerning urinary catheter indication, insertion, follow up and discontinuation.

METHODS :This educational intervention followed the Agile design methodology. To achieve sustainable standardized education for nurses, doctors and medical students, a video and a web-based module were created. After further gap analysis, it was determined that most significant learning gap existed within the medical student population.

The following educational intervention was implemented as a mandatory session for all Sunnybrook medical students during their surgery rotation:

1) E-module and video

2) Simulation (education, demonstration and 60-90min hands-on practice)

3) Assessment: 100% score on procedural checklist completed in the Sunnybrook Canadian Simulation Centre

4) Pre and Post Evaluation

E-module: 18 min procedural video with audio and annotation detailing procedure, followed by a comprehension quiz.

Simulation Session: 60-90min hands-on demonstration of catheter insertion on both male and female models, based on 5 case studies. First attempts are guided teaching sessions with expert facilitator. Final attempts are scored according to a Sunnybrook Health Sciences Centre protocol checklist. Hands-on learning is facilitated in small groups consisting of 2-3 learners per expert facilitator.

RESULTS: Historically, there was an assumption made that the current medical student curriculum addressed this learning need. However, learners demonstrated during their first catheter insertion significant gaps in catheter indication and insertion procedure.

After one-on-one learning sessions with an expert facilitator, learners were able to perform and demonstrate the correct procedure, showing an increase from 60% to 100% of correct checklist steps completion.

DISCUSSION: The current medical student surgery rotation sessions are not sufficient to acquiring proper technique in order to safely place urinary catheters in patients. During the initial insertion, learners indicated that they did not feel prepared or confident to insert urinary catheters on real patients. After reviewing the e-module and completing the simulation session, learners commented on their increased confidence level and preparedness to perform the procedure on patients. With subsequent sessions we will be in a position to collect additional data to further assess the impact of this education initiative on outcome.

Development Of A Quality And Safety Competency Curriculum For Radiation Oncology Residency: An International Delphi Study

Presenter: Jenna Adleman

Jenna Adleman[1], Caitlin Gillan[2], Amanda Caissie[3], Carol-Anne Davis[4], Brian Liszewski[5], Andrea McNiven[2], Meredith Giuliani[2]

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Abstract

Purpose: The purpose of this study was to develop an entry-to-practice quality and safety competency profile for radiation oncology residents to guide training in this area.

Materials and Methods: A list of 1211 potential quality and safety competency items was compiled from a range of international sources, including quality-related course objectives, competency profiles for radiation therapy and medical physics, and other quality-focused organizations such as the World Health Organization and the Canadian Partnership for Quality Radiotherapy. Through investigator consensus, items that were redundant or beyond the scope were eliminated, generating a refined list of 105 unique potential competency items. This list was subjected to an international 2-round modified Delphi process with experts in radiation oncology, radiation therapy, and medical physics. In the first round, each item was individually scored on a 9-point Likert scale to indicate agreement that an item should be included in the competency profile. Items with a mean score >7.0 were included, <4.0 were excluded, and 4.0-6.9 were refined and rescored in Round 2 for inclusion or exclusion in the competency profile following a web-conference discussion. Items ranked for inclusion by >75% of Round 2 participants were included in the final competency profile.

Results: Fifteen of the 50 invited experts participated in Round 1: 10 radiation oncologists, 4 radiation therapists, and 1 medical physicist from 13 centres in 5 countries. All 105 items were scored in Round 1, resulting in a mean score of >7.0 for 80 items, <4.0 for 1 item, and 4.0-6.9 for 24 items (intermediate group). Certain categories emerged as more controversial, for example: change management, equipment quality assurance (QA), and human factors. Web-conference with 5 of the participants resulted in 9 of the 24 intermediate group items edited for content and/or clarity. In round 2, 12 participants rescored all intermediate group items. Ten items were ranked for inclusion by >75% of participants and the remaining 14 items excluded. The final 90 enabling competency items were organized into thematic groups consisting of 18 key competencies under headings adapted from Deming's System of Profound Knowledge, specifically: Appreciation for a System (Process, Standardization & Benchmarking, Organizational & Systems Structure, Accessibility, Risk Management), Knowledge of Variation (Incident Management, Patient QA, Equipment QA), Theory of Knowledge (Change Management, Outcomes), Psychology (Human Factors, Quality Culture), and Safety (Radiation Safety, General/Patient Safety).

Conclusions: This quality and safety competency profile may inform minimum training standards for radiation oncology residency programs and assist in CanMEDS2015 implementation. Other relevant professional groups may benefit from the groundwork laid through this process.

Pregnancy And Reproductive Outcomes In Elite And High-Level Recreational Athletes: A Survey Of Female Canadian Masters Swimmers

Presenter:

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Canada

Abstract

Study design: Pilot retrospective cohort survey study. Data was collected via a link to an online survey administered to participants through email.

Subjects: Female master swimmers (n=7) who have been pregnant and competed at elite levels (i.e. masters, international, national, provincial, varsity).

Observation techniques: Participants were administered a survey of approximately 60 questions spanning the following categories: demographics, swimming history, reproductive and obstetrical history, activity level prior to and during each pregnancy, pregnancy outcomes, postpartum outcomes, and overall health.

Results: Preliminary pilot data show 57% of participants experienced an eating disorder, disordered eating, delayed menarche, amenorrhea potentially related to training. Furthermore, 42% of participants had difficulty achieving pregnancy, though only 14% used artificial reproductive technology (ART). All participants planned their first pregnancy and all participants delivered vaginally. 85% of survey subjects reported continuing an exercise regimen of moderate intensity. None of the subjects experienced any common pregnancy complications such as gestational diabetes, gestational hypertension, pre-eclampsia, eclampsia, or preterm birth.

Conclusion: This pilot study suggests high prevalence of eating disorders, disordered eating, delayed menarche and amenorrhea. High rates of exercise during pregnancy as well as the lack of common pregnancy complications and low rates of operative deliveries (caesarian sections), suggest that physical activity may be related to fewer antenatal as well as labour complications. The results of this pilot study are based on participants from Toronto, Ontario. This study warrants further research with an increased sample size and will be expanded to Canadian Masters Swimmers in partnership with Masters Swimming Canada (study is underway and results are pending.)

The Role Of Medical Improv In Health Professional Education: A Literature Synthesis

Presenter: Jeremy Rezmovitz

Jeremy Rezmovitz[1], Lu Gao[2], Judith Peranson[3], Eshita Kapoor[4], Joyce Nyhoff - Young[5]

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Abstract

Purpose: To synthesize available evidence on the role of improvisational theater training in medical education to delineate its potential utility in training, and to understand elements of curricular design that makes such applications successful.

Methods: A systematic search identified seven articles outlining the use of improv in medical education, which were then read for themes in both learning outcomes and curricular design.

Results: Learning outcomes from improv varied depending on the objectives of the exercises, and have potential to impact the majority of CanMEDS roles: content mastery and comfort with uncertainty (Medical Expert); team management (Leader); accepting and giving feedback and self-reflection (Scholar); empathy, active listening, and non-verbal communication (Communicator); a culture of trust (Collaborator); and resiliency and confidence (Professional).

Common factors of improv curricula included orientation, co-facilitation with theatre and health professionals, creating a low-stakes environment in which uncertainty is normalized, and extensive debriefing and feedback giving and receiving to make connections to clinical practice.

Conclusions: Improv is a unique learning modality capable of achieving learning goals encompassing most CanMEDS roles, while promoting rediscovery of fun in learning. Potential applications include remediation, team development, leadership training, and wellness and resiliency.

Understanding Barriers To Interactivity In Online Continuing Medical Education

Presenter: Mark J Rapoport

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Abstract

Background: The Canadian Academy of Geriatric Psychiatry launched an Online Course in 2012 to help practicing general and geriatric psychiatrists enhance and consolidate their knowledge of the field, and discuss evidence based practice, controversies and difficult cases. The course has attracted some family physicians and other health professionals as well. This 10 month asynchronous course has been popular and has trained more than 200 learners to date. Interactivity tends to vary over the 10 month duration and there is inter-learner heterogeneity in participation, which may or may not pose a threat to learning.

Objective: The purpose of this study was to examine barriers to interactivity in this online course.

Method: The authors developed an interactivity survey based on informal feedback from faculty, facilitators and learners, as well as a review of the literature. The survey was sent electronically to all participants with weekly reminders during the last three modules of the most recent (2015-6) edition of the course.

Results: Preliminary results from 18 participants indicated that the top 4 barriers listed as “Agree” or “Strongly Agree” by more than half of participants were “…too busy with work..” (72%), “I learn just as well by reading the posts rather than actively participating” (61%), “I feel I have nothing further to contribute” (61%), and “I learn better in a didactic format” (56%). The 4 least common barriers, endorsed as “Agree” or “Strongly Agree” by less than 10% of participants were: “I have been offended by something a participant or faculty member wrote” (0% for participants and 0% for faculty), “I am discouraged by off topic posts…” (6%), “…the questions posed…are unhelpful and vague (6%). Unclear expectations, privacy concerns, technical problems, inhibition from dominating members, shyness, and fear of offending were endorsed by some members (between 10 to 49%) as additional barriers. Qualitative responses will be presented as well.

Discussion: Outside commitments of busy faculty, learning preferences, and saturation of participation are common barriers to active participation, but many learn passively rather than through writing posts. A variety of other barriers have been identified, but violations of e-etiquette were not commonly endorsed. Future directions will include prospective study of the relationships between these barriers, preferred learning styles, evaluation of the course, and learning outcomes.

Building A MRI Safety Culture

Presenter: Krista Dawdy

Krista Dawdy[1], Susan Crisp[1], Lisa Di Prospero[1], Brige Chugh[1], Steve Russell[1], Helen Su[1], Amir Owrangi[1], Ruby Endre[1], Igor Gemchuk[1]

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Canada

Abstract

Background

Magnetic Resonance Imaging (MRI) uses a strong magnetic field to generate diagnostic images. This magnetic field has the potential to cause serious and even fatal injuries to patients undergoing scans as well as to clinical and non-clinical staff in the area. There are currently 10 MRI units spread across the campus of Sunnybrook Health Sciences Centre (SHSC). Ensuring awareness of MRI safety through a formalized education and training program is integral in creating an MRI safety culture that protects patients and staff from harm. The aim of our work was to develop an accessible and interprofessional electronic (e) module learning series.

Process

MRI safety training is mandatory for all personnel working directly in the MRI scan area. However, MRI safety training is not mandatory for other staff coming into the scanner area on a regular or occasional basis. To ensure patient and personnel safety, a far reaching mandatory safety training program must include all staff throughout SHSC.

There are 10 MRI scanners installed across the campus within: Medical Imaging, Radiation Therapy, Sunnybrook Research Institute, and Cardiology. The early challenge was to build a safety program that could meet the needs of all of these departments and all learners. An interprofessional working team was created that included educators, clinical and technical experts from Radiation Therapy, Medical Imaging, Research Institute, Medical Radiation Physics, Nursing and Radiation Oncology to ensure that the MRI safety training program met the needs of all key stakeholders and followed the American College of Radiology (ACR) guidelines. An early search confirmed that there was very little in the way of a formalized transferable safety program across Canada; this group was in essence building a training module from the ground up.

The MRI Safety e-learning module series was developed in partnership with the e-technology office so as to house the series within the organizations' Learning Management System (LMS) that embeds adult learning principles. Three modules were developed to tailor the training for specific audiences based on access to the MRI scanner area. Basic MRI Safety Awareness Module that provides a basic overview to all hospital employees. The Level 1 Safety Module is designed to give staff such as porters, RTs, or RNs accompanying patients for scans who enter the MRI area, more in-depth training. The final module, Level 2 Safety Module is intended to review safety procedures at a high level for all staff working routinely in the magnet area such as MRI technologists. All modules were 10-20 minutes in length with interactive engagement activities throughout as well as a final summative evaluation for comprehension. Early feedback has been positive in terms of content and format.

Impact on Practice

Comprehensive e-learning modules have been developed using input from interprofessional teams to meet the needs of all staff across various roles and professions. Knowledge of the existence of the MRI unit is only one facet of a safety culture, but by increasing the awareness of the hazards of MRI to all personnel throughout the hospital, the risk of harm to patients and staff may be decreased.

Teaching End Of Life (EOL) Communication To Residents

In The Emergency Department (ED) Through High Fidelity Simulation Scenarios

Presenter: Susan DeSousa

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Abstract

Background
EOL (End of Life) care is challenged in the ED (Emergency Department) because of compressed timelines and necessity of caring for the patient while simultaneously communicating with the family. Previous literature describes EOL training delivered in didactic sessions, workshops or simulated encounters with standardized patients divorced from the acute care episode. Currently at the University of Toronto there is no EOL curriculum for emergency medicine (EM) residents.

Process
To address this EOL communication training gap, we implemented high-fidelity simulation education for residents on the EM (Emergency Medicine) rotation. The simulated scenarios required residents to manage the acute presentation of a patient while communicating EOL goals with the patient's family. These hybrid scenarios were incorporated into existing simulation-based resuscitation training. We evaluated scenario feasibility, participants' satisfaction and self-perceived effect on practical skills in EOL communication (measured on a 5-point Likert scale).

We developed two hybrid scenarios: 1) speaking to a family member by telephone while attempting resuscitation of a cardiac arrest patient; 2) assessment and management of a lung cancer patient with severe dyspnea, including establishing goals of care with the substitute decision maker. Over 25 months (2014/1-2016/2), 69 postgraduate year-1 and -2 trainees participated. Most had limited exposure to EOL training. The overall level of satisfaction was high and the sessions positively contributed to the trainees' self-perceived knowledge on the topic (mean±SD scores: 4.44±0.62 [scenario 1]; 4.22±0.68 [scenario 2]).

Discussion
In the ED environment, EOL communication often occurs during management of high-acuity patients, a scenario not considered in existing resident training. Our novel simulations addressing this common ED training gap were feasible and well received.

High-fidelity simulation can be used to teach EOL communication in the acute care environment. Effects on actual resident performance and family satisfaction should be evaluated.

Can We Talk? Developing A Communication Skills Workshop For ACNRT Nurses

Presenter:

Dana MacKay[1], Diana Goliss[1], Cathy Lemieux[1]

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Canada

Abstract

Objective: To develop a workshop for Acute Care Nursing Resource Team (ACNRT) nurses to provide them with communication strategies to address challenging situations with respect and confidence.

Background: ACNRT is comprised of novice and experienced nurses who are cross-trained to work in over 14 acute care units across the organization. ACNRT nurses work in complex patient environments where they interact with different interprofessional teams and patient populations on a daily basis. Historically, orientation focused primarily on clinical skills, while assertive communication skills were not covered. Formal and informal feedback was gathered from ACNRT nurses via an 'ACNRT Quality of Work Life' survey. Survey results identified that ACNRT nurses felt that they lacked skills to have difficult conversations and would benefit from training that would enable them to confidently communicate in challenging situations. Evidence has shown that effective communication skills in the healthcare workplace positively impacts patient safety, job satisfaction and retention of nursing staff.

Methods: A four-hour workshop was developed collaboratively between ACNRT leadership and the Organizational Development & Leadership department at Sunnybrook and presented to four groups of ACNRT nurses.

In total, 54 ACNRT nurses, mostly novice, or new graduate nurses, participated. During this workshop, nurses identified their current or anticipated concerns when working in different units. The also described what their ideal work experience would look like. Participants then completed a self-assessment tool to identify how they usually react in stressful situations and how this reaction impacted their willingness and ability to communicate their concerns.

The workshop included communication techniques that, if practiced regularly, would build confidence for these nurses to clearly state their concerns in ways that that were respectful and would encourage mutually satisfying solutions. These techniques were practiced using case studies based on real-life ACNRT scenarios and then were applied to the specific concerns identified earlier in the workshop.

Results: Evaluations were completed immediately following the workshop and three months afterwards. Those completed following the workshop showed a mean rating for overall satisfaction of workshop content of 5.35 out of 6. The main learning for participants was techniques for framing the conversation and the importance of starting the conversation with a positive mindset. Participants also found value in coming together as a team to discuss common challenges and the opportunity to problem solve solutions together. Three-month post-workshop evaluations indicated that the biggest changes for the participants was the willingness to speak up, to start conversations with a positive attitude and to raise issues using the communication techniques taught. Their self assessments of this change in practice showed a rating increase from 3.18 to 7.27 points out of 10.

Conclusions: Providing nurses with communication skills training in addition to their clinical orientation increased their confidence for dealing with challenging communication situations.

Future Direction: The next step is to invite experienced ACNRT nurses to attend the workshop along with newly hired nurses to discuss their workplace challenges and allow them to learn strategies for speaking up. It is hoped this will enhance relationships between novice and experienced ACNRT nurses so they will be able to better support each other when working in the units.

Assessing The Effectiveness Of An Online Education Resource For Post-Prostatectomy Prostate Cancer Patients And Their Caregivers: Our Experience With The Evaluation Of Online Patient Education.

Presenter: Merrylee McGuffin

Ewa Szumacher[1], Katija Bonin[2], Deb Feldman-Stewart[3], Xingshan Cao[4], Merrylee McGuffin[4]

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Canada

Abstract

Background:

Radiotherapy (RT) after prostatectomy is indicated to prevent local recurrence while improving biochemical control and disease-free survival. However, most prostate cancer patients do not receive adequate information about post-prostatectomy radiotherapy to make informed treatment decisions. Based on two previous studies, we have developed an online education resource to better inform patients about post-operative RT and help them with their treatment decisions. The purpose of this initiative is to evaluate the impact and effectiveness of this online resource for patients and their caregivers currently involved in decision making around post-prostatectomy RT.

Process:
All post-prostatectomy patients and their caregivers attending a consultation with a radiation oncologist regarding radiotherapy treatment at the Odette Cancer Centre are eligible to participate. Potential participants are approached by a research assistant who obtains informed consent. All consenting participants are given a unique study identification number and written instructions on how to access the online education resource at a time and place that is convenient for them. Participants are asked to take as much time as they need to review the information and discuss it with others if they so desire. After reviewing the information, the written instructions direct participants to an online demographics form and purpose-based information assessment (PIA) questionnaire, which is a validated tool for evaluating patient education. Using the PIA, participants are asked to indicate how they used the information and evaluate the quality of the information. Participants are also asked to rate the online education resource on a 4-point Likert scale according to six identified common purposes for such information: 1) organizing, 2) understanding, 3) decision making, 4) planning, 5) providing emotional support to others and 6) discussing the situation with others. All responses are anonymous.

Benefits/Challenges:

Evaluation is currently on going with 5 patients and 3 caregivers consenting to participate thus far. Preliminary results will be presented using descriptive statistics. Additionally, an overview of our experience with the online evaluation of an education resource will be presented. Benefits and challenges to issues such as accrual, resource accessibility, convenience for participants, technical issues and the effect on response rate will be described.

Impact on Patient Care:

An online education resource has the potential to reach a large number of patients and their caregivers who desire more information and involvement in treatment decisions. This resource has the potential to empower patients to become more active, feel less anxious and be better prepared for post-operative radiotherapy.

Is Near-Peer Teaching An Effective Method Of Teaching Surgical Pathology Grossing Skills To Anatomical Pathology Junior Residents: A Pilot Study Design

Presenter: Elena Diana Diaconescu

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Canada

Abstract

Introduction:

Near-peer teaching (NPT) is an educational method in which senior trainees teach junior trainees. NPT among residents can be of educational value to both the student and the teacher. Previous studies have shown that participating in a peer teaching programme can serve to increase the knowledge base of both the teacher and student, while simultaneously enhancing the teaching skills of the senior acting as the teacher. In Anatomical Pathology residency programs, specimen grossing techniques are learned during the junior residency years (PGY1-2). This is of primordial importance for the establishement of a solid knowledge base on which the residents can further build their surgical pathology knowledge.

Since NPT is a new educational method, studies to assess its efficiency in teaching grossing skills among Anatomical Pathology residents have not yet been done. The objetives of our study are to 1) assess the feasibility of NPT for specimen grossing, and 2) to assees the residents' subjective impression in terms of improvements in their grossing skills (for both junior and senior residents) and teaching ability (for senior residents).

Methods:

The study will commence on October 17, 2016 and will end on November 24, 2016.

During that period there will be a total of 6 AP residents rotating at SHSC (four junior and two senior residents), who will be consented to participate in this study. Each junior resident is expected to gross 3-4 times during the study period, and will be paired with a senior resident everytime he/she gross specimens. At the end of each grossing session, the senior resident will evaluate the grossing skills of the junior resident using a standardized assessment form. This form will be used for formative assessment of the junior resident by the rotation supervisor. At the end of the study period, junior and senior residents will be asked to complete a survey questionnaire regarding their experience and impressions of NPT for specimen grossing. An option of having a debriefing session at the end of the study will also be given to the junior and senior residents. This will offer a more interactive environment that will encourage them to reflect on their experience as well identify areas of strength of NPT and areas that my need improvement.

All results will be anonymized prior to statistical analysis.

Descriptive Analysis Of 4th Year Pharmacy Students' Perspective On Virtual Interactive Case (VIC) Software

Presenter: Jam Bravo

Jam Bravo[1], Karen Cameron[1], Miranda So[1], Cindy Natsheh[1], Gordon Tait[1]

[1]University Health Network

Canada

Abstract

Background

In the Canadian pharmacy curriculum, students are required to apply concepts from classroom learning into clinical practice through experiential placements. This transition can be challenging and there are limited options to help students bridge this gap. VIC software allows pharmacy students to practise information gathering and clinical reasoning skills using the pharmaceutical care process. In VIC cases, students navigate through available information of a simulated patient to identify drug therapy problems (DTPs) and select care plan options. Upon completion, students are provided with immediate feedback on their assessment, including rationale on the appropriateness of their selection. Another advantage of the VIC software is that cases are easily modified for rapid new case creation.

Objective

To obtain student feedback on VIC cases.

Method

Ten 4th year pharmacy students independently worked through four VIC cases followed by a semi-structured interview to guide discussions on challenges in transition from classroom to bedside and the relevance of VIC in preparing students for clinical practice. The interviews were recorded, transcribed and coded for themes using qualitative research methods.

Results

After analysis of the interview transcripts, five main themes were identified: 1) information gathering, 2) feedback from VIC, 3) learner engagement, 4) realistic, and 5) user-friendly. Students provided suggestions for improvement and made recommendations to incorporate VIC in the classroom. They appreciated the immediate and thorough formative feedback received. Most students required an explanation of the cost associated with their performance score presented at the end.

Conclusion

VIC cases provide pharmacy students with an opportunity to develop clinical reasoning skills through practice on patient assessment and care plan development. VIC is a useful tool to bridge classroom learning and clinical practice. Other potential uses include remediation for students experiencing difficulty in rotations and to enhance active learning strategies in the classroom.

Integrating New Nursing Graduates Into The Neonatal Intensive Care Unit

Presenter: Meghan Donohue

Meghan Donohue[1], Yvonne Yu[1]

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Canada

Abstract

BACKGROUND: The Neonatal Intensive Care Unit (NICU) is recognized as a highly specialized area caring for a unique population. The ongoing need for skilled nurses is complicated by the general lack of post-graduate specialty courses and the reluctance of hospitals to hire new graduate nurses directly into specialty areas.

OBJECTIVE: To develop a comprehensive orientation program to fully integrate new nursing graduates or nurses with no NICU experience into the role of bedside nurse in a Level III NICU.

METHOD: An orientation program has been developed that utilizes interdisciplinary subject matter experts to teach an extensive didactic component. Knowledge translation and application is enhanced through one on one partnering with experienced bedside nurse preceptors who guide the learners within the clinical setting. Learning objectives and outcomes are clearly outlined and achievement of such are continually evaluated and documented throughout the orientation process. Transition to independence at the bedside is facilitated through the identification of a resource nurse who continues to guide and support the new nurse after orientation is complete.

RESULTS: The orientation program continues to evolve through ongoing evaluation and feedback from staff. This Level III NICU has successfully hired and transitioned 30 new graduate nurses and 8 nurses with no previous NICU experience since 2011. The recruitment process no longer focuses solely on nurses with NICU experience; instead it recognizes the untapped potential in the new graduate nurse.

CONCLUSIONS: The investment of time and resources into developing and supporting a comprehensive orientation program will better prepare new graduate nurses to care for the tiniest patients. The provision of a solid foundation on which to build their skills and apply their knowledge may facilitate the development of independence and encourage the learner to pursue advanced skills and roles within the NICU.

Teaching Person-Centred Care Via Patient Narratives: A Pilot Study Of First-Year Medical Students

Presenter: Alon Coret

Alon Coret[1], Kerry Boyd[2], Kevin Hobbs[3], Joyce Zazulak[4], Meghan McConnell[5]

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Abstract

Theory: People with intellectual and developmental disabilities (IDD) face complex bio-psychosocial challenges, and are considered a medically underserved population. In light of these disparities, the present study sought to create an experiential learning opportunity that introduces first-year medical students to the IDD population. More specifically, this investigation focused on the use of narrative-based reflection as a teaching tool, that is, learning through authentic stories of and interactions with people affected by IDD. This comes as an extension to the work done by other researchers, which shows promising results for the pedagogic usefulness of patient narratives.

Hypotheses: It was hypothesized that narrative reflection would allow medical students to: (1) develop adaptable, person-centred interviewing skills; (2) feel more comfortable, confident, and competent in communicating with people with IDD; and (3) engage with an enjoyable and meaningful educational experience.

Method: 27 first-year medical students from the Michael G. DeGroote School of Medicine (McMaster University) were recruited and randomly assigned to one of two groups. The control group received an introductory lecture about IDD healthcare, followed by a quiz. The narrative group received the same lecture, followed by a reflective discussion on videos of people affected by IDD sharing their unique perspectives and stories. All students then participated in four simulated clinical encounters, each with a patient educator (PE) affected by IDD. The students were assessed through self-, PE, and objective evaluator scores on measures of person-centred communication (e.g. attentiveness, empathy). Students also reported their comfort, confidence, and competence interacting with people with IDD pre/post intervention. Focus groups were conducted separately with students at the conclusion of their simulated encounters.

Results: The narrative cohort reported greater increases in confidence measures compared to control ($p = 0.05$; $F = 4.3$); they also outperformed across all PE interview stations, although these differences were not statistically significant. Students and PEs described the experience as enjoyable and meaningful.

Conclusions: Patient narratives are pedagogically beneficial for medical students. More specifically, exposure to video-based narratives of patient educators and reflective discussion on these narratives promotes students' confidence in their approach to people affected by IDD, and trends toward being a more valuable educational intervention for communication skills compared to a more didactic approach.

Key words: person-centred care; intellectual / developmental disabilities; medical student; communication skills

The Effect Of Medical Student Clerks On Emergency Department Length Of Stay At A High Volume Community Hospital

Presenter: James Bao

James Bao[1], Yusuf Ahmed[2], Ruby Alvi[3], Sarah McClennan[4], Jennifer Everson[3], Christopher Meaney[3]

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Canada

Abstract

Background/purpose: Emergency department (ED) wait times are associated with clinical outcomes, hospital overcrowding and patient satisfaction. In 2013, a high volume community ED in Ontario, Canada took on its first cohort of medical student clerks as part of their core clerkship rotations. However, the effect that medical student clerks have on wait time metrics is not well understood. We aim to determine the impact of medical student clerks on patient length of stay in the ED.

Methods: We conducted a retrospective, quasi-experimental matched case-control study of patients who presented to a high volume community ED between June 2013 and June 2016. Emergency department patients were allocated as a case if a clerk was working in the ED at their time of triage, and were matched on a 1:1 ratio with controls that did not have a clerk working in the ED at time of triage. Cases and controls were matched on 6 variables: gender, age, CTAS acuity score, ambulance arrivals, discharge status, and presence of a resident physician. Mean patient length of stay was assessed between these two groups.

Results: From June 2013 to June 2016, 300,881 patients were identified, 58,485 of which were seen with clerks present. After allocation, a perfect match was obtained with 58,485 cases and 58,485 controls on gender, age, CTAS acuity score, ambulance arrivals, discharge status, and presence of a resident physician. Total ED length of stay was 383.0 minutes in the group without clerks, and 396.7 minutes in the group with clerks, a difference of 13.7 minutes ($p<0.0001$).

Conclusion: Patients triaged in the ED, while a clerk is present, experience a 13.7 minute longer length of stay compared to similar patients triaged when a clerk is not present.

A Multi-Disciplinary Needs Assessment For Improved Training In Identifying And Managing Free Flap Compromise

Presenter: Laura Snell

Laura Snell[1], Catherine McMillan[1], Veerle D'Hondt[1], Joan Lipa[1]

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Canada

Abstract

Objective: This study aimed to examine the need for improved training in the identification and management of free flap compromise and to assess the potential role for simulated scenario training from the perspective of plastic surgeons, nurses, and plastic surgery trainees.

Methods: A mixed methods approach employing three needs assessment surveys and expert focus groups was used to achieve study objectives. Plastic surgeons practicing in Canada were invited to complete the online survey and plastic surgeons in Canada, the United States, and Europe with expertise in microsurgery education were invited to participate in focus groups. Plastic surgery trainees in Canadian programs and nurses with experience in free flap care at a tertiary centre were invited to participate in a needs assessment via email. Descriptive statistics and qualitative assessment methods were combined to analyze data.

Results: Sixty-six surgeons completed the needs assessment survey and eleven surgeons participated in focus groups in addition to completing the needs assessment survey. Thirty-two trainees (PGY1 to fellowship) and 14 nurses also completed surveys. Forty-three percent of surgeon-educators (n=49) felt that graduating residents are not adequately prepared to manage free flap compromise independently. Sixty-five percent of educators estimated that their volume of free flap cases is insufficient to adequately teach residents how to manage compromise and 45% indicated too low a volume to adequately teach identification of compromise. Forty-seven percent of trainees felt that the number of free flap cases seen on their rotations is insufficient for adequate training while 28% felt that too few cases are seen to adequately learn identification. Thirty-six percent of nurses surveyed reported an insufficient free flap case load on their floor for nurses to learn identification of free flap compromise. Exposure to normal and abnormal free flap cases was felt to be critical by focus group participants for effective training. Focus groups identified low failure rates, communication issues, and challenging teaching conditions as current barriers to adequate training. Most educators (74%), trainees (78%), and nurses (64%) felt that simulated scenario training would be "very useful" or "extremely useful" in training. Focus groups recommended the development of a standardized algorithm for re-exploration and salvage before creating simulation-based modules aimed at teaching the management of FF compromise.

Conclusion: The creation of simulation-based training modules may improve education for the multidisciplinary team in identifying and managing FF compromise by addressing a lack of clinical exposure and providing a means for deliberate practice.

Feasibility And Impact Of A Patient Mentoring Program In Immediate Breast Reconstruction: Preliminary Results

Presenter: Catherine McMillan

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Abstract

Background: Due to the urgent nature of immediate breast reconstruction (IBR) in the treatment of early stage breast cancer, patient education must be provided over a short period of time. Besides creating additional anxiety, this time limitation may result in the misalignment of pre-operative expectations with post-operative satisfaction. The objective of this study was to determine the feasibility and impact of a patient mentor program that aims to match pre-operative patients with post-operative patients based on reconstructive surgeon, procedure, and demographics.

Methods: After a standard education session and consenting to mastectomy with IBR, patients were invited to participate in the study. Post-operative mentors were recruited from follow-up clinics or via email. Patients were matched based on age, reconstructive surgeon, procedure, laterality, and the age of offspring and language if possible. A comprehensive program guide was developed using existing cancer-related mentor program resources and input from a clinical psychologist specializing in breast cancer care. Unstructured one-on-one patient meetings were arranged at the hospital for one hour in the week before IBR. Pre-operative anxiety, expectations, and health-related quality of life (HR-QOL) were determined one day before surgery using the State-Trait Anxiety Inventory (STAI) and the BREAST-Q, respectively. The BREAST-Q was used to assess post-operative HR-QOL at 3 months and 12 months. Brief exit interviews were held with all participants shortly after the meeting to determine feasibility and feedback for future improvements. A control group of non-mentored patients undergoing IBR completed questionnaires for comparison.

Results: The study objectives are in progress as all participants are currently in follow-up. Five women (age range 42-60) undergoing IBR were mentored by five post-operative patient mentors (age range 49-60) prior to undergoing IBR and two patients have been enrolled in the study as controls (age 53). The impact of the program will be measured by assessing pre-operative expectations, anxiety and health-related quality of life. To date, interviews with mentees and mentors suggest that the program is feasible, while revealing the importance of matching patients closely. Most participants valued a face-to-face interaction, had few or no concerns about the program, and chose to keep in touch with one another outside of the study. Suggestions for improvement included increasing the number of match criteria and providing mentorship early than a week before surgery.

Conclusions: The patient mentor program appears to be a feasible and acceptable form of support for women undergoing IBR. The 12-month results of this pilot study will verify whether the benefits of patient mentoring as suggested by post-interview data are quantifiable.

A Qualitative Evaluation Of An Academic Family Practice And Psychiatry Shared-Care Program

Presenter: Purti Papneja

Eva Knifed[1], Nicolas Howell[2], Purti Papneja[1], Nate Charach[3], Amy Cheung[3], Nikola Grujich[3]

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Abstract

Background

Collaborative care integrating primary and specialist mental health care have been increasingly highlighted as a way to improve psychiatric services in Canada and internationally. The family practice unit at Sunnybrook Health Sciences Centre, in collaboration with the department of psychiatry, have operated a 'Shared Care' program since 2008 providing joint family medicine-psychiatry consultations for patients within the family medicine clinic. The program has also aimed to provide teaching for residents and family medicine staff to build capacity to manage psychiatric illnesses in a primary care setting. The program has not, however, undergone formal evaluation since its inception. The objective of this study was to evaluate whether the Shared Care program was meeting the educational and clinical needs of health care team members and look for opportunities for improvement.

Methods

A qualitative study design using a combination of in-depth interviews and focus groups to understand the views of family practice and psychiatry team members on the Shared Care program were conducted. Family medicine and psychiatry residents and staff, registered nurses, social workers, office coordinators, and program coordinators were sampled to elicit a wide range of perspectives on facilitators and barriers to the goals of the program. A qualitative content analysis approach was used to iteratively code the interview and focus group transcripts and derive themes.

Results

Themes arising from the discussion included: continuity of care, formalization, educational goals, attitudinal shifts, communication issues, and program strengths. The participants voiced that the value added by family medicine's longitudinal relationships with patients was lost when Shared Care appointments were scheduled with physicians who had not met the patient previously. Trainees also noted that a more structured approach to the program would help clarify roles of the learners and other healthcare team members. Many participants felt that the program was succeeding for patients and clinicians by offering timely access to psychiatric care and helpful feedback, respectively.

Discussion

Alterations to the structure of the Shared Care program could help improve the educational experience of the trainees. Formalization might lead to less uncertainty regarding responsibility for follow up, clearer expectations, and better longitudinal care.

Myteamapp: Patient Co-Designed App To Promote Team Supported Patient Self-Management Of Chronic Conditions

Presenter: Jocelyn Charles

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Abstract

The number of older patients with multiple co-morbidities and complex health needs is increasing. Lack of coordination between primary, specialist and community providers as well as poor patient health literacy, self-management skills and care navigation knowledge all contribute to avoidable ED visits and hospitalizations. While significant work is underway to improve provider communication/coordination, a better understanding the experiences of patients will facilitate the development of strategies to assist patients with self-care and care navigation which are independent of hospitalization and ED visits where appropriate.

The purpose of this work was to understand the patient experiences leading up to repeat ED visits and the patient factors related to navigating their care to inform the development of a tool to assist patients in their self-management.

Interviews of 20 older patients with multiple ED visits/hospitalizations in the previous 6 months were conducted while they were in the ED at Sunnybrook HSC or shortly after discharge. Primary outcomes were the identification of the patient/family perceived barriers and challenges with patient self-management and care navigation prior to an ED visit and the opportunities and strategies to inform improved care in the community. As the barriers, challenges and care navigation issues identified were very specific to each patient's health and circumstances, a patient-specific tool was needed.

One patient volunteered to work with an interprofessional team, the research team and the Human Factors Specialists (clinical engineers, cognitive psychologists, human factors specialists) at the Centre for Global eHealth Innovation to develop a prototype tool to facilitate tailored self-management. The patient was interviewed by an interprofessional team which was observed by the Human Factors team. Four specific questions were identified as key daily cues for this patient which were built into a prototype tool. The tool provides pre-defined feedback on specific measures that are then shared with his care team at regular intervals. The tool was then translated into a mobile device app by Think Research and tested with the patient, Think Research, the research team and Human Factors Specialists. The prototype of the tool will be presented. The app can be tailored to many different patient needs/preferences.

Evaluation Of An Institutional Guideline For The Periprocedural Management Of Direct Oral Anticoagulants For Percutaneous Coronary Procedures: A Prospective Observational Study To Identify Gaps Between Guideline And Practice

Presenter: Gloria Lau

Gloria Lau[1], Claudia Bucci[1], Artemis Diamantouros[1], Rita Selby[1], Sam Radhakrishnan[1]

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Canada

Abstract

Background: Direct oral anticoagulants (DOACs) have emerged as recommended treatment for stroke prophylaxis in patients with non-valvular atrial fibrillation. Limited guidance exists regarding peri-procedural management of DOACs and current available recommendations are based on expert consensus and the pharmacokinetic properties of these medications. At our institution, a guideline is available on the intranet for clinicians, but its uptake and use in practice are unknown. This study was conducted to identify any gaps between the guideline and practice and, if a gap exists, to use this information to create a better clinical tool to improve practice. Plasma DOAC concentrations were obtained to identify whether current recommendations resulted in DOAC levels that correlated with expected plasma concentrations reported in the literature.

Methods: This prospective observational study describes the current management of patients on DOACs undergoing elective coronary procedures. Information that was collected included: the date and time of the last DOAC dose, patients' past medical history, medications; physicians' instructions for peri-procedural management, patient adherence and periprocedural complications. The data were evaluated using descriptive statistics. Informal interviews were conducted with the cardiac triage coordinators (CTCs) to identify challenges to current practice and to gather informal feedback about the use of the guideline in practice. Pre-procedural blood samples were collected from each patient to obtain plasma DOAC concentrations using anti-factor Xa levels (rivaroxaban and apixaban) and the Hemoclot® Assay (dabigatran).

Results: Twenty-four patients were recruited between February and May 2016. Physicians' recommendations were consistent with our guideline in 12.5% patients suggesting that uptake on its use is low and/or inconsistently followed. Variability in physician practice was noted in the recommendations and confirmed through the interviews with the CTCs. Patient adherence to the recommendations was 70.8%. DOAC plasma concentrations of the study patients were consistently below reported "on-therapy" trough ranges which is an expected outcome for patients who were off therapy for at least 24 hours. Plasma concentrations are weakly affected by the number of days the DOACs were held and changes in drug concentrations do not reflect significant changes in conventional coagulation parameters such as the international normalized ratio (INR), prothrombin time (PT), partial thromboplasmin time (PTT), or thrombin time (TT). There were no significant peri-procedural complications.

Conclusions: The current institutional guideline for peri-procedural management of anticoagulants is used inconsistently in practice. Patient adherence to physicians' instructions is also inconsistent. The results of this study suggest that a revision to the institutional guideline or creation of an alternative resource is needed to improve its usability in practice and to also standardize and minimize variations in physician practice. In addition, patient education needs to be improved to increase adherence to physicians' instructions. The coagulation tests results will add to our growing knowledge of peri-procedural use of DOACs. Future research in identifying the barriers to using the guideline in practice and designing a guideline or tool that overcomes these barriers will be critical to improve the use of knowledge in practice.

Care For The Dying – Internationally Trained Nurses Experience Approaches To Palliative Care Through Simulation

Presenter: Kevin Hobbs

Kevin Hobbs[1], Courtney Evers[2], Dustin Gibson[2]

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Abstract

Introduction

When educating on family centered care for the dying, it can be challenging to explore the nuances of therapeutic communication through a lecture-style format. Further, international nursing students have unique needs when adapting to our country's healthcare context. This kind of educational circumstance requires time to attain full impact. Our objective was to provide concrete experiences by utilizing an experiential methodology. We integrated a long-term simulation, allowing the students an opportunity to engage with Kolb's Experiential Learning Cycle over a period of weeks. In January 2015, our institution introduced a palliative care course to Term 2 students enrolled in the International Graduate Certificate Program in Palliative Care. A long-term simulation with standardized patients was integrated to enhance training.

Project Description

The course centered on a palliative patient and her husband ("Mary and Ben"), depicted by Standardized Patients. In preparation, the students were provided a lecture on experiential learning and viewed a large group modelling of an encounter between a trained nurse and a standardized patient. In teams of two, students met Mary and Ben three times over the term. The same SPs were employed for each meeting, allowing students the opportunity to form an on-going relationship with Mary and Ben. The initial meeting was an introductory interview following Mary's diagnosis of terminal breast cancer. The next meeting was a discussion on Mary's advancing illness; topics such as pain management and caregiver support were explored. The final meeting was at Mary's deathbed; students provided care for Mary prior to her "death" and support for Ben immediately following her "death". These interactions took between eight and fifteen minutes.

Outcomes

Student feedback was positive. Students described increased confidence with palliative care, enhanced therapeutic communication, and a deeper understanding of the emotional aspects of loss and grief.

Conclusions / Discussion

This course has implications for pedagogical practices in simulation learning, palliative care nursing, and the continued education of international health professionals. Investment in the integration of Standardized Patients into long-term simulation - from diagnosis to end of life - has provided higher educational value than the typical one-off simulation encounters.

QI Teachers Learn From A Less Successful Project And Hospitalist Trainees

Presenter: Andre D Small

Andre D Small[1], Mireille norris[1]

[1]Sunnybrook hospital (Main campus)

Canada

Abstract

Title: QI teachers learn from a less successful project and hospitalist trainees

Introduction:

What educational lessons are learned when award winning project team fails to reproduce results? In Previous years the hospitalist fellowship program produced award winning quality improvement posters. These projects are integrated into the fellowship program's education. QI modules are taught by Dr. Brian Wong, with the assistance of Dr. Norris. All project's trainees follow a strict QI methodology, and take a multi-disciplinary approach. For the first time this year we were unable to engage learners into completing a successful QI project. This year's project, 'Improve access to swallowing studies to Reduce Delays in Feeding Times', did not achieve our usual performance standard. It is our intent to discuss and explore the educational factors that led to this lower performance.

Previous year's teams consisted of award-winning self-motivated clinical fellows. Many had previous quality improvement exposure, and thus the modules complimented their previous knowledge. The culmination of these factors led to many championing these projects. This year's fellows did not possess a similar background, and thus complimentary education became essential to their learning. Furthermore, several personal and academic issues diverted attention away from the fellow's focus. The end result was a project championed and driven by the supervisors and non-frontline team members.

This year's initiative focused on dysphagia, swallowing assessment, and decreasing food order time in stroke patients. A topic which in hindsight we realized was not in physician control.

Method:

Each lecture illustrates a concept of QI that is preceded by learning objective and followed by experiential learning. Lessons are split into two components, lectures and a quality improvement project. The lectures are conducted every 3-4 weeks. The project encompassing the teaching component is facilitated concurrently and iteratively; this is done to help integrate theory into a real-world perspective. Collaboration with the stroke team, nurse clinician, and physician added an inter-disciplinary quality to the learning experience. The lessons and project occurred during a 9-10 month period.

Clinical fellows created an aim statement, and conducted two chart reviews on data related to stroke patients and oral feed orders. Stakeholders were engaged after each round of data collection, and they assisted in process mapping.

Results:

Formulizing an aim statement took several months, as compared to weeks on previous projects. Fellows failed to produce a champion to spearhead the project, and social and personal issues involving our fellows resulted in a lack of continuity of education. Three data collect intervals were necessary for the project, and a refocusing of data parameters was necessary. Stakeholders were engaged along each step of the process. During process mapping it was our stakeholders who identified that our project would call for increased workload and resources for minimal change in outcome measure.

Conclusion:

As educators it is important to understand the different aspects of adult learning. One aspect that is constantly overlooked is the modification of learner's behavior [2]. In this project our group received excellent teaching and guidance to reach their goal. However, there was a failure to modify behaviors and attitudes directed at the project. This is reflected in the refocusing of data collection, delayed creation of an aim statement, and lack of project champion. To improve upon our project outcomes, our educational initiative cannot be compartmentalized and must take an immersive approach. The solution is a holistic educational approach.

Compassion Fatigue In Surgical Trainees – Desperately Seeking Help!

Presenter: Natashia Martina Seemann

Natashia Martina Seemann[1], Jessica Marchese[2], Leslie Gotlieb-Conn[2], Janet Ellis[3], Ari Zaretsky[3], Avery Nathens[4], Paul Karanicolas[4]

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Canada

Abstract

Introduction: Compassion fatigue is the emotional and physical burden felt by those helping others in distress. This phenomenon has been identified and studied in health-care providers, but there is a paucity of data on how it affects trainees. Surgical trainees have been shown to be amongst the busiest and most stressed medical trainees and may be at particular risk for compassion fatigue. If not addressed, this can lead to significant job dissatisfaction, mental health issues, and burnout.

Methods: As the first step in an exploratory study to examine compassion fatigue, an IRB approved email survey was sent to all surgical trainees at a large academic center. The survey included yes/no, multiple choice and open-ended questions. It also included the ProQOL, a validated measure of compassion fatigue.

Results: 115/543 (21%) of the surgical trainees responded after three iterations of the email survey (42% female, 58% male). The majority of the respondents (41.7%) were trainees in general surgery, but the survey included trainees from orthopedics, otolaryngology, neurosurgery, urology, plastic, vascular and cardiac surgery. Trainees represented all levels from PGY-1 to fellow, as well as residents currently on research. 21% of the trainees identified as single, 31% in a relationship, 45% married and 3% divorced. 30% had at least one child.

When asked which parts of their job they found stressful, surgical trainees mentioned “the system” (ie. hospital flow, computer systems etc.) most commonly at 69%, but also cited inability to control schedule (65%), heavy workload (61%), lack of personal time (59%) and interactions with staff surgeons and colleagues (49%). Patient interactions were only deemed stressful by 16% of respondents.

73% of respondents reported being personally affected by a patient’s death and 32% reported experiencing secondary trauma from this. 52% of respondents did not feel there were adequate supports in place to help them deal with these experiences. When asked whom they talk to about stressful or traumatic situations at work, partner (84%), resident colleagues (71%) and friends (51%) were the most common. Staff physicians (25%) and professional counselors (3%) were the least common. Coping mechanisms reported included exercise (70%), mindfulness/meditation (20%) and 24% admitted to using alcohol as a coping mechanism. Based on the validated ProQOL, 34% of the trainees qualified as having compassion fatigue.

The majority of respondents (70%) felt that an intervention to help residents deal with compassion fatigue would be useful to them. When asked how to help residents cope with compassion fatigue, 75% of the respondents felt debriefing sessions and 70% felt training for healthy coping mechanisms would be beneficial. 57% felt an individual setting would be most useful, while 43% preferred a group setting. The majority (56%) felt that an intervention should be mandatory following a tough case.

Conclusions: Compassion fatigue is exceedingly common in surgical trainees and must be addressed. While a majority of residents are using healthy coping mechanisms, at least 24% are using alcohol to cope. The majority of surgical trainees feel that an intervention to help them cope with compassion fatigue would be useful. Determining the optimal timing, setting and content of an intervention will be vital to the success of such a program.

Measuring Collaborative Practice To Inform Interprofessional Education And Care At Sunnybrook: Results Of The Collaborative Practice Assessment Tool (CPAT)

Presenter:

Lesley Gotlib Conn[1], Tracey DasGupta[2], Elizabeth McLaney[2], Siobhan Doherty[2], Sandi Ellis[2], Karen Johansen[2], Ru Taggar[2], Katie N. Dainty[3]

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Abstract

Background

Sunnybrook's Interprofessional (IP) Collaboration Strategy aims to support and strengthen interprofessional care and education across the organization. Its objectives are to create opportunities for collaborative decision making among organizational leaders and establish and embed models for interprofessional practice, education, quality improvement, and research. In order to inform the strategy, we assessed perceptions of collaborative team functioning within six clinical units at Sunnybrook with a view toward identifying areas of excellence and challenge.

Methods

We administered the Collaborative Practice Assessment Tool (CPAT), a validated survey instrument, across 6 acute and long term care units at Sunnybrook. The survey is comprised of 56 Likert-style questions in 8 domains, with 4 open- ended questions and 1 set of demographic questions. The survey was conducted from March 26 through October 20 2015 (7 months) in both paper and online formats. All unit staff, physicians and trainees were invited to participate.

Results

We received 133 responses including 44 completed on paper. The sample was a cross-section of clinical professionals, in different career stages, and number of years having worked on their participating unit. About half of the respondents (51%) were nurses and 85% were female. Positive perceptions of team collaboration were reported in the domains of mission, purpose and patient goals; general team relationships; communication & information exchange; and, patient involvement. Yet, one quarter of respondents perceived team leadership to discourage professionals from taking initiative to support patient goals (24%). Only 38% of respondents reported that their team has a process for peer review. Almost half (45%) felt limited in the degree of autonomy they can assume in patient care. One third (32%) felt that disagreements among team members are unresolved, and 40% felt that the team does not share information related to community resources or has a process to optimize the coordination of client care with community resources.

Conclusions

Perceptions of interprofessional collaboration in the surveyed units are generally positive with some key areas for improvement identified in the domains of team leadership; general role responsibilities and autonomy; decision-making and conflict management; and, community linkages and coordination of care. The results of this work will inform Sunnybrook's IP Collaboration Strategy, as well as the development of a toolkit to support the evolution of interprofessional education and care therein.

The Twitter Journal Club For Medical Radiation Professionals (#Medradjclub): CPD/CE For The 21st Century

Presenter: Lisa Di Prospero

Lisa Di Prospero[1], Geoff Currie[2]

[1]Odette Cancer Centre at Sunnybrook Health Sciences Centre
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Canada

Abstract

Introduction

There is a growing trend towards the use of online journal clubs amongst healthcare professionals as a means of sharing knowledge, discussing evidence in an accessible form of continued professional development (CPD). In March 2015, the Medical Radiation Journal Club was founded to run monthly Twitter-based journal critique and discussion. The Twitter journal club is aimed at all medical radiation professionals. The hour-long meetings are based on a key selected theme relevant to all medical radiation technologists, with one key study chosen from the literature and supplemented by suggested reading. The objective of this study was to examine the progression and development of this initiative over the initial 12 months.

Methods

Tweets including the journal club hashtag (#medradjclub) were analysed for each session through third party services, Symplur (www.symplur.com) and Keyhole (www.keyhole.com). Available information included total tweet count, total participants, total impressions and country of tweet origin.

Results

Provisional analysis indicates that there is a core group of consistent participants, with others joining for topics relevant to their area of practice. The initial trend is for relatively consistent volumes of tweets and impressions across the chats. The Twitter journal club has a global reach, typically 500+ tweets per hour and a total reach in the order of 1000000 per session.

Conclusions

Online journal clubs provide a forum for promotion of evidence based practice, academic debate and professional networking, free from traditional physical boundaries. Analysis of the first twelve months of #MedRadJclub demonstrates consistent participation and global reach, and is an accessible, interactive platform for discussion of research and practice in this field. The Twitter journal club is consistent with globalisation and internationalisation strategies amongst the medical radiation technology professions.

Can Simulation Help Our Medical Students "Choose Wisely"?

Presenter: Anita Sarmah

Thiago Appoloni Moreira[1], Mabel Choi[1], Agnes Ryzynski[1], Susan DeSousa[1], Anita Sarmah[1]

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Canada

Abstract

Background

Recently there has been a shift in Canada's health care philosophy towards "less is more". . Choosing Wisely (CW) Canada (1) is part of a global campaign to help physicians and patients engage in conversations about unnecessary tests, treatments and procedures. Educators must implement CW early in the curriculum to promote learners developing patient-centred management plans(2,3).

Traditionally physicians have ordered multiple tests prior to "routine" surgery. These may be un-helpful, non-evidence-based, and lead to more tests with the potential for unnecessary harm. As Anesthesiologists, we are "gatekeepers" for elective surgical patients. Ideally patients are seen 2-3 weeks for optimization. CW has collaborated with the Canadian Anesthesiologists Society to develop a list of "Five Things Physicians and Patients Should Question." One of these is a Chest X ray (CXR).

Summary of Work

We highlighted this to 250 University of Toronto medical students during core Anesthesia Simulation. To keep costs down, we customized our existing pre-operative scenario.

Students extract the history from a Standardized patient (SP). Based on examination findings, students justify appropriate investigations. Competition is introduced and teams who choose CXR automatically lose points. This is where the discussion becomes rich and heated!

Finally teams explain their rationale to the SP.

Learner Feedback

Among the answers to" What will you take away from this to apply to your practice?" our learners specifically commented "investigation selection", "Choosing Wisely" and "don't order unnecessary tests!"

Impact

Introducing the concepts of CW in anesthesia rotation curriculum, we encourage the discussion about the best way to proceed, contemplating patient safety and responsible resources usage. This process shifts away from generalized protocols for groups of patients, towards individualized approach.

Take home messages

Implementing CW in undergraduate medical education targets a grassroots' change in culture necessary for transformation.

References

1. Levinson W, Huynh T. Engaging physicians and patients in conversations about unnecessary tests and procedures: Choosing Wisely Canada. MBA CMAJ. 2014; 186(5): 325–326.

2. Cooke M. Cost consciousness in patient care - what is medical education's responsibility. N Engl J Med. 2010; 362:1253-55.

3. Weinberg SE. Providing high-value, cost-conscious care: A critical seventh general competency for physicians. Ann Intern Med. 2011; 155:386-388.

Is Artificial Empathy Enough? A Qualitative Study Of Chinese Medical Student Perspectives On The Role Of Empathy In Medicine

Presenter: Linghong Zhou

Linghong Zhou[1]

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Canada

Abstract

Background: In an effort to improve the patient-physician relationship, empathy among medical trainees has been a topic of profound study. The vital role of empathy in medicine has been studied extensively in recent years – it has been found to improve the quality of patient care, physician satisfaction and even health outcomes. Due to the benefits, medical education has been keen to see empathy training integrated into the curriculum by means of patient shadowing, communication skills training, and wellness programs.

However, there is a scarcity of literature evaluating the role of empathy in non-Western medical curriculum. In this study, we provide a detailed account of Chinese medical student perspectives on the role of empathy in medicine and its utility for them as future clinicians. More specifically, we sought to better understand the definition of empathy, the perceived role of empathy in medicine, empathy erosion and its associated factors, and empathy training in the medical curricula. To our knowledge, this is the first study that addresses empathy from the perspective of Chinese medical students.

Methods: Two focus group sessions, recruiting sixteen medical students from the Shanghai Jiao Tong University School of Medicine and the Shanghai-Ottawa Joint School of Medicine were conducted. Each session, lasting an average of 90 minutes, was led in a semi-structured interview style to explore perspectives in an in-depth manner. Following data collection, thematic data analysis was applied for thematic coding, and visual thematic data maps were constructed using Leximancer thematic software.

Results: Thematic data analysis presents results in four main themes, organized as follows: (i) defining empathy; (ii) establishing the role of empathy in medicine, (iii) empathy erosion and its associated factors, and (iv) empathy training. Empathy was found to be made up of four components – understanding emotion, emulating others' emotions, a desire to help others, and amelioration of patient care. The first three components are universally accepted in the literature, while the fourth revealed that the students assigned a clear clinical definition to empathy. The top themes identified as the perceived benefits of empathy were found to include improved communication, superior patient care and emotional support, and physician self-fulfillment. However, the concept of 'artificial empathy' – the idea that the simple act of empathy, without genuine emotion, was a novel concept put forth forward by the students. Artificial empathy directed towards patients was described to be enough to attain all perceived benefits without unnecessary burden or expenditure of energy on the part of the physician. The top three associated factors of empathy erosion were identified as workplace constraints, emotional guilt and burden, and distrust in the physician-patient relationship. Finally, empathy training in the medical curricula was discussed and unsurprisingly, revealed students' preference for role playing, practical-based learning, and experience-sharing over traditional lecture learning.

Conclusion: As the physician-patient relationship becomes increasingly strained in many countries worldwide, an exploration of the role of empathy in medicine in relation to its sociocultural factors is of paramount importance. This study expands the current body of literature examining the role of empathy in medicine, as well as the novel concept of artificial empathy, from a unique cultural and student-focused perspective.

Overnight Obstetrical Outcomes Are Worse After Resident Work Hour Restrictions

Presenter: Brian Liu

Brian Liu[1], Michael Ordon[2], Janet Bodley[1], Grace Liu[1], Refik Saskin[3], Jamie Kroft[1]

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Canada

Abstract

Introduction

Many residency programs around the world are now implementing work hour restrictions. The effects of this new system on patient outcomes is still unclear. The Obstetrics program at the University of Toronto has recently adopted a "night float" system, in which residents work for a restricted number of hours overnight but work for four consecutive nights in a row. The objective of this study was to determine if there has been a change in patient outcomes since the implementation of the new system of restricted resident work hours.

Methods

This project was designed as a population-based, retrospective cohort study in Toronto, Ontario, Canada using data from the Institute for Clinical Evaluative Sciences (ICES). The study included all obstetrical patients who underwent a delivery of any kind between July 2011 and June 2015 at one of three academic hospitals in Toronto (Sunnybrook Health Sciences Centre, Mount Sinai Hospital, and St. Michael's Hospital). These patients were found based on billing fee codes for obstetrical deliveries using the physicians' claims database and were linked with the mom and baby database. The pre-intervention cohort was comprised of patients who delivered between midnight and 7am, before resident duty hour restrictions took effect (July 2011-June 2013). The post-intervention cohort included patients who delivered between midnight and 7am, after the implementation of the night float system (July 2013-June 2015). The demographics of the patients between groups were compared using standardized differences.
The primary outcome was a composite index of all maternal and fetal outcomes. Secondary outcomes were: a composite of all maternal outcomes; maternal transfusion or postpartum hemorrhage; maternal infection; a composite of all surgical/obstetrical complications; a composite of all fetal outcomes; fetal mortality; and NICU admissions.

Regression analysis was performed to determine if the outcomes listed above were significantly different between the two cohorts. We also adjusted for the following baseline characteristics: maternal age; maternal Aggregated Diagnosis Groups score (a standardized comorbidity index); parity; multiple gestation; caesarean section; preterm labour; placenta previa; and post dates. As well, to control for each institution, an analysis was completed for each outcome using a Generalized Estimating Equation model clustered by institution.

Results

The pre-intervention cohort consisted of 6,763 deliveries, and the post-intervention cohort of 5,548 deliveries. There were no significant differences between groups for any of the baseline characteristics. There was no significant difference found in the primary outcome, the composite of all maternal and fetal outcomes. After the implementation of the night float system, an increased incidence of composite maternal surgical/obstetrical outcomes (OR 1.23, p=0.0016) and transfusion/postpartum hemorrhage (OR 1.26, p=0.0006) was found. There were no significant differences between groups for the composite of all maternal outcomes, maternal mortality, maternal infection, a composite of all fetal outcomes, fetal mortality or NICU admissions. Controlling for baseline characteristics did not significantly alter any of the results.
Conclusions

Since the implementation of reduced duty hour restrictions at the University of Toronto Obstetrics and Gynecology program, there has been an increased incidence of surgical/obstetrical maternal complications and transfusion/postpartum hemorrhage at the three academic hospitals. Although this is an observational study and we cannot infer causation, it certainly highlights the need to further investigate the clinical impact a change in resident duty hours has, in order to determine the best strategy to adopt as we move forward.

It Only Takes A Minute: The Development Of A Patient Experience Survey In Radiation Therapy

Presenter: Fatima Hashmi

Fatima Hashmi[1], Nikolaus Gregor[1], Merrylee McGuffin[1], Angela Turner[1], Brian Liszewski[1], Ruby Bola[1], Lisa Di Prospero[1]

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Canada

Abstract

Background: Hospitals use patient satisfaction surveys (PSS) to assess metrics of patient satisfaction and identify possible areas for improvement. Although the use of PSS has grown in the past decade with much research on their effectiveness and correlation with other measures of quality, their typically closed-ended questions focus on items of importance to the hospital; these investigations have shifted toward the patient experience, allowing patients to report their priorities for the hospital to build upon via appreciative inquiry. It is integral to provide a mechanism for patients to provide feedback regarding the service we provide and meeting their needs as they proceed through the trajectory of service. Over the last decade, participation in these traditional style surveys has declined, making them costly to administer for minimal benefit. In keeping with the literature, we have introduced the minute survey, a validated three question survey consisting mainly of open ended questions to learn more about the patient experience. Our aim was to develop a tool for health care professionals at OCC to quickly educate themselves about the needs of their patients and use what they have learned to innovate and adapt their practices accordingly.

Methods: The minute patient experience survey was piloted over 4 weeks in the Radiation Therapy department of Odette. Each survey consisted of one global assessment, asking patients to rate their agreement with the statement “My overall experience in Radiation Therapy was great,” on a 5-point Likert scale (strongly disagree to strongly agree), and two open ended questions highlighting strengths and areas for improvement. The surveys were made available to patients in waiting areas, as well as from their radiation therapists during their last week of treatment. All responses were anonymous and completed surveys were returned via drop boxes placed near the reception area. Surveys were collected weekly from these boxes and assessed for any critical comments that needed immediate attention. Descriptive statistics were used to analyse the data.

Results: A total of 29 surveys were completed. 62% of respondents strongly agreed that their experience in Radiation therapy was great, while less than 4% disagreed with that statement. Almost half of the respondents identified friendliness of the staff as a particular strength of the department (48%). They also identified the knowledge of staff (20%), feeling cared for by staff (28%), and staff accommodating scheduling needs (17%). The most commonly identified area for improvement was delay times (28%), with three patients wishing to be better informed of delays, two requesting the delay board be more up to date and two wishing for a way to check delays from home. There were also a few specific requests such as being provided with more multilingual documents, entertainment for the waiting room and a celebration bell to commemorate the end of treatment.

Conclusion: Although the average satisfaction rating for our centre was quite high, this pilot has shown that areas for improvement can still be identified through this simple tool. Obtaining constant quality improvement data is critical to the education of staff and administration regarding the needs and priorities of our patients. Including the patients’ perspective in quality improvement enhances the outcome of the initiative. In the past surveys at the Odette have been used to enhance the patient experience by implementing improvements such as an appointment delay board in the atrium. In the future we will be comparing the overall satisfaction scores following implementation of any improvement to see if there are changes as well as ask patients if they find specific improvements to be beneficial.

Perceptions Of Informal Quality Improvement Education In Trauma

Presenter: Lesley Gotlib Conn

Lesley Gotlib Conn[1], Charlene Soobiah[1], Avery B Nathens[2], Homer Tien[2], Barbara Haas[2]

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Abstract

Background

Quality improvement (QI) learning is an essential and highly prioritized part of all current health professions' education programs. Formal and informal curricula target medical trainees' competencies and skill in patient safety and quality improvement (CanMEDS) as a mandatory component of post-graduate training. At present, there is no consensus on the optimal approach for delivering QI education in surgical residency programs. Academic trauma programs appear to be ideally suited for informal learning approaches to QI through direct exposure to continuous QI processes and initiatives embedded in complex inter-specialty patient care. The objective of this study was to better understand how trauma program physicians and trainees account for informal QI learning at Sunnybrook with a view toward identifying and supporting the factors that best enable its success.

Methods

Ethnographic data were collected from April 2015 to February 2016. Seventeen semi-structured interviews were conducted with trauma program staff physicians (7), surgical fellows (3) and surgical trainees (7). Physician specialty areas included general surgery, anesthesia and emergency medicine. Interview data were triangulated by 27 field observations that included monthly morbidity and mortality rounds (19) and morning handover (8). All data were coded and analyzed iteratively and inductively using a thematic analysis approach in Nvivo software.

Findings

Routine QI participation and education were viewed as important and integral to the roles and responsibilities of all interviewed physicians and trainees; however, as participant groups they described discrepant experiences with informal QI education. Staff physicians described their QI teaching to include discussions of patient complications, clinical decision-making, patient safety risks, protocol development and process improvements. Trauma staff perceived opportunities for QI teaching to be ubiquitous in their daily practice and described trauma patient care scenarios they leveraged for teaching specific skills in QI. Despite a shared commitment to teaching and practicing QI generally, some physicians perceived themselves to be non-participants in trauma QI education specifically, which they attributed to lack of expectation beyond their home disciplines. Morbidity and mortality rounds, which were also considered to be QI rounds in this context, were perceived as effective for teaching clinical reasoning and decision making around patient complications and deaths, but they were viewed to offer little in the way of learning about process and systems issues as a result of an overly clinical focus and uncertainty about expertise and effort to address systems or process issues.

Surgical trainees defined QI learning as reviewing complications and deaths, surgical decision making, and process improvements. Most trainees identified QI rounds as the ideal forum in which they expected to learn about process and systems improvements and did not identify other scenarios or settings where they were acquiring these skills. At the same time most trainees found QI rounds ineffective for achieving QI learning in their current form due to poor staff attendance and case selection. As a result, some trainees felt there was no QI learning in trauma at all. Residents also perceived themselves to be poorly positioned to contribute to QI initiatives because of their transient status and the tendency for QI to happen by staff "behind the scenes". Most residents accepted themselves as bystanders in process and/or systems improvements in trauma.

Conclusion

Trauma surgery training programs are ideal for informal QI education and have the potential to offer surgical trainees many opportunities to learn about QI through specific skills such as handover and guideline use. Staff physicians teach but do not emphasize QI principles or objectives when they impart them leaving residents poorly equipped to recognize and articulate these learnings.

Educating Nurses At The Bedside For Future Leadership

Presenter:

Mary Glavassevich[1], Elaine Avila[1], Michaelson Steffanye[1], Elmi Samia[1]

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Canada

Abstract

The need for nursing leadership at the bedside is vital in today's rapidly changing health care system. As nurses caring for patients, leadership is essential to address the many changes in patient care and to integrate and advance practice. Within our hospital setting, practice councils have been established corporately and at the unit level. This is an opportunity to develop frontline nursing staff for leadership and as chairs of unit council to affect changes now and in the future. However, nurses are not formally trained to assume the role of chair of the unit practice council. To prepare the nurses for this role, a group of nursing leaders explored the knowledge, skills and experience of current and past nursing practice council chairs.

Six questions developed were used to guide the survey. Questions included the understanding of the role, experience in the role and strategies to better prepare for the role. Results of the survey were collated and themed. Specific areas for leadership development were then identified. A customize leadership education workshop was designed in collaboration with Organizational Development to educate future nurses aspiring to the role.

This initiative highlights the importance of our role as leaders in the development of nurses at the bedside for leadership. Nurses must be ready to actively influence change while engaging in best practices.

Collaborative Practice: Improving The Efficiency And Quality Of Student Performance Evaluation In The Clinical Environment

Presenter:

Karen Moline[1], Marnie Peacock[1], Lisa Di Prospero[1], Krista Dawdy[1]

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Canada

Abstract

Introduction

Student performance evaluation in the clinical environment is achieved through a variety of methods. Within the undergraduate Medical Radiation Sciences program at the University of Toronto/the Michener Institute, radiation therapy students are provided with formative and summative performance evaluations throughout their clinical program in addition to competency assessment. The Performance Evaluation Form (PEF) presents students with written, summative feedback of professional behaviours and knowledge and application skills. The PEF is completed by supervising radiation therapists (preceptors) and clinical coordinators (CCs) for individual rotations. The PEF, as a component of the assessment system of the student, provides the student with areas of strength as well as those that require improvement, as assessed relative to the expected standard of trainee training.

Process

In collaboration with the manager of education and team leads, the clinical coordinators (CCs) redesigned the process for completion of the PEFs using a collaborative model approach. The redesign was primarily undertaken to address the issue of efficiency of obtaining and completing the evaluation within the target timeline set out in the MRS clinical course outline as well as standardization of scoring evaluation criterion. Conversely, during development of the new process, the opportunity to incorporate improvements to the quality of the written feedback was identified. The process was converted from one wherein the supervising therapist team completed the evaluation and subsequently forwarded to the CCs for review and final comment, to a system which allows for joint completion with discussion and clarification of criterion and examples of student performance in the co-creation of the final evaluation document.

Benefits and Challenges

Consistent feedback from the therapists who participated in the process indicated a positive experience from both a teaching and learning perspective. The therapists specified a preference from the previous system of form completion. Comments focussed on the ability to provide insight into student performance unhindered by trying to “find the right wording” or not providing comments due to time constraints. Clinical coordinators benefitted from the ability to provide students with a more thorough narrative and description of the comments on the performance evaluation as a result of the collaboration with therapists. CCs were able to provide a standardization of grading of performance evaluation criterion by facilitating discussions between members of the team. An unanticipated outcome of the process redesign was the increased feeling of ‘team’ anecdotally reported by therapists and CCs.

The challenge of scheduling meeting times with therapists and CCs was persistent throughout the process. Flexibility in rescheduling was required of both therapists and CCs. However, the efficiency of form completion was improved due to fulsome conversations that prevented the need for CCs to return to the team for repeat clarification of comments or examples as was a prevalent occurrence under the pre-existing system (add in a time estimate – what did if go from to?).

The updated process provided students with evaluation form which consistently met the course criteria timelines. The evaluations contained a greater number of comments with specific examples and actions to demonstrate improvement. Richer dialogue occurred between the students and CCs during the evaluation review and provided transparency between student, preceptor and clinical coordinator.

Conclusion

Direct collaboration of supervising therapists and clinical coordinators has shown to benefit all participants: students, therapists and clinical coordinators. Students receive summative performance evaluations which include clear and concise descriptive comments that allow for development of learning strategies to foster improvement. CCs have improved insight into student performance while assisting and mentoring therapists in student evaluation.

Becoming A Curator Of Learning: Competency-Based Educator Development For Healthcare Professionals

Presenter:

Haesun Moon[1], Diana Goliss[1]

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Canada

Abstract

The role of an educator in health care, whether formal or informal, is becoming increasingly complex as the amount and access to available information and data surged in the past decade. The demand for developing education skills and strategies suitable for the 21st-century learning has been identified, and it is still increasing. In response to the identified need, Organizational Development & Leadership, in partnership with SEAC Educator Development Committee, designed and delivered the Educator Competency Development Workshop series based on the competencies framework of adult learning principles and practices by the IPL (Institute of Performance and Learning). There were 33 participants in total among which 18 different professions were represented. The purpose of the workshop series was to provide consistent and innovative methods of teaching and learning to any Sunnybrook staff who want to enhance their teaching and education practice in their immediate work context. The series consisted of six (6) 90-minute in-class sessions over 5 months including the final presentation of their application project at the end.

We examined the effect of the overall program as well as each learning component using mixed-methods methods. Each evaluation survey completed after each in-class session as well as a 3-months post-series surveys collected both quantitative measures and qualitative data, and the analyses of the data informed the questions asked in the semi-structured interviews conducted with participants (n=5) who completed the full program requirements. In addition, we examined the detailed effect of a learning process that contributed unintended outcomes identified by the participants so that it may be considered as an immediate and practical strategies/activities to be embedded in their everyday work context.

Our findings suggest that there were three (3) main effect of the workshop series overall: 1) the definition of “who an educator is” expanded to include those who conduct informal/non-formal educational activities as part of their role, 2) self-efficacy of participants increased significantly as a direct result of action learning, 3) the participants are more aware to initiate and engage in informal learning processes outside of formal classroom settings. Synthesizing learning through final presentation process appears to facilitate retention and transfer of the competencies; however, our results demonstrate that it may have resulted in a lower completion level of the full program for some participants. In addition, the departure from a traditional conceptualization of educator as an instructor, as modelled by facilitators, seemed to have positive effects on the perceptual shift of what educators’ role is.

Quality Improvement Intiative For Patient Teachings At The Odette Cancer Centre

Presenter:

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Canada

Abstract

Introduction:

The Patient and Family Education (PFE) program collaborates with other teams at the Odette Cancer Centre (OCC) to offer enriched and meaningful patient teaching opportunities. These range from formal lecture-based classes to informal drop-in sessions, accommodating different patient learning styles. We conducted a quality improvement initiative (QI) for two patient teachings, informal drop-in sessions (ie. Ask a Radiation Therapist, Ask a Social Worker, and Ask a Nutrition Expert) and a formalized class for patients before starting chemotherapy (Introduction to Chemotherapy Class). We sought to document and reflect on the quality of these education interventions, patient satisfaction, and how they might be improved. Specifically, we looked at how to standardize patient teaching evaluation methods and compliance with PFE best practices.

Methods:

Drop-In Sessions: Data collection (for eight-weeks) and analysis consisted of two parts (1) data recorded by the clinicians, and (2) patient feedback on the quality of the interaction, satisfaction, and how the service might be improved.

1. During each drop-in session, clinicians collected information on the length of the interaction, who they spoke to, and specific questions. We charted this information using Microsoft Excel and compiled the quantitative data.
2. We obtained consent to call patients/caregivers, up to two weeks following the interaction and conducted semi-structured interviews (n=5). We documented responses using Microsoft Word and synthesized it into common themes.

Patient Teaching Class: Data collection and analysis consisted of two parts; (1) collecting class registration sheets and tallying attendance, and (2) patient feedback on the quality of the class, satisfaction, and how the class might be improved.

1. Class registration from 11 classes (5 Monday and 6 Thursday) were collected and matched to attendance from each corresponding class. We compared the collective number of registered patients (n=104) with those that attended (n=52).
2. We obtained consent to call patients/caregivers, up to three weeks following the class and semi-structured interviews were conducted (n=21). We documented responses using Microsoft Word and synthesized it into common themes.

Results:

Drop-In Sessions: An average of two interactions occurred during each drop-in session, with interactions lasting between one to 30-minutes. Specifically, the Ask a Nutrition Expert drop-in session had the highest number of interactions with patients/caregivers (n=3.3), followed by the Ask a Radiation Therapist session (n= 2.2), then by the Ask a Social Worker session (n=0.55). Two larger themes emerged; (a) patients/caregivers felt comfortable asking questions in a public space, and (b) the importance of someone to speak to in the moment.

Patient Teaching Class: There was a 50% attendance rate for the Introduction to Chemotherapy class during this period. Two larger themes emerged from the qualitative feedback; (a) mixed satisfaction with the group learning environment, and (b) comfort with the content of the class (normalizing symptoms and side effects, what to expect, the chemotherapy process).

Limitations include recall bias from some patients/caregivers that were unable to remember the interaction; language barriers as we were only able to communicate with people in English; favourable responses from patients for fear that their care at the OCC may be affected; and a limited representation of the OCC population.

Conclusion:

This QI initiative provided us and other programs an opportunity to document the satisfaction of the two types of patient education interventions, and to reflect on how they might be improved. We succeeded in standardizing patient teaching evaluation methods and ensured that each drop-in session and class met compliance with PFE standards and best practices. Qualitative feedback will be used to better inform future patient-teaching sessions/classes and to improve learning opportunities for patients.

Improving Communication On A Surgical Unit

Presenter: Natalie Coburn

Natalie Coburn[1], Oshan Fernando[1], Julie Hallet[1], Elaine Avila[1], Steffanye Michaelson[1], Avery Nathens[1], Lesley Gotlib Conn[1]

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Canada

Abstract

Background: The 2012 Royal College Review of the General Surgery Residency Program cited difficulties in communication and paging at SHSC

Methods: We performed 126 hours of observations and 32 semi-structure interviews with surgical trainees and nurses to examine barriers and enablers to improved communication.

Results: In addition to time and spacial barriers, the observations identified a lack of communication between the nursing team and attending surgeons.

Intervention: In order to increase interdisciplinary communications, we established a monthly “lunch and learn”series in which once a month the attending surgeons present a topic relevant to the patients who are treated on C6. Attendance ranges from 10-20 multidisciplinary team members, and feedback for the sessions are very positive.

Mentorship In Acnrt

Presenter: Molly Trix Sandoval Garcia

Molly Trix Sandoval Garcia[1]

[1]*Sunnybrook Health Sciences Centre*

Canada

Abstract

ACNRT Mentorship is an innovative way of providing mentorship to new graduate nurses. Its purpose is to create a mentorship program that meets learning needs of new graduate nurses while building leadership capacity in ACNRT nurses.

Health Force Ontario New Graduate Initiative requires all new graduate nurses to have mentor. New graduate nurses in ACNRT are being buddied by unit nurse to provide consistency in their orientation in one unit, since ACNRT nurses work across different units and could not be guaranteed to be in one unit during the duration of new graduate nurse's orientation schedule. In its pilot in January 2015, each ACNRT mentor was partnered with one new graduate nurse. There were challenges with this, since mentors and mentees have conflicting schedule, worked in different units hence expectations were not met.

With the initiative that was started from September 2015, mentorship is provided by one ACNRT mentor to total 8 new grads that are hired in ACNRT that came in staggered every month from September 2016 to January 2016 until mentorship is completed at approximately 3 months. I am provided designated time within my full time hours allotted towards mentorship activities. Through this initiative, I was able to support new grad nurses in their transition from a student nurse to a novice nurse, team member and a nurse in the ACNRT role.

New grad hired in ACNRT continued to receive formal mentorship from April 2016 to present. To date, total of 26 New Grads received mentorship.

The overall experience had been positive from the evaluation. The mentees feel supported, has more confidence and has readiness to practice. They were able to meet their learning needs, through continuous assessment and evaluation. Also, they were able to build a trusting relationship and felt integrated with the team. This initiative helped the mentees, me and the team which impacts the organization as a whole. Although there is no evaluation done at an organizational level, I can foresee the benefits this will bring to Sunnybrook. This has impact towards patient safety and quality of care, positive quality of work life, enhanced job satisfaction, better retention of nurses and decrease use of agency staff.

Univore: A Healthy Eating App For Students

Presenter: Brandon Tang

Brandon Tang[1], Elizabeth Liao[1], Brad Kratky[1], Karen Keung[2]

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Canada

Abstract

How can we beat the Freshman 15? Many university students do not eat healthy diets1, lack the skills to cook themselves2, and face campus food options that are not conducive to healthy eating3. Experiencing these problems ourselves and seeing them in our peers inspired us to find a solution.

Surveying medical students at the University of Toronto provided valuable insight into student eating habits and cooking abilities. The initial survey showed that 67% of students rating their cooking abilities as either “average” or “below average”, and that students rarely had more than 6 home-cooked meals in a week (n=80). The survey also explored the most common ingredients available in the households of students (n=80). As a result, these ingredients were used to develop a smartphone recipe generator application called Univore (http://uhnopenlab.ca/project/univore/). The application serves as a virtual cookbook in which one enters the ingredients they have available to generate quick, healthy, and simple recipes. This application is designed to accommodate a busy lifestyle and a relative inexperience with cooking. All recipes focus on simplicity with a maximum of 5 main ingredients and embedded video tutorials.

Univore has been disseminated to medical students across Canada through national mailing lists, and has also attracted interest from local community groups such as the Toronto Western Hospital and the North York Harvest Food Bank. After only a few weeks on the App Store, Univore has over 350 downloads and is continuing to grow steadily. Future directions include incorporating additional features based on user feedback and using a validated questionnaire (Barton, Wrieden & Anderson, 2011) to measure the impact of Univore on cooking attitudes and habits. Through Univore, we envision a novel solution to the age-old struggle of healthy eating.