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A message from the Vice-Dean (Health Sciences) and Director of the Queen’s School of Nursing

The School of Nursing faculty have undergone a major renewal exercise in the last few years to align their individual research programs into a comprehensive School program. While each faculty member maintains their own lines of inquiry there are many overlaps and complementary topics. The synergy between individual programs has allowed faculty to work together on multiple projects, with the teams of researchers adding to the perspectives and enhancing grant applications and grant opportunities.

The faculty voted to combine a number of smaller grants to support research staff hired for the whole school. This has allowed the faculty to receive appropriate help in seeking grants, preparing budgets, and completing required paperwork in the granting process. Newer faculty have received help to increase the likelihood that they will receive external funding.

This first report of the new Queen’s Nursing and Health Research group clearly demonstrates the increase in scholarship achieved by faculty, and the renewed focus in three substantive areas: population with complex conditions, practice environments, and health care quality. Over the next few years there will be modest growth in the number of tenured/tenure track faculty as there has been a complete turnover of faculty since 2000. The School of Nursing complement of programs continues to expand – especially in graduate education. With the renewed QNHR group it will also be easier to attract graduate students and post-doctoral fellows as the research focus is clearer now for prospective students.

We will publish a full report every two years with an interim update of new grants and publications in the intervening years. We hope you enjoy reading the report and welcome your feedback.

Jennifer Medves
A message from the Director of the Queen’s Nursing and Health Research

I am very pleased to provide a report on our first full year, since our transition into Queen’s Nursing and Health Research.

Our previous experience and history as researchers within the original Practice and Research Nursing health services research group provided the necessary foundational support for our recent evolution. Given the complexities and challenges of the research landscape, we wanted to optimally position our individual and group research programs. This was particularly important for new investigators. In the previous year, faculty reached consensus on the common research clusters – complex patient populations, practice environment and health care quality. In 2015, our mandate was to establish the key structures and processes to support research development and capacity building within these clusters. As you will see when you read this report, we have achieved success.

One of the most important additions to the QNHR was the creation of the Research Manager position. We were extremely fortunate in recruiting Geneviève Paré to this position. She has been key in assisting faculty through the identification of research opportunities, facilitation of research grant submissions and management of research project activities. We would like to thank Dr. Medves for the initial bridge funding to support this position and essential infrastructure.

Secondly, in 2015 we focused on further developing a strong methodological approach in the use of large administrative or secondary databases. While several research projects using administrative data had already been completed by faculty members of the Queen’s Nursing and Health Research group, we wanted to build upon this available faculty expertise and our collaborations with Queen’s – Institute for Clinical Evaluative Sciences (Queen’s – ICES). Thus faculty members with an interest in developing research using ICES data contributed to funding dedicated epidemiologist and analyst time from ICES. This has led to a much faster turnaround on the development of proposals for funding, increased knowledge of the available databases, and more efficient processes. In 2015, five new research projects were developed using this approach. It should be recognized that the use of administrative data to answer nursing relevant research questions is not a common approach – thus we are positioning ourselves to be leaders in this area.

Through the year, we established key activities to engage QNHR investigators and our practice partners. A key strategy was the regular scheduling of meetings of each research cluster. At these meetings, current research, proposed research and publications were discussed and reviewed within the group. As I attended all meetings, I can report that the interactive discussions were comprehensive and valuable to participating investigators and partners. As well, we arranged Academic Series, a lunch-time seminar series held on a bi-weekly basis. This forum allowed students, faculty and practice partners to share past, current or proposed research activities. We scheduled this seminar series to facilitate attendance of graduate students. The seminar topics ranged from presentations about new Advanced Practice Models of Care to a wonderful presentation by Dr. Jacquelyn Coutré, of the Agnes Etherington Art Centre.
Research is often perceived as a “solo” venture and journey. While each faculty member is developing their own comprehensive program of research, the QNHR provides infrastructure supports for individual research development within the context of a research and scholarship group. This benefits both the individual and the School of Nursing.

It is with enthusiasm and excitement that I look forward to the next years and the research scholarship and development of the QHNR members.

It is a pleasure to work with this dedicated and engaged group.

Joan Tranmer
History of the Queen’s Nursing and Health Research

The Queen’s Nursing and Health Research, formerly known as Practice and Research in Nursing (PRN), is home to 14 faculty members of the Queen’s University School of Nursing. It is composed of a team of nurse investigators who collectively, and in collaboration with practice and academic partners, lead and facilitate comprehensive research programs embedded within a cycle of practice – knowledge creation and/or synthesis – translation – evaluation. The research programs of its members fall into the research themes of 1) Populations with complex conditions, 2) Practice environments, and 3) Health care quality.
Highlight of Research and Scholarship Activities

Within each of these clusters, faculty are leading or collaborating with others to enhance our knowledge and understanding of issues relevant to each theme. We will highlight some of these below.

The projects in the **Populations with complex conditions** theme have their focus on the patient, and aim to develop knowledge and interventions for the optimization of function and well-being for persons with complex health conditions, with a particular focus on i) older populations, ii) persons with mental health and/or addiction, and iii) persons with complex conditions and/or multiple co-morbidities.

A large group of faculty researchers are leading or collaborating on studies aimed at providing a better understanding of the presentation, health resources utilization and outcomes of patient treated for acute and chronic pain (Sawhney, VanDenkerkhof, Wilson), or understanding the health care utilization and needs of patients with complex chronic conditions such as diabetes, foot ulcers or those undergoing lower leg amputation (Woo). As well, members are using rigorous review and literature synthesis methods to understand and address care issues such as the use of frailty indices as predictor of post-operative outcomes (Wilson), the experience of patients on the wait list for organ transplantation (Godfrey), the effectiveness of non-pharmacologic interventions for babies suffering from neonatal abstinence syndrome (Wilson), or the perspectives of early discharge in breast cancer survivors (Luctkar-Flude). We anticipate that these reviews will generate evidence-based knowledge to support intervention design.

The projects in the **Practice Environment** theme have a provider focus and pursue development of knowledge and interventions designed to optimize the practice environments for health care professionals with a particular focus on 1) effective models of inter-professional care, 2) leadership, 3) workplace structure, culture and health, and 4) communication strategies and systems.

J. Almost leads projects that focus on the role of formal leadership in long-term care settings, identifying and describing positive and negative behaviours in the workplace, and ways to promote quality workplace relationships among nurses. Other projects aim to define how self-identity and compassionate care is developed in the nursing profession (Tregunno), or focuses on the development of an instrument to decrease moral distress in long-term care (Almost). As well, J. Tranmer continues to implement her research exploring the effects of shift work on cancer and cardiovascular risk in female hospital employees.

The **Health Care Quality** theme provides a system focus and pursues the development of knowledge, as well as system and educational interventions, designed to improve the quality of health care, with particular focus on 1) advancing safety, 2) risk assessment and reduction, 3) educational and health technological innovations, 4) health system service and delivery, and 5) health equity. A number of faculty are conducting projects related to clinical simulation (Luctkar-Flude, Tregunno, Sawhney), improving student’s experience and knowledge of epidural analgesia (Sawhney), assessing the validity of generic outcome assessment rubrics (Luctkar-Flude), or understanding concepts such as psychological fidelity and safety in simulation (Luctkar-Flude). M. del P. Camargo Plazas leads an innovative program of research exploring how social determinants of health impact experience and access to health care services in vulnerable populations, in an effort to address health equity issues.
New at the Queen’s School of Nursing

**Dr. Elizabeth VanDenKerkhof** was appointed the inaugural Sally Smith Chair in Nursing in July 2015. The Sally Smith Chair in Nursing was created as part of a $10-million donation to Queen’s by A. Britton Smith, a continuing supporter of the university. The chair is named after his wife Edith “Sally” (Carruthers) Smith, who passed away in June 2012. The funding also helped create the Smith Chair in Surgical Research and the Britton Smith Chair in Surgery, as well as to support the revitalization of Richardson Stadium.

The Sally Smith Chair in Nursing will make it possible for Dr. VanDenKerkhof to move her focus from teaching responsibilities and allow her to further advance her research program into the prevention of acute and chronic pain. It will also give her an opportunity to continue to provide mentorship to junior faculty and students, create stronger connections with the practice setting and help foster further links between researchers in nursing and in health care in general.

**Dr. Katie Goldie** joined the School of Nursing in January 2015, after completing her doctoral degree at the University of British Columbia, and her post-doctoral fellowship at the Centre for Addiction and Mental Health. Her doctoral work explored the positive associations between cardiovascular risks and disease among people with mental health disorders using data from the Canadian Community Health Survey, a survey designed to collect health-related data at the sub-provincial level. Insights from this work motivated her to investigate smoking cessation in this population. During her post-doctoral studies, she studied personalized treatment approaches for people with comorbid mental illness and chronic diseases who are trying to quit or reduce their tobacco use. She also studied the role of nurse practitioner-led clinics in the delivery of effective smoke cessation interventions.

Since returning to Queen’s, she continues to focus her attention on investigating the relationship between physical and mental health using population data sets. She is also developing another theme in her program of research which studies nursing roles in cardiovascular risk reduction.

**Dr. Maria del Pilar Camargo Plazas** joined the School of Nursing in July 2015, after completing her doctoral and post-doctoral studies at the University of Alberta. In her doctoral studies, she explored the experience of people living with chronic illness in Canada and Colombia, in the context of globalization and neoliberal policies. In her postdoctoral studies, Pilar was engaged with a research initiative aimed at reducing inequities in access to healthcare services for Indigenous peoples in Alberta.

Building on the research work above, Dr. Camargo’s research program at Queen’s is oriented towards investigating and alleviating health inequities and symptom burden in vulnerable populations with a high burden of chronic disease. In the next three years, she will 1) investigate how the social determinants of health affect the experience of access to health care services in refugees and immigrants population with a high burden of chronic illness: this will be performed through interviews, 2) perform a systematic review of literature on what interventions are in place for these population,
and 3) implement interventions with immigrant/refugees to address access to health care services. She will strengthen and expand alliances with key national and international organizations building on her doctoral and postdoctoral programs. These include the research team of the Access Research Initiative in Edmonton (Alberta, Canada), and the Chronic Patient Care Support Group affiliated to the National University of Colombia (Colombia). These research partnerships, as well as new partnerships to be developed with knowledge users and population health researchers, are the foundation for future formulation of locally, nationally and internationally funded studies that will focus on reducing the global burden of chronic diseases for minority groups.
Joan Almost: What is known about positive and negative behaviours in workplace relationships?

Identifying the issue
Engaging in teamwork requires a clear understanding and articulation of the positive and negative behaviours that act as facilitators and barriers to collegial workplace relationships. Identifying and correcting these underlying barriers, while promoting facilitators, is fundamental to a sound organizational strategy to improve care delivery and, ultimately, clinical outcomes. Despite a considerable amount of literature in this area, there is a lack of clarity of the different behaviours as several parallel literatures address similar questions about antecedents, processes and outcomes.

Research in a snapshot
In this scoping review, Dr. Almost and her team will identify and list the various types of positive and negative behaviours of workplace relationships that are observed across work environments (not restricting to healthcare). They will create a conceptual framework of positive and negative behaviors, and generate a list of instruments used to measure each of the behaviors. They will then compile a preliminary list of interventions shown to promote collegial workplace relationships. The research team is composed of specialists in the review process and knowledge users with experience in point-of-care decision-making, policy development, and change management. The multi-disciplinary approach will guide the review, and enhance the validity of the study outcomes, while also strengthening the applicability to the healthcare setting.

Implications
By providing knowledge users such as human resources managers, policy makers and unit managers with a list of interventions and strategies to improve workplace relationships, we can support changes in the healthcare system that will ameliorate work conditions, decrease absenteeism and stress leaves, and improve morale. At the end of the day, employers, employees and patients will all benefit greatly from respectful, collegial workplace relationships.
Identifying the issue:
The health of individuals living with a chronic disease is not solely a result of medical treatments or lifestyle choices. It is also a reflection of the living conditions they experience: these conditions are called social determinants of health. Examples of social determinants of health include income, wealth, employment status, education, working conditions, social services that can be accessed, or the quality of education, food and housing that can be obtained.

Research in a snapshot:
Pilar’s program of research strives to describe and understand the personal experience of access to healthcare services for immigrant and refugee individuals with a chronic illness, to examine how social determinants of health affect access to healthcare services, and to establish a partnership with community members, knowledge users and researchers to promote capacity building in immigrant and refugee individuals and their healthcare providers. These goals will be attained through semi-structured interviews with immigrant and refugee individuals, focus groups and tailored knowledge dissemination strategies.

Implications
This research program has the potential to generate first hand highly relevant knowledge to improve the delivery of sensitive and culturally competent care for these vulnerable populations. Knowledge generated will assist in the development of strategies to improve access to healthcare services for immigrant and refugee individuals with chronic conditions, and close gaps in social determinants of health-related care. In addition, the development of research initiatives that examine how the social determinants of health influence inequities in access to healthcare services for vulnerable groups with chronic conditions will help develop stronger nursing practices and assist these populations.
Dana Edge: Experience of managing chronic conditions

Identifying the issue:
Having a long-term, or chronic, illness, or caring for a loved one with a chronic illness, can disrupt life in many ways. And while healthcare providers are trained and available to monitor the symptoms and discuss treatment plans, an important part of the day-to-day management of the disease rests on the patient’s and their family’s shoulders.

Research in a snapshot:
Under Dr. Edge’s guidance, two students on her team published the results from their graduate projects on the management of chronic conditions. Visekruna et al. explored the experience of self-management in young women with Type I diabetes, and extracted five themes from the participants’ answers: 1) elusiveness in control; 2) dualism of technology; 3) forecasting and maintaining routine; 4) dealing with the “ups and downs”; and, 5) interfacing with the health care team. The essence of the experience for these young women revolved around trying to achieve a state of “being in balance”.

Fallatah & Edge described the experience of family members who provide social support to their relative with rheumatoid arthritis, and explored the forms of support these family members may require in this role. The research team identified five themes to the participants’ answers: 1) effect of the disease; 2) reshaping the relationship; 3) provider of support; 4) social support needs of family members; and, 5) finding balance and coping.

Implications
The research by students Visekruna and Fallatah bring to light the challenges encountered by persons living with a chronic illness or by family members providing support to them. Both studies provide healthcare providers with evidence to plan nursing interventions that would support disease self-management and strengthen the delivery of emotional and informational support, as well as guidance to families living with a chronic illness.
Christina Godfrey: Synthesizing evidence to make it accessible

Identifying the issue:
Thousands of scientific articles are published every week on a multitude of topics. Synthesizing this overwhelming amount of evidence, to make it useful and accessible for healthcare providers and scientists alike, is a task that requires a thorough understanding of literature searches, critical appraisal of the publications, and excellent synthesis skills.

Research in a snapshot:
Through the Queen’s University International Fund, Dr. Godfrey’s and the Queen’s Joanna Briggs Collaboration’s (QJBC) expertise in the methodology of systematic review of literature will be shared with librarians at various sites in Africa. The project started in 2015 with building relationships with librarians within the Consortium for Advanced Research & Training in Africa (CARTA) group and the Canadian Centre for Global Health Research, and will continue with an assessment of the needs of librarians on the topic of evidence synthesis. Based on the needs identified, Dr. Godfrey and her QJBC team will travel to Africa to offer an intensive comprehensive systematic review training workshop and an additional training session tailored to bridge the gaps in knowledge identified by the librarians.

Implications
Evidence synthesis is a powerful way to generate guidelines and recommendations rooted in scientific evidence. It is much faster than primary data collection, and builds on the global knowledge of the topic. By providing training to groups of librarians, this project will build individual and institutional capability, and support healthcare teams in the innovative use of evidence for healthcare decision-making and knowledge implementation.
Marian Luctkar-Flude: Improving care for breast cancer survivors: tools for patients and primary care providers

Identifying the issue:
Breast cancer is the most common cancer affecting women, and with the aging of the population and improved cancer treatment, the number of women who have survived breast cancer is increasing. Many of these women have multiple, complex and unique health care needs and may experience debilitating physical and psychosocial consequences, such as pain, fatigue, depression and lymphedema.

As well, we are seeing an evolution in post-treatment follow-up care being performed by community-based primary care practitioners, in contrast to oncology specialists in the past. However, patients often report their health care needs are not being sufficiently met through this transition.

Providing health care professionals, patients and families with the tools and guidelines to navigate this transition has been the focus of Marian Luctkar-Flude’s research program.

Research in a snapshot
Although clinical practice guidelines existed for follow-up surveillance and for certain aspects of cancer survivorship, Marian and her team set out to generate a comprehensive framework and key guideline recommendations for the provision of evidence-based breast cancer survivorship care within the primary care setting. The completed framework consists of a one-page checklist outlining breast cancer survivorship issues relevant to primary care, a three-page summary of evidence-based recommendations and a one-page list of guideline sources. As well, she looked at the implementation of 21 key recommendations by primary care providers. Marian is currently collaborating with researchers at McGill University and members of Breast Cancer Action Kingston (BCAK) to disseminate these guidelines to both practitioners and survivors using a mobile app.

Another part of Dr. Luctkar-Flude’s work focuses on the safety and effect of neurofeedback on fatigue and cognition. Neurofeedback or EEG biofeedback is a noninvasive, drug-free form of brain training that could help alleviate the long-term and late effects of cancer and its treatment on the patient’s physical and mental health.

Implications
The framework and recommendations have the potential to help both breast cancer survivors and their primary health care teams design together a more comprehensive follow-up plan, to better meet the patient’s needs as they transition from oncology care to primary care.
Jennifer Medves: Educating the nurse practitioners of today and tomorrow

In addition to her role of Vice Dean (Health Sciences) and Director of the School of Nursing, Dr. Medves is involved in various projects on systems leadership, on the exploration of conceptual and theoretical frameworks for nurse practitioner education, and on supporting the preceptor role of nurse practitioners in the Primary Health Care Nurse Practitioner Program.

Identifying the Issue

Nursing practice becomes more complex daily. Preparing nurses for practice and then supporting them is important if we are to retain nurses in the workforce in the long term. Many strategies are required to ensure the profession of nursing remains congruent with the needs of Canadians today and in the future.

Research in a snapshot

Designing curriculum that is evidence based and philosophically grounded is important to ensure nurse practitioners in primary health care are prepared for the complexity of care.

Implications

If we are able to design education programs using an approach that is appropriate, we will be able to ensure nurse practitioners start their practice with the skills and knowledge they require for long term practice, including skills in life-long learning and increasing scopes of practice, and we will help stabilize the nursing workforce for the future.
Mona Sawhney: Multimodal analgesia for pain management after total knee arthroplasty

Identifying the issue:
Total knee arthroplasty is a painful surgery that requires early mobilization for successful joint function. Multimodal analgesia, including spinal analgesia, nerve blocks, periarticular infiltration, opioids, and co-analgesics, has been shown to effectively manage postoperative pain. However it is unclear which technique is most effective.

Research in a snapshot
A sample of 151 patients undergoing unilateral total knee arthroplasty were randomized to receive either an adductor canal peripheral nerve block, periarticular infiltration, or a combination of both. Their pain intensity was measured with walking, at rest, and with knee bend, on day 1 and 2 post-operatively. The results of this randomized controlled trial showed that the participants who received a combination of adductor canal nerve block and periarticular infiltration reported lower pain intensity scores when they were walking on day 1 and 2 post-surgery.

Implications
An optimal analgesic regimen for patients undergoing total knee arthroplasty provides adequate pain management while not impeding the patients’ ability to ambulate. Our results suggest that the combination of adductor canal block and periarticular infiltration provides better pain relief and does not compromise the patients’ ability to walk as compared with adductor canal block only or periarticular infiltration only. The ability to ambulate early helps to facilitate early rehabilitation and timely discharge from hospital following total knee arthroplasty.
Kim Sears: Advancing quality care, reducing risk and improving patient safety

Identifying the issue:
Patient safety is of paramount importance in health care, and is influenced by a multitude of factors. Delivery setting (community vs hospital), provider factors (insufficient training of provider, overtime, precepting of student, off-service patient), work environment factors (workload, distractions, ineffective communication), and patient factors have all been shown to increase the occurrence and severity of medication errors.

Research in a snapshot
Dr. Sears conducts an active program in health services with a focus on advancing quality care, reducing risk, and improving patient safety. The majority of her work focuses on furthering the quality and safety of medication delivery. Her recent work focused on identifying patient-related risk factors that played a role in the high observed medication errors in the community. Medication errors have been shown to occur 4 times more often in the community compared to the hospital setting. It is therefore important to identify patient-related factors that contribute to this observed increase. Through various studies, Kim and colleagues identified that increased age and the death of a spouse was linked to a poorer knowledge of the medication they were using, and increased the likelihood of medication error. As well, taking multiple medications and a recent change in the medication dosage increased the probability of experiencing a medication error.

Implications
By identifying and understanding the patient factors that influence the incidence of medication error in the community, health care professionals can increase awareness about medication errors and determine solutions to decrease the risk of errors.

Kim is also an active member of the Queen’s Joanna Briggs Collaboration, providing comprehensive systematic review training to students, faculty members, librarians and clinicians with her colleagues. She further contributes to the science of evidence synthesis through the development of the methodology of evidence synthesis, specifically that of systematic reviews of association. This work was published in the International Journal of Evidence Based Healthcare in 2015.
Joan Tranmer: Studying the links between shift work and cardiovascular health

Dr. Tranmer’s research interests fall into 2 major themes: 1) the prevention of cardiovascular and cancer diseases through the study of psycho-physiological stress response and the understanding and modifying of organizational factors, and 2) the optimization of nursing contribution to chronic disease prevention and management.

Identifying the issue:
1) In Canada, shift workers represent roughly 45% of the healthcare sector workforce, with 80% of these hospital employees being women. Shift work has been associated with many adverse health outcomes such as atherosclerotic-related cardio-vascular disease, gastrointestinal disturbances, metabolic syndrome, diabetes mellitus, reproductive difficulties and breast and prostate cancer. The potential pathways in which shift work may increase health care risks are numerous and complex.

2) Primary health care reform remains a health system priority. There are continued challenges within primary care, such as expanding patient enrolment, early management of healthcare problems, sectorial integration and transitions, appropriate use of specialist services and care of patients with complex, chronic conditions, to name a few. Recently, to address these challenges, an Ontario expert advisory committee recommended a population-based model of an integrated primary healthcare system based on redesign of the existing primary care sector. Integral to this proposed reform is the enhanced availability of, and access to, high quality inter-professional primary healthcare services. Nurses are integral members of these healthcare teams. Thus there is a need to understand the important contribution, and the impact, of primary care nurses.

Research in a snapshot
Joan Tranmer and colleagues published a study in 2015 identifying work patterns that influence cardiometabolic risk in female hospital workers. They found that a full-time work status, extended shift length, and working 35 or more paid overtime hours per year were significantly associated with metabolic syndrome, a proxy measure of cardiovascular disease. Metabolic syndrome is a cluster of risk factors of cardiovascular disease that present together. Dr. Tranmer also went on to study the potential mediating effect of sleep disturbances in shift workers and metabolic syndrome. And while the self-reported measures of sleep disturbances did not mediate the link between shift work and metabolic syndrome, further work is underway to assess sleep quality and disturbances using actigraphy measures.
Within the primary care research focus, Julia Lukewich completed her PhD dissertation under the supervision of J. Tranmer. This allowed for the completion of foundational work including a provincial survey of all nurses working in the primary care setting which showed that primary care nurses’ role varied and there was substantial role ambiguity. They also completed a systematic review of the literature to identify how to best measure organizational attributes within the primary care setting. This allowed the team to conduct a novel data-linkage study designed to explore the associations between nurse staffing, organizational characteristics and diabetic outcomes.

**Implications**

Our 24-hour society requires shift work, and its negative effect on employees’ health is better established. By teasing out mechanisms can could lessen the harm posed by shift work on health, such as sleep, level of physical activity, or diet, Dr. Tranmer and her research team hope to provide employers and employees with ways to live healthier shift workers’ lives.

Our primary care research is designed to help inform primary health care system planning. We will continue in this line of research with partners from the Ontario Ministry of Health and the Southeast Local Health Integration Network to provide knowledge for health system redesign.
Deborah Tregunno: The development of self-identity and compassionate care

Deborah was the recipient in 2015 of an AMS Phoenix Fellowship for her project on ‘Courage to Nurse: The Development of self-identity and compassionate care’.

Identifying the issue:
Compassion and technological competence are often seen as contradictory nursing identities. In today’s practice settings, nurses are judged on their technical competence and the delivery of efficient care. At the same time, others argue that the hallmark of nursing is the delivery of compassionate care that reflects the dignity and value of all persons.

Research in a snapshot
In the Courage to Nurse project, we are probing the important question of the formation of professional identity and how nurses marry the value of technological skills with the art of care.

In this project, we will use narrative inquiry to explore the ways in which scientific and technological advancements and changing approaches to nursing education influence the delivery of compassionate care. We will then use various narrative (or storytelling) techniques to engage with nursing students and faculty members to stimulate the development of a nursing self-identity that values compassionate, person-centered care.

Implications
By engaging nursing students and faculty members, and understanding how nursing education supports futures nurses to deliver compassionate care, this project may help re-equilibrate the balance between competence and compassion in the nursing profession.
Elizabeth VanDenKerkhof: The picture of chronic pain in Canada

Identifying the issue:

The picture of chronic pain in Canada is a poorly defined one, especially when it comes to neuropathic pain and the burden in Canadian Veterans.

Research in a snapshot

Dr. VanDenKerkhof’s study published in the journal of Pain Research and Management describes the prevalence of chronic pain in Canadian Veterans and the associated disability, and negative effect on physical and mental health. Based on the 2010 Survey on Transition to Civilian Life, 41% of the surveyed population experienced constant chronic pain, and 23% experienced intermittent chronic pain, slightly higher than the prevalence in the general population of Canadians.

In a separate survey study published in the journal of Pain Research and Management, Dr. VanDenKerkhof found that 5.8% to 8.1% of the Canadians likely have neuropathic pain (pain caused by a lesion or disease of the nervous system). Neuropathic pain was highest in individuals with low income, were unemployed, smoked or were unmarried. The study also reported a higher prevalence of neuropathic pain in males than females. This study found that prevalence was higher in males who are economically disadvantaged, suggesting that deprivation factors may play a role.

Implications

The study on Veterans highlights the high prevalence and burden of chronic pain in our Veterans, and provides evidence for agencies and those supporting the well-being of Veterans. The findings from the second study highlight the high burden of neuropathic pain in the general Canadian population and provides a clearer picture of the characteristics of people with neuropathic pain.

Pain in Canadian Veterans: Analysis of data from the Survey on Transition to Civilian Life

Elizabeth G VanDenKerkhof DPH1, Linda VanTill2, James M Thompson MD CCTP/MEMI FCPhP1,2, Jill Sweet MSc2, Wilma M Hopman MA1,3, Meg E Carley BSc1, Kerry Sudom PhD2

An epidemiological study of neuropathic pain symptoms in Canadian adults

Elizabeth G VanDenKerkhof RN DPH1,2, Elizabeth C Mann RN PhD1, Nicola Torrance PhD1, Blair H Smith MBChB MEd MD1, Ana Johnson PhD1, Ian Gilron MD MSc1
Rosemary Wilson: Supporting the implementation of evidence-informed pain management protocols in Rwanda

Identifying the issue:

Implementation of evidence informed clinical pain care practice in low to middle income countries remains problematic, because of barriers at the system, provider and patient levels.

Research in a snapshot

This project aimed to identify barriers and facilitators, and overcome barriers to the implementation of evidence informed clinical care practice for postoperative pain in Rwanda. The initial part of the research program consisted in developing a questionnaire to assess the social, cultural and attitudinal barriers hospital staff’s (anesthesia, surgery, nursing, pharmacy, and administrators) encounter in their practice of postoperative pain management. Availability of medications, use of best-practice protocols and difficulty in adopting evidence-based approaches were the most frequently cited barriers to treating pain. The second part of the study brought the Rwandan researcher to Canada, where he completed formal training in research methodology, statistics, literature searching, research ethical principles and knowledge translation/protocol implementation. He also conducted interviews to aid in the development of an intervention strategy in Rwanda, in an effort to address the barriers in implementing postoperative pain management protocols.

Implications

The project undertaken by Drs. Rosemary Wilson, Gaston Nyrigira and Ryan Mahaffey resulted in a better understanding of barriers to the implementation of pain management protocols, led to the design and implementation of a 3-day workshop devoted to pain assessment and training in the context of postoperative pain management, and culminated in the establishment of an interdisciplinary learning network to connect trainees to physicians, nurses, policy makers and hospital administrators, and of a clinical interdisciplinary acute pain management service.
Kevin Woo: Analysis of the burden of pressure ulcers in Ontario using administrative data

Identifying the issue:
Pressure ulcer, also referred to as bedsore, is an area of skin breakdown incurred by excessive or prolonged exposure to pressure, shear and friction, leading to tissue ischaemia and cell death. It is a common health problem across the continuum of care settings, and translates into poor quality of life, social isolation, loss of independence, depression, persistent pain and recurrent infection for the individual.

Research in a snapshot
Dr. Woo’s study published in the International Wound Journal describes the prevalence of pressure ulcers across the continuum of care in Ontario, as well as the incidence risk and associating factors. It also looks at the extent to which best practices were applied. The study explored data contained in the Resident Assessment Instrument-Minimum Data Set (RAI-MDS) and the Health Outcomes for Better Information and Care (HOBIC), held at ICES. The analysis of the population-level administrative data shows that 1) the prevalence of pressure ulcers is approximately 13% across the continuum of care, and highest in the complex continuing care setting, 2) over 25% of pressure ulcers in long-term care developed one week after discharge from acute care hospitalisation, 3) individuals with cardiovascular disease, dementia, bed mobility problems, bowel incontinence, end-stage diseases, daily pain, weight loss and shortness of breath were more likely to develop pressure ulcers, and 4) only half of the patients received the evidence based nutritional intervention to treat pressure ulcers.

Implications
Development of a thorough and comprehensive understanding of the existing problem is the first and critical step in the process of addressing it. Additional questions on the topic of staff mix, resource availability, early screening for pressure ulcers, ongoing monitoring and use of appropriate evidence-based interventions to prevent and treat pressure ulcers among frail, older individuals were raised and warrant further research.
QNHR Research Funding in 2015

AMS Phoenix

CIHR
New Investigator Salary Award
Improving care for older adults with peripheral artery disease in the community: from knowledge to action – K. Woo, E. VanDenKerkhof, J. Tranmer - pending decision
CIHR SPOR Quick Strikes
Improving care for older adults with peripheral artery disease in the community: from knowledge to action – K. Woo, L. Keeping-Burke, J. Tranmer – pending decision

CIMVHR
Development of a proposal to examine the determinants of a successful transition from Military to Civilian Life – E. VanDenKerkhof, – CIMVHR - $13,915

Council of Ontario Universities
John Polanyi Prizes
Pain assessment and management following ambulatory/day surgery – M. Sawhney – pending decision

COUPN PHCNP Evaluation Funds
Supporting Preceptors in the PHCNP Program: Utilizing a Capability Framework to Develop, Implement and Evaluate a Preceptor Workshop – K. McQueen, K. Poole, R. Wilson, J. Medves, R. Egan – $19,100

IN-CAM Research Network
Exploring the effect of neurofeedback on post-cancer cognitive impairment and cancer-related fatigue: A pilot feasibility study – M. Luctkar-Flude - $5,000

Internal funds
School of Nursing Research Development Fund
Exploring the effect of neurofeedback on post-cancer cognitive impairment and cancer-related fatigue: A pilot feasibility study – M. Luctkar-Flude - $2,500
Utilizing administrative data to examine the utilization of emergency room services following ambulatory or day surgery in Ontario – M. Sawhney, E. VanDenKerkhof, D. Goldstein – School of Nursing Research Development Fund - $2,500
Queen’s University International Fund
Building skills in evidence synthesis to advance healthcare C. Godfrey - $20,000

Ministry of Health and Long Term Care
AHRQ
Utilizing administrative data to examine the utilization of emergency room services following ambulatory or day surgery in Ontario – M. Sawhney, E. VanDenKerkhof, D. Goldstein - $22,777
Health System Research Fund (Nursing)
Identifying organizational attributes that optimize nursing contributions to primary care of persons with chronic conditions – J. Tranmer, E. VanDenKerkhof, D. Edge – pending decision

Ministry of Labour
Evidence for Practice
Research for the Workplace
**QNHR Publications**

(Students are underlined)


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