CJNR

Volume 47 Nº 3

September / septembre 2015

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Ingram School of Nursing, McGill University

CJNR 2015, Vol. 47 Nº 3, 2–6

Discourse

The Mental Health of Those Who Serve Canada

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"Life is pleasant. Death is peaceful. It's the transition that's troublesome." This statement by the prolific author Isaac Asimov highlights the thought process of every military person who has ever been deployed overseas in the service of their country. It is especially true because physical trauma is one of the inevitable occupational health hazards of war. It is a reality that military personnel accept when they enrol and it is part of the concept of unlimited liability that forms the profession of arms. As strange as it may seem, during my multiple military deployments the possibility of death was never a concern. I had, however, more than occasional thoughts about the horrors associated with being dismembered. These thoughts were intensified with each of the frequent rocket attacks on Kandahar Airfield during my deployment in Afghanistan. When outside Kandahar Airfield, one could not help but think of dismemberment as a result of being blown up by a roadside bomb or caught inside a burning armoured vehicle only to survive with disfigurement.

When a soldier steps on a landmine, the physiological consequences of blast pressure, heat, shrapnel, and being thrown about are profound. If the soldier survives the initial ballistic insult to their body, they are programmed, through repetitive and realistic training, to enact a self-preservation drill known as "self-aid." Soldiers will, if able to, seek cover, apply tourniquets, place field dressings on themselves, and signal the fact that they need aid from their platoon mates. Regardless of the extent of physical pain they may experience, they know that as soon as a field medical technician reaches them they will be offered some relief in the form of an injectable or transmucosal opiate analgesic. This battlefield pain relief has been a mainstay of pre-hospital combat medicine since at least the American Civil War (Vassallo, 2004) and we have come to count on it.

I must admit that, while the possibility of physical injury and dismemberment was a serious concern at the time of my deployment, the threat of mental trauma never crossed my mind — at least not until one of my closest friends brought it up prior to my deployment to

Afghanistan. Over dinner one evening he asked, "Do you think you'll get post-traumatic stress disorder [PTSD] while serving in Afghanistan?" It was a casual question that challenged my sense of mental immunity. I had never even contemplated the possibility of becoming mentally ill from military service, and this self-conceptualization was very irksome. I was suddenly faced with the unique challenges associated with mental as opposed to physical trauma. If I were to be struck by a rocket or blown up by a roadside bomb, I knew what to do. I had the self-aid drill etched into my frontal lobe and knew that a morphine injection or a fentanyl lollipop would soon be offered to ease my suffering. However, I was never prepared for, nor did I think about the possibility of sustaining, an operational stress injury and living with a mental illness such as PTSD. There are no magic lollipops or injections to take away the pain or reduce the suffering from an operational stress injury. This fact was seared into my health-care consciousness in 2009 when I was begged by a young battle-hardened corporal in the field hospital at Kandahar Airfield to kill him in order to stop his nightmares: here I am, supposed to provide health care to a comrade and alleviate his suffering, and he is asking me to end his suffering by taking his life away! There was no painkiller I could administer to resolve this problem, and it was an unsettling experience that reshaped my view of wartime trauma. This situation opened my eyes to the challenges associated with mental trauma, and the fact that these could sometimes be greater than the challenges associated with physical dismemberment.

From a population health point of view, the Canadian Armed Forces is a subset of the Canadian society that it represents. Occupational health screening measures are routinely taken at the time of recruitment to exclude those with a serious pre-existing mental illness incompatible with military service. Hence our mental health is reflective of the mental health of the Canadian public, except for two conditions: depression and stress. It is well documented that the prevalence of depression and the incidence of stress are high among military personnel, likely due to the dangerous and stressful environments in which we often operate. It is estimated that one in five Canadians will develop a mental illness in their lifetime, and the challenges to society represented by this population outside the military are as notable as those within. Macroscopically, it is the number of operational stress injuries that sets us apart from the civilian population we serve. In the Canadian Armed Forces, mental conditions most commonly manifest as generalized anxiety, major depression, and PTSD, and they cause notable human, organizational, and population health challenges for the military. For instance, the 2011 Canadian Forces Health Services Group Operational Stress Injury Cumulative Incidence Study found that 13% of the personnel deployed on the Canadian mission to Afghanistan up to 2008 were clinically diagnosed with a deployment-related mental injury (National Defence and the Canadian Armed Forces, 2013, p. 4). While 13% may not sound alarming, it is not an inconsequential proportion in a relatively small military like Canada's (approximately 68,000 full-time and 32,000 part-time members), and it seems that everyone who has served or is actively serving in the Canadian Armed Forces has a colleague who has suffered or is suffering from a mental injury related to military service.

It is important to point out that the presentation and impact of mental illness among military personnel are markedly variable. There are those who have been mentally ill and have returned to work, only to function at a higher level than before their illness. There are also those who return to work and continue to struggle and those who suffer in silence. The most affected, however, are those who experience severe forms of mental illness that render them unable to meet the universality of service requirements leading to their release from Her Majesty's service and those who take the dramatic step of killing themselves as a way out of their mental illness. There are a variety of outcomes and anyone who is serving in the Canadian military today has a story about a colleague. The one commonality among these different scenarios is that they all genuinely require short-term and long-term levels of care and support. Even though the Canadian Armed Forces has completed operations in Afghanistan, there is no reason to believe that the issue of long-lasting mental illness will cease to exist. In addition, proper long-term management and planning are needed so that such experiences are handled based on lessons learned in future operations or wars. Operational stress injuries are now recognized as one of the occupational health hazards of deployed military service. They are becoming a fact of life and, like physical trauma, part of the concept of unlimited liability that forms the profession of arms. It is important that military personnel be well prepared to cope with these situations through rigorous training and a well-resourced mental health service.

As mental injury has increasingly become part of the backdrop of the profession of arms, the Canadian Forces Health Services Group has, along with its civilian partners, gone to great lengths to address the problem through health surveillance, mental health research, and the education of both clinicians and members of the service. The military and its partners have also invested in clinical programs for those afflicted by mental illness. Every person who joins the Canadian Armed Forces, be it as a cook or as a fighter pilot, is placed on the Road to Mental Readiness during basic training. This comprehensive program offers a wide range of services. These include educating members of the Canadian Armed Forces in the continuum of mental health: assisting with stress management, recognizing and managing mental illness, providing mental care for a colleague, accessing professional care resources if required. The program is revisited in greater depth as one is placed in successive leadership roles and/or is deployed in harm's way. It goes beyond simple education, to provide an overall strategy of mental resilience training in order to prevent operational stress injuries and minimize the severity of such injuries should they occur. It also encourages those who sustain mental injuries to seek out timely and proper care when appropriate.

Everyone who encounters a stressful situation should, ideally, not only survive the experience but come out stronger as a result of having survived adversity. This can set a powerful cyclical process in motion if one encounters repeated stressful situations over the lifespan. Members of the Canadian Armed Forces now have a self-aid drill to execute should they suffer or see someone else suffer the effects of a mental injury; it is akin to the drill they follow if they step on a landmine and suffer physical trauma.

Canada's operations in Afghanistan have only recently been concluded and we have a long way to go before we discover the "morphine for mental illness." There is still much to be done in terms of understanding and treating mental illness. The Canadian Armed Forces is losing the service of good men and women as a result of operational stress injuries, and it will require a significant investment in research to stem the flow. The past is not behind us. This is not an academic issue that we can put in a banker's box on a shelf and then move forward. That would be a travesty and a disservice to military personnel. War has been a constant in human history, and it is highly probable, if not certain, that members of the Canadian Armed Forces will find themselves in sizeable operations in the future. We need to learn from the past, study and manage the present reality, and prepare for the future.

Mental health researchers have a moral responsibility to assist in the development of evidence-based strategies to address this challenge. The Canadian Armed Forces knows more about the mental health of its workforce than any other large employer in Canada (National Defence and the Canadian Armed Forces, 2013, p. 21). Without the help and interest of civilian researchers, however, this body of knowledge will struggle to move forward. I encourage all stakeholders, and especially mental health researchers, to invest in the conduct of research in line with the Surgeon General's Health Research Program and to become involved in academic endeavours such as those undertaken by the Canadian Institute for Military and Veteran Health Research (https://cimvhr.ca/).

While it might be true that we have made great strides in addressing the mental health of our service men and women, it is also true that more can be done to help those who put their lives on the line for Canada. Research attention is still needed on such topics as the impact of leadership on the mental health of subordinates, the overall impact of mental health on Canadian Armed Forces workplace productivity, the impact of military screening programs, and the effectiveness of various population-centric mental health treatments. I strongly believe that the last topic deserves special attention. If we can find better treatments for mental illness by investing in mental health research, then we can heal and therefore retain more military personnel who suffer from mental illness.

Mental illness is one of the occupational health hazards of war, and we owe it to our men and women in uniform to do more to understand the problem, provide education, build resilience, and deliver care to those affected. Surely we can all agree that no one who has developed or may develop a mental illness while serving their country should have to beg for death as a treatment for their pain.

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CJNR 2015, Vol. 47 Nº 3, 7–17

Commentary

Do as We Say or Do as We Do? Examining the Hidden Curriculum in Nursing Education

Ruth Chen

Introduction

Faculty administrators in undergraduate nursing programs face great complexity both within the university and within the health-care environment. Student enrolment numbers are increasing. Availability of clinical placements is decreasing. Financial resources and funding for education are diminishing. Physical, human, and technological resources are difficult both to obtain and to maintain. Amidst this challenging situation, undergraduate nursing students must navigate a rigorous program that will place them, upon their graduation and professional registration, in the role of providing care, hope, and healing to members of the public who are often at their most vulnerable moments.

In nursing education, educators, administrators, and course planners give serious thought to the formal curriculum we deliver to students throughout the program. We consider important pedagogical principles, such as promoting a constructivist approach to learning. We integrate content related to entry-to-practice competencies and develop knowledge required for the professional licensing examination. We structure the curriculum around principles such as "caring," "healing," and "person-centredness" — principles that are necessary and good and that characterize both nursing professionals and the nursing profession. The nursing curriculum — communicated through the program's philosophy, delivered through the required courses and their content, and evaluated based on students meeting the course expectations and demonstrating the desired outcomes — is, in its totality, the formal curriculum that we deliver.

However, the formal curriculum is accompanied by the hidden curriculum in nursing. From the moment students enter a program, they receive a parallel education in professional socialization. This socialization comes through the routes of informal interactions (with peers, other professionals, and students from other programs) in a variety of contexts (between classes, in virtual spaces, through extracurricular activities) and through the lessons learned via the hidden curriculum. There are the three interrelated spheres of influence that inform and shape students' learning experiences: the formal curriculum, the informal curriculum, and the hidden curriculum (Hafferty, 1998). The hidden curriculum does not *explicitly* dismiss or contradict the formal nursing curriculum. Rather, it runs subtly alongside or underneath the formal curriculum, and permeates its interstitial spaces.

What Is the Hidden Curriculum?

The concept of the hidden curriculum has been discussed in the education and social science literature for nearly a century. In his book *Experience and Education,* John Dewey (1938) states: "Perhaps the greatest of all pedagogical fallacies is the notion that a person learns only the particular thing he is studying at the time. *Collateral learning in the way of formation of enduring attitudes, of likes and dislikes,* may be and often is much more important than the spelling lesson or lesson in geography or history that is learned" (p. 20) (my emphasis).

While the hidden curriculum discourse originated outside the health professions, educators are increasingly approaching curriculum development in health professional education and practice with an explicit acknowledgement of the hidden curriculum (Hafferty & O'Donnell, 2015). Defined succinctly, the hidden curriculum is "that which the school teaches without, in general, intending or being aware that it is taught" (Cowell, 1972). It is therefore defined by two elements: the absence of intentionality and the lack of awareness. What students learn is not what we intend, and at the same time we are unaware of what we have taught.

Given that the hidden curriculum is a product of the specific structure and culture of an education program, it will vary in its expression. There is no universal hidden curriculum that applies uniformly to all nursing programs. Rather, each program has a hidden curriculum that is the product of its unique history, culture, structure, and practices. Even though particular expressions of a hidden curriculum may vary between programs and institutions, general elements remain consistent. The hidden curriculum in nursing is, furthermore, not limited to undergraduate programs. The examples discussed in this article may also resonate with students, faculty, and administrators in graduate nursing programs.

The literature is scant on the subject of the hidden curriculum in nursing. When the literature does discuss nursing's hidden curriculum, it is in the context of new graduate nurses entering clinical practice, and it highlights the discordance between what new graduates have been taught and what they experience in practice. For example, some have written about the hidden curriculum as pertaining to the theory–practice gap in nursing education and nurses' lack of preparation for the practice environments they encounter as new graduates (Day & Benner, 2015). Others speak of workplace experiences, including intimidation and bullying of new nurses by their more experienced nursing colleagues (Duchscher & Cowin, 2004; Feng & Tsai, 2012). These are important areas worthy of further exploration, but they will not be examined in this article. Instead, I will focus on facets of the hidden curriculum that become manifest during students' course of study.

The purpose of discussing the hidden curriculum is not in order to eradicate it. Providing a space for open discussion may help us, as educators and administrators, approach our program development, curriculum design, and interactions with students with greater awareness of and sensitivity towards the expression of a hidden curriculum within our own programs.

The reflections presented in this article are based on more than a decade of education and administrative experience in undergraduate nursing education. The examples are drawn from the observations and experiences of faculty across multiple nursing programs. Therefore, the reflections should not be construed as based on the hidden curriculum of a particular nursing program or faculty group. My intention is to promote reflection and discussion and, furthermore, to illuminate the complexities surrounding the hidden curriculum in nursing. The article is intended to be neither comprehensive (i.e., it does not address all possible expressions of the hidden curriculum) nor prescriptive (i.e., it does not dictate specific, concrete steps that nursing or other education programs should take to address the hidden curriculum). It advocates for a discussion of the hidden curriculum from a position of curiosity, openness, and humility.

Author's Reflections

In my administrative role within a baccalaureate nursing (BScN) program, I have responsibility for senior-level courses (3rd and 4th year). I am also a tutor/instructor for final-year students in the program. Largely due to my administrative responsibilities, my encounters with students commonly involve a concern, a complaint, or a conflict. A student may be concerned about failing a clinical course and be seeking support and guidance, or may have a complaint about an assigned clinical placement because it allegedly offers inadequate clinical experiences. Students may wish to challenge a policy or process I have implemented or may have a conflict with their instructor, with their clinical preceptor, or with me.

My reflections and examples describe three potential expressions of a hidden curriculum in nursing education, in the arenas of power, privilege, and professional communication.

Power

Students learn about the use and misuse of power and authority through their experiences and interactions with educators and administrators in their program. In the BScN program, students are expected to develop advocacy and leadership skills. Students learn how to be advocates for patients, clients, and families. They develop leadership capabilities, both with their peers and within their practice settings. They are evaluated on their ability to demonstrate these skills and are provided feedback on their clinical and tutorial performance evaluation forms. However, when these skills are used to advocate for themselves during their education, their actions are frequently dismissed or minimized rather than encouraged, shaped, and cultivated. Some students are also subjected to anger, defensiveness, or backlash from faculty members.

Students learn very early on in their program of study that they put themselves at risk if they "speak up" or express their concerns to faculty members, particularly if their concerns relate to faculty inconsistencies or contradictions. While advocacy and leadership skills are encouraged in the abstract sense or on behalf of patients and clients in practice settings, students receive a different response when they demonstrate leadership through self-advocacy and when this involves faculty members. The very act of speaking up can result in the exertion of power over the student. Students are expected to show critical thinking, expose contradictions, or take an opposing viewpoint when discussing clinical or course content — and are even praised and rewarded for doing so. However, if they employ these same approaches with faculty on their own behalf or on behalf of their peers, they risk negative repercussions such as intimidation. While the consequences are not always overt, students are well aware that they can put their academic progress or their reputation at risk (such as by receiving a failing grade or being labelled a "troublemaker" or "manipulator" within faculty circles).

Students quickly learn that while they are expected to be advocates and future leaders in the nursing profession, they jeopardize their own educational progress or reputation if they apply these principles to themselves or their peer group. They learn that silence, obedience, and conformity are the desired behaviours. And yet these very behaviours in their clinical practice can lead to errors and the risks to patient safety that our curriculum is intended to address. While the formal curriculum is dedicated to instilling a spirit of inter- and intraprofessional teamwork, of collaboration, and respect for patients' concerns, the hidden curriculum may undermine those very attitudes and behaviours that we strive to cultivate in our future nurses.

The literature speaks of oppressed group behaviour and the "learned helplessness" of nurses (Roberts, Demarco, & Griffin, 2009) and the practices of intimidation and bullying by senior nurses directed against new graduate nurses (Laschinger, Grau, Finegan, & Wilk, 2010; McKenna, Smith, Poole, & Coverdale, 2003; Skillings, 1992). Perhaps these phenomena can be traced back to the insidious lessons of power and silence that students learn from the hidden curriculum during their nursing education.

Privilege (Preferential Treatment)

One result of the rising enrolment numbers in many undergraduate nursing programs is an increase in clinical placement needs each semester. While our clinical agency partners attempt to meet our requests for placements, they also receive requests from a growing number of other academic programs. Therefore, clinical placement limitations are one of the greatest challenges for many BScN programs. For most student nurses, clinical experiences are their central focus. Students see these as vital to their future professional success. Students speak of their final clinical placement as a precursor to their first job as a new graduate, and they want a placement that will provide them with the clinical skills they will need once employed.

The combination of limited clinical placements and student expectations of specific placement experiences creates an environment of stress and anxiety within the student body. Assigning students to clinical placements requires a careful, transparent process so that they will know it is fair and consistent and carried out with integrity. Students are quick to detect inequities and unfair treatment in the program, yet during their undergraduate education they witness many examples of inequitable and preferential treatment.

The formal curriculum emphasizes health-care access for all, regardless of social status, education level, or financial means. We connect these concepts to the principles of professional integrity and ethical practice. The hidden curriculum, however, teaches students that if they know the "right" people in the program or at a clinical agency, then an exception can be made for them and the placement they want might be available to them. A frequent occurrence is parents accompanying students to meetings in order to advocate for them. Instead of reinforcing the message that students will be registered nurses in a few short months, with responsibility for managing complex and difficult patient situations without the help of their parents, we allow parents to speak on their child's behalf and to exert their influence. Sometimes such attempts at securing preferential treatment are successful. The other students immediately hear about this treatment and learn that exceptions are made for those who circumvent the rules, use their connections, or enlist the help of their parents or other influential individuals to achieve their desired outcomes.

Thus we do not teach students how to manage their energy, emotions, and learning goals — or encourage them to do so — if they fail to get what they want (such as a particular clinical placement). We espouse principles of professional ethics and integrity in the formal nursing curriculum. We could draw on these principles to help students see the potential for learning in a variety of clinical settings that they might not have expected. Yet students learn through the hidden curriculum that these principles can be circumvented or disregarded, that their personal outcomes and goals might be more easily achieved through preferential treatment.

Professional Communication

According to Dewey (1938), "collateral learning" informs a student's personal and professional development. One area of collateral learning is the hidden curriculum of professional communication. Communication contexts range from face-to-face interactions to technology-mediated communication: instant messaging, text messaging, provision of home phone numbers, and the use of social media such as Facebook, Twitter, or various blogs.

As educators, we want to be present for our students, both physically and through technology. We want students to have access to us for in-person meetings, and we want to be responsive to their communication attempts. However, with the proliferation of social media use in the university and in clinical agencies, our approach to social media and technology-based communication requires a thoughtful, nuanced approach. We must consider the hidden messages we send at a program level as well as at the level of individual faculty members.

Some programs and faculty members choose not to use any form of social media or other technology-mediated communication with students, aside from e-mail. Non-use, however, does not free us from the impact and implications of our communication practices, or lack thereof. Other programs and faculty members permit access to certain accounts only — for example, they allow students to be Followers on Twitter but not Friends on Facebook. What messages do these practices send to students regarding issues such as personal and professional boundaries or appropriate communication outside of the professional context? Such experiences have direct application to the students' future practice, as they determine how they will interact with patients and families. These examples represent only a small subset of the range of issues we face with technology and social media that pertain to students' development of professional communication behaviours.

Students receive mixed and conflicting messages at both the individual and the organizational level. How do students learn what professional communication looks like if they receive inconsistent messages from their educational program yet are faced with a ubiquity of social media and technology-mediated communications in their daily lives? For example, it might be obvious to some educators and administrators that students and faculty alike should manage their privacy settings on Facebook or Twitter and should not be posting content that is sexually inappropriate or that involves the use of alcohol, drugs, or illicit substances. What message do students receive when their educators post such content themselves? Students have told me that seeing such content on an educator's social media account "humanizes" the faculty in the minds of their classmates and makes students more receptive to learning from that individual. One wonders if students will use the same rationale to connect with patients outside the work setting, believing that it will make patients more receptive to the nurse's health teaching and thus more responsive to her or his plan of care.

The literature on professional boundaries for health-care providers who engage with patients and families through social media (McCartney, 2012; Tariman, 2010) suggests that our lack of clarity about proper professional communication may lead students to adopt poor habits or make false assumptions about the use of social media in their practice (Chretien & Kind, 2013; Cronquist & Spector, 2011). What makes this issue particularly confusing to students is that, even as we cite the importance of professional communication in nursing practice, more and more programs, faculty members, and clinical organizations are using social media to connect with each other and with the community (Kind, Greysen, & Chretien, 2012; MacDonald, Sohn, & Ellis, 2010; Skiba, 2011). Because the issue is complex and rapidly evolving, we must continue to explore the implications of social media and technology-mediated communication practices in shaping our students' understanding of professional communication.

Implications

By its very definition, the hidden curriculum arises from our lack of awareness and results in messages we had not intended. What to do? There are two possible approaches. We can use our *moral imagination* to envisage aspects of the hidden curriculum that we may not be aware of, and we can use our *practical wisdom* to act and respond in a way that aligns the messages that students receive with what we mean to communicate. The reflections above highlight the complexity involved in addressing the hidden curriculum. It is our responsibility as educators and administrators to approach it in our programs with the deliberation and care we give to the development and delivery of our formal curriculum.

Perhaps the most important insight I have gained as an administrator and educator is how crucial moral imagination and practical wisdom are in navigating such situations. We educators and administrators need to use our moral imagination and develop our practical wisdom in order to counter the insidious effects of the hidden curriculum within our programs. The Aristotelian concept of *phronesis,* or practical wisdom, can provide a framework for shaping our actions and responses.

According to Aristotle, ethical virtue is connected to practical wisdom and wise action lies between the two extremes of excess and deficiency (Kraut, 2014). The approach we take when we recognize a hidden curriculum should not be a reactionary swing from one extreme to the other. In reflecting on power, we do not serve our students well by coddling them or handing over all power and authority to them, never demonstrating the courage needed to communicate difficult information or set appropriate boundaries. We must not ignore or dismiss all the unique circumstances that students face, including disabilities and the need for accommodation, and treat the student body as a monolith. In professional communication, prohibiting or actively *not* engaging in social media and technology leaves students to wrestle with these issues on their own and makes us appear tone-deaf to cultural trends and evolving practices in health care and academia.

In attempting to demonstrate Aristotelian *phronesis* in these complex situations, we offer students the opportunity to see action and response as not dichotomous, with only right and wrong requiring a yes or no decision. When we address such messages in the hidden curriculum with moral imagination and practical wisdom, students tune in; they observe our approaches to situations that arise, and how we respond. This gives us an opportunity to play a positive role in the formation of students' professional identity. Modelling these behaviours for our students helps them to develop and internalize a nuanced approach to professional practice.

Caveats

The examples given in this article are reminders that faculty interactions with students and a program's organizational culture and processes have the potential to yield far more meaningful learning for students than we may realize. Students are quick to recognize inauthenticity and hypocrisy in their leaders and educators; they are quick to look for what faculty "really want" instead of simply trusting what is overtly stated in a course assignment, faculty conversation, or academic policy. We must not turn a blind eye to the hidden curriculum in our education programs, lest we be viewed as perpetuating its messages through our wilful ignorance.

And yet we must guard against "curriculum creep" when adopting strategies to address the hidden curriculum. The purpose of examining the hidden curriculum in our programs is not to make everything "unhidden." Also, it would be inappropriate and naïve to simply add more content once aspects of a hidden curriculum are revealed. The hidden curriculum cannot be remedied by inserting yet another course exercise, reflection, evaluation measure, or lecture to the formal curriculum. There is ample evidence that these approaches are ineffective (Coulehan & Williams, 2003; Hafferty & Franks, 1994; Hundert, Hafferty, & Christakis, 1996). Rather, the discussions and examinations should prompt us to look at the systems within which we operate (Hundert, 2015). For example, what role does the accreditation process play in embedding the hidden curriculum in our nursing programs? What program structures or cultures persist because they ultimately benefit select individuals or subgroups within the faculty, even if detrimental to students or to the program itself? In addressing the hidden curriculum in nursing education, we must not only look at individual examples and ascertain their impact on students, but also explore what has contributed to the formation and persistence of a hidden curriculum in our programs (Haidet & Teal, 2015).

Conclusion

The hidden curriculum is by definition difficult to recognize and address. The goal is not to eliminate the hidden curriculum from our nursing programs but to appreciate how it affects students and how it reinforces negative organizational culture and structures. We can use moral imagination and practical wisdom to identify and respond to hidden curricula in nursing, but we must approach our explorations in a spirit of humility, openness, and curiosity. Future directions for research and application include developing a more thorough understanding of the formation and impact of hidden curricula in nursing, from the macro level involving the accreditation review down to the micro level of the individual student experience. By listening to students' stories, delving into their experiences, and disentangling the explicit and implicit messages that students receive while in the program, we can develop greater understanding and discernment regarding the hidden curriculum in our nursing programs.

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Conflict of interest statement: The author has no financial disclosures or conflicts of interest to declare.

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CJNR 2015, Vol. 47 Nº 3, 18–38

University Students' Sexual Health Knowledge: A Scoping Literature Review

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Sexual health plays an important role in the well-being of university students. The literature shows that the majority of university undergraduates are sexually active and at high risk of contracting sexually transmitted infections (STIs); however, the breadth and degree of the literature on their sexual health knowledge is unclear. The purpose of this scoping review was to gain a deeper understanding of the state of research on the sexual health knowledge of university/college students globally. A 5-stage framework was used to guide the review and to characterize the literature on sexual health knowledge. Articles published in English between 2000 and 2014 were reviewed if they included university students as a population of interest and described the methods used to measure sexual health knowledge. Of the 2,386 articles retrieved, 91 met the criteria. The majority of the articles (*n* = 79) used a cross-sectional design to investigate students' knowledge about HIV/AIDS (*n* = 45), STIs (*n* = 23), HPV (*n* = 9), and contraception (*n* = 24). The review highlights gaps in the literature and in findings relating to the research dominance of various geographic locations, common research designs, the wide range of measurement tools used, and the variety of sexual health knowledge outcomes of interest. The review provides a useful description of the literature on sexual health knowledge among university/college students and some recommendations for moving the field forward.

Keywords: sexual health, knowledge, students, scoping literature review, health education

Résumé

Revue de la littérature sur les connaissances des étudiants universitaires en matière de santé sexuelle

Christine Cassidy, Janet Curran, Audrey Steenbeek, Donald Langille

La santé sexuelle joue un rôle important dans le bien-être des étudiants universitaires. La littérature indique que la majorité des étudiants de premier cycle sont actifs sexuellement et présentent un risque élevé de contracter une infection transmissible sexuellement (ITS). Toutefois, l'étendue et la profondeur des études et travaux de recherche sur la connaissance que possède cette population des questions de santé sexuelle demeurent mal connues. L'objectif de la présente revue de la littérature est de mieux comprendre l'état actuel de la recherche sur la connaissance qu'ont les étudiants universitaires et de niveau collégial à l'échelle mondiale des questions de santé sexuelle. Un cadre d'analyse en cinq étapes a été utilisé pour orienter l'exercice d'examen et caractériser la littérature quant à la question des connaissances relatives à la santé sexuelle. Un corpus d'articles publiés en anglais entre 2000 et 2014 a été évalué de manière à repérer les études ayant comme population cible les étudiants universitaires et proposant une méthode pour mesurer les connaissances de cette population en matière de santé sexuelle. Parmi les 2 386 articles évalués, 91 répondaient à ces critères. La majorité d'entre eux (n = 79) s'appuyaient sur un modèle d'étude transversale pour examiner les connaissances des étudiants concernant le VIH/sida (n = 45), les ITS (n = 23), le virus du papillome humain (n = 9) et la contraception (n = 24). Cette revue de la littérature a permis de relever des lacunes dans les études et travaux de recherche ainsi que dans leurs conclusions concernant la prédominance de certaines régions géographiques dans la recherche, la présence de modèles de recherche communs, la grande diversité des outils de mesure utilisés et la variété des résultats liés aux connaissances en matière de santé sexuelle ciblés par les études. L'article fournit une description utile de la littérature touchant la question des connaissances en matière de santé sexuelle chez les étudiants universitaires ou de niveau collégial et formule certaines recommandations afin de contribuer à la progression de ce domaine de recherche.

Mots-clés : santé sexuelle, connaissances, étudiants, revue de la littérature, connaissances en matière de santé sexuelle

Background

The transition from adolescence to young adulthood can be difficult, as this is when many youths leave home for the first time to attend university. According to the Association of Universities and Colleges of Canada (2011), 62% of full-time undergraduate students are under the age of 22. For most the transition to university is uneventful but for others it may involve high-risk behaviours or new sexual experiences, which can lead to negative health outcomes, including sexually transmitted infections (STIs) and unplanned/unwanted pregnancy (Dalton & Galambos, 2008; Public Health Agency of Canada [PHAC], 2011).

Research with the university and college student population has focused on sexual health behaviours and negative health outcomes, including contraception use, sexual activity, sexual coercion, and the relationship between alcohol use and sexual intercourse (Scholly, Katz, Cole, & Heck, 2010; Snipes & Benotsch, 2013). Eighty percent of young adults in Canada aged 20 to 24 are sexually active (PHAC, 2011). This high prevalence of sexual activity, coupled with newfound independence and campus culture, may lead to opportunities for high-risk behaviours, including unhealthy sexual practices (PHAC, 2011; Scholly et al., 2010). For example, in one study only 58% of young adults reported using a condom the last time they had sexual intercourse (PHAC, 2011).

Despite extensive research on sexual health behaviours and outcomes in this population (Certain, Harahan, Saewyc, & Fleming, 2009; Martson & King, 2006; PHAC, 2011; Rhodes et al., 2006; Scholly et al., 2010; Snipes & Benotsch, 2013), the breadth and degree of sexual health knowledge among university students are unclear. On the international front, a few studies have focused on sexual health knowledge among university students, with the findings indicating that university students overall have a minimal level of sexual health knowledge (Bertram & Niederhauser, 2008; Moore & Smith, 2012; Peate et al., 2002; Simbar, Tehrani, & Hashemi, 2004; Tung, Ding, & Farmer, 2008). The results of various studies indicate that students are able to name various STIs but are unaware of how these are transmitted, the signs and symptoms, and how to get diagnosed (D'Urso, Thompson-Robinson, & Chandler, 2007; Lewis, Rosenthal, Succop, Stanberry, & Bernstein, 1999; Moore & Smith, 2013; Weinstein, Walsh, & Ward, 2008).

Sexual health and well-being are important components of holistic nursing care, as they intersect with a variety of other health factors (East & Jackson, 2013; Evans, 2013). Nurses have a unique opportunity to ensure the best possible health outcomes by engaging patient populations, across a range of practice settings, in sensitive discussions related to sexuality and safe sex; however, this aspect of care is often neglected (East

& Jackson, 2013; Hayter, 2005). Studies have found that many nurses do not feel adequately prepared to address the sexual health concerns of patients in various health-care settings (Astbury-Ward, 2011; Evans, 2013; Hayter, Jackson, Carter, & Nyamathi, 2012). Hayter et al. (2012) recommend that nurses develop communication skills and knowledge specific to their population of interest in order to support communication during sensitive discussions, such as those about sexual health. It is critical that nurses working with adolescents and young adults understand the state of research on sexual health knowledge of university students, so that they can tailor their approach to their patients.

The literature examining the sexual health knowledge of university and college students has not been systematically reviewed. More specifically, it is unclear how the literature is dispersed in the field and how sexual health knowledge is defined and measured. The uncertainty makes it challenging for health-care providers working with this population to gain an understanding of the variation in sexual health knowledge and the range of sexual health practices and the tools available to capture them. This scoping literature review had two research objectives: (1) to describe the range of current research related to sexual health knowledge among university and/or college students, and (2) to describe the tools and measures used to capture sexual health knowledge among these students.

Methods

Scoping reviews "map the key concepts underpinning a research area and the main sources and types of evidence available, and can be undertaken as standalone projects in their own right, especially where an area is complex or has not been reviewed comprehensively before" (Arksey & O'Malley, 2005, p. 21). We followed the five-stage framework outlined by Arksey and O'Malley to map the literature on the sexual health knowledge of university students.

Stage 1: Identifying the Research Question

Identification of the research question is the initial stage of a scoping literature review, as it provides a guide for building the search strategies (Arskey & O'Malley, 2005). We used the PICOT (Population, Intervention, Comparison, Outcome, Time) format (Glasziou & Del Mar, 2003) to frame our research question. Our population of interest was university or college undergraduate students and our target outcome was sexual health knowledge. Our two research questions were as follows: *What literature has been published relating to sexual health knowledge among university and/or college undergraduate students globally? In the literature* *on the sexual health knowledge of university and/or college undergraduate students, what tools or measures are used to capture their sexual health knowledge?*

Stage 2: Identifying Relevant Studies

A systematic approach was used to identify relevant studies. This involved articulation of strict inclusion and exclusion criteria and development of a comprehensive search strategy.

Inclusion and exclusion criteria. Criteria were developed in order to build a well-defined strategy for identifying studies pertaining to the sexual health knowledge of young adults. In 2002 the World Health Organization reworked the definition of sexual health with the aid of a number of expert consultants. The new, holistic definition includes the state of physical, mental, and social well-being in relation to sexuality, as well as changing sexual behaviours among young adults in today's society (Dalton & Galambos, 2008; World Health Organization, 2013). We decided to review articles published between 2000 and 2014 to capture any changes in the sexual health literature that could reflect this new definition. Three sexual health themes were identified: STIs (including chlamydia, gonorrhea, syphilis, herpes, human papillomavirus [HPV], and HIV/AIDS); condoms; and contraception. Articles focusing on sexual health knowledge were included if they explored how the knowledge was measured, influences on sexual health knowledge, level of knowledge, or predictors of sexual health knowledge. Articles could be from any geographic location, as a range of locations could serve to deepen our understanding of any knowledge differences among various countries and cultures. Only articles published in English were included. Additionally, only articles using a quantitative, qualitative, or mixed methods research design were included. Editorials and commentaries were excluded. Also, the data had to pertain to college or university student populations; if other populations were part of the study, the results for the student population had to be provided separately.

Search strategy. The search strategy, developed in consultation with a library scientist, included electronic databases, reference lists, and key journals that were hand-searched for relevant studies.

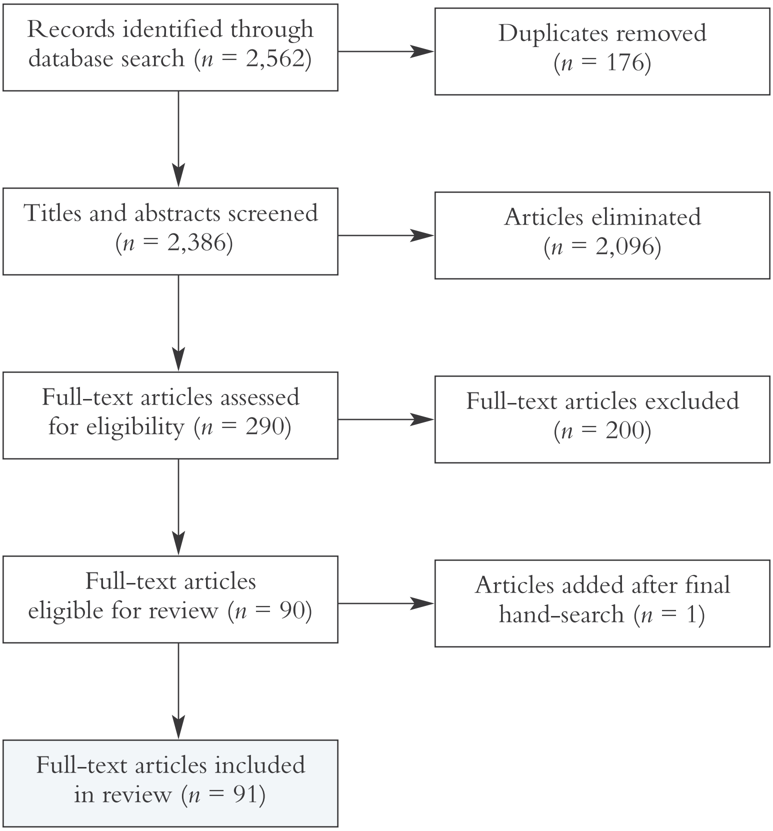
Four electronic databases were searched: CINAHL, PsycINFO, PubMed, and EMBASE. MeSH headings and keyword searches — college, university, undergraduate, student,* sexual,* knowledge — were applied in combinations using the Boolean operators AND and OR. The truncation symbol allowed for a variety of spellings of the root word. As described above, date limits (2000–14) and language limits were placed on each search. (The search strategy is available upon request from the first author.) Additional search initiatives included hand-searching of relevant journals (*College Student Journal* and *Journal of American College*

Health) and the reference lists of the final articles selected for review. All retrieved references were imported into RefWorks.™ Following removal of duplicates, 2,386 citations were screened for inclusion.

Stage 3: Selecting the Studies

Studies that did not meet the inclusion and/or exclusion criteria were eliminated (Arskey & O'Malley, 2005). Selection of articles involved two stages of screening. First, two reviewers working independently screened the titles and abstracts of the selected articles. Next, two independent reviewers screened the full-text articles. The researchers then met to compare their selections and discuss articles that they were unsure about (Figure 1).

Figure 1 *Flow Chart of Screening Stages and Outcomes*



Stage 4: Charting the Data

In the next stage of the scoping literature review, two reviewers extracted data from the 91 selected articles. Three members of the team developed a data-charting template (using Microsoft Excel™) to extract the data needed to answer the research questions. Additionally, as the objective of the review was to draw a map of the literature, the seven selected variables were author(s), year of publication, country of publication, research design, population of interest, outcome variables, and measurement tools. Two independent researchers extracted data from the first 15 articles and met to ensure that their approach was consistent; subsequently data were extracted from the remaining articles. Once data abstraction was complete, the two reviewers met again to compare their results. Variations in extraction were discussed and consensus was used to settle discrepancies. After the data were extracted, they were coded in Microsoft Excel™ and a descriptive approach was used to organize the findings into groupings. A deductive approach was then used to group the textual data based on the inclusion/exclusion criteria and the data-extraction categories.

Stage 5: Collating, Summarizing, and Reporting the Results

The fifth stage consisted of an overview of the data extracted from the 91 articles included for review (Arksey & O'Malley, 2005; Levac, Colquhoun, & O'Brien, 2010; Rumrill, Fitzgerald, & Merchant, 2010). The data were analyzed descriptively on the variables selected and a deductive approach based on established categories was used to determine patterns and groupings. The results of the scoping literature review are described below.

Results

Year of Publication

As described above, the inclusion criteria stipulated articles published between 2000 and 2014 using the World Health Organization's (2013) modified definition of sexual health. For the years 2003 to 2010, the number of publications on the sexual health knowledge of university students ranges between four and eight. More publications appear in later years: 11 in 2011, 11 in 2012, and 14 in 2013 (Table 1).

Table 1 *Year of Publication for Articles Included in Review*

Year of Publication	Number of Articles
2000	2
2001	4
2002	2
2003	6
2004	5
2005	4
2006	8
2007	4
2008	8
2009	7
2010	4
2011	11
2012	11
2013	14
2014	1

Figure 2 ***Geographic Location of Articles Included in Review***

Geographic Location	**Number of Articles**
North America	25
Europe	16
Middle East	9
Africa	20
Asia	19
Australia	2

Geographic Location of Publications

Of the 91 articles included in the review, the largest number, 25, were published in the United States (27%). Twenty of the articles reported on studies conducted in African countries (22%), of which Nigeria had the largest number — all focused on university students' knowledge about HIV/AIDs. Countries in Asia and Europe followed, with 19 and 16 papers, respectively (Figure 2).

Research Design

Of the 91 articles included for review, the majority (*n* = 79) reported on cross-sectional descriptive and/or cross-sectional comparative studies.

Five studies used a pre/post-test quasi-experimental design to capture the sexual health knowledge of their participants (Chi, Hawk, Winter, & Meeus, 2013; Lambert, 2001; Mill, Opare, & Fleming, 2004; Moore & Smith, 2012; Warren, 2010). Another five used a qualitative and/or mixed methods design (Brown et al., 2008; Burchard, Laurence, & Stocks, 2011; Goundry, Finlay, & Llewellyn, 2013; Li et al., 2004; Tagoe & Aggor, 2009).

Of this latter group, one study (Brown et al., 2008) interviewed each of its 105 participants individually, while the remainder used focus groups as their method of data collection.

The sample size for the above studies depended on the total student population, research design, and research question ($\mu = 716.7$; $\sigma = 827.6$). The sample size for the cross-sectional studies ranged between 55 (a single-site study in Vadodara, India, that compared medical and dental students [Agrawa, Sadadi, Dat, & Trived, 2013]) and 4,769 (a multisite study that examined sexual health knowledge among female undergraduate students from 16 colleges in China [Li et al., 2013]). The sample size for the qualitative studies ranged from 21 (Burchard et al., 2011) to 105 (Brown et al., 2008).

Variables of Interest

The studies examined knowledge, attitudes, and behaviours across several variables under the phrase "sexual health": HIV/AIDS, contraception, STIs, and sources of sexual health information (Table 1).

HIV/AIDS. Almost half of the studies (49%; *n* = 45) examined students' HIV/AIDS knowledge. The majority of these (*n* = 16) were conducted in Africa between 2004 and 2013 (Brown et al., 2008; Chng, Eke-Huber, Eaddy, & Collins, 2005; Hoque & Ghuman, 2011; Mill et al., 2004; Mkumbo, 2013; Nkuo-Akenji et al., 2007; Nwezeh, 2010; Odu et al., 2008; Ogbuji, 2005; Onah, Mbah, Chukwuka, & Ikeme, 2004; Oppong Asante & Oti-Boadi, 2013; Oyefara & Bisiriyu, 2007; Petro-Nustas, 2000; Reddy & Frantz, 2011; Tagoe & Aggor, 2009; Unadike, Ekrikpo, & Bassey, 2012). Ten of the articles that focused on HIV/AIDS were published in the United States (Grin, Chan, & Operario, 2013; Inungu, Mumford, Younis, & Langford, 2009; Lance, 2001; Mancoske, Rountree, Donovan, & Neighbors, 2006; Sileo & Sileo, 2008; St. Rose, 2008; Sutton et al., 2011; Tung, Hu, Efird, Su, & Yu, 2013; Weinstein et al., 2008).

The HIV/AIDs-focused studies examined various student subpopulations in addition to undergraduates in general: medical students, female students, MSM (men who have sex with men) college students, heterosexual students, African-American college students, and first-year undergraduates. The articles relating to HIV/AIDS investigated the following outcomes of interest: knowledge (*n* = 6); knowledge and awareness (*n* = 2); knowledge, attitudes, and practices (*n* = 1); knowledge, attitudes, and behaviours (*n* = 22); perceived risk (*n* = 7); and sources of HIV/AIDS information (*n* = 14) (Table 1).

STIs. A total of 23 studies (25%) explored knowledge related to STIs, including symptoms, transmission, complications, screening/testing, and treatment. The populations of interest were undergraduates in general;

female undergraduates; health and education students; and medical, engineering, and human sciences students. The outcomes of interest were knowledge (*n* = 5); knowledge, awareness, and beliefs (*n* = 3); knowledge, attitudes, and practices (*n* = 4); knowledge, attitudes, and behaviours (*n* = 8); and sources of STI information (*n* = 6) (Table 1).

Nine studies (10%) examined students' knowledge about one STI in particular — HPV — including prevalence, symptoms, complications, prevention, treatment, and screening/testing. Subpopulations of interest for the HPV studies were medical science students; female students; male students; female sorority members; Black undergraduates; physician assistant students; and psychology students. The outcomes of interest were knowledge (*n* = 3); knowledge and attitudes (*n* = 2); knowledge, attitudes, and behaviours (*n* = 3); and sources of HPV information (*n* = 2). Four of the articles also explored students' knowledge about the relationship between HPV and cervical cancer as well as beliefs and attitudes towards the HPV vaccine (Aleshire, Lock, & Jensen, 2013; Ghojazadeh, Azar, Saleh, Naghavi-Behzad, & Azar, 2012; Katz, Krieger, & Roberto, 2011; Wong & Sam, 2010).

Contraception. Twenty-four studies (26%) investigated students' knowledge about various contraception methods, including oral contraception, condoms, and overall family planning (Agrawa et al., 2013; Ajmal, Agha, & Karim, 2011; Aygin & Fidan, 2012; Barbour & Salameh, 2009; Franklin & Dotger, 2011; Li et al., 2013; Reis, Ramiro, Matos, & Diniz, 2013; Simbar et al., 2005; Zhang, Maddock, & Li, 2010; Zhou et al., 2012). Ten of the 91 studies investigated students' knowledge about emergency contraception: four from the United States (Corbett, Mitchell, Taylor, & Kemppainen, 2006; Hickey, 2009; Miller, 2011; Sawyer & Thompson, 2003), four from African countries (Ahmed, Moussa, Petterson, & Asamoah, 2011; Aziken, Okonta, & Ande, 2003; Ebuehi, Ekanem, & Ebuehi, 2006; Kebede, 2006), one from Australia (Calabretto, 2009), and one from India (Puri et al., 2007).

The studies examined knowledge of contraception among several subpopulations: undergraduates in general; female students; kinesiology and education students; first-year students; and medical, engineering, and human science students. The outcomes of interest were knowledge (*n* = 2); knowledge, attitudes, and practice (*n* = 7); knowledge, attitudes, and behaviours (*n* = 3); and sources of information (*n* = 4).

Predictors of Knowledge

The studies collected a wide range of variables in their demographic questions. The researchers analyzed these variables to determine whether they were statistically significant predictors of sexual health knowledge. Demographic variables throughout the 91 articles were age, sex, religion, marital status, level of education, number of sexual partners, academic standing, place of residence, ethnicity, academic major, sexual orientation, sexual experience, socio-economic status, family monthly income, and number of siblings.

Measurement Tools

A wide variety of instruments were used to measure students' knowledge about sexual health. The most common type of measurement tool was a true or false (yes/no) questionnaire. The second most common was a multiple-choice questionnaire, followed by the Likert scale. Students were given a list of sources of sexual health knowledge and asked to check all that applied.

Several studies used instruments developed specifically for the study and tested for validity and reliability. Among the 91 studies, only two valid and reliable measurement tools were used more than once. The HIV Knowledge Questionnaire, which assesses HIV knowledge using true/false questions, was used by Grin et al. (2013), Mancoske et al. (2006), and Reddy and Frantz (2011); this tool has strong internal consistency across various samples (Cronbach α = 0.75–0.89). The International AIDS Questionnaire (Cronbach's α = 0.76) was used in all four studies by Tung (Tung et al., 2008; Tung, Cook, Lu, & Yang, 2013; Tung, Hu, et al., 2013; Tung, Hu, Efird, Yu, & Su, 2012); this questionnaire used a five-point Likert scale to assess students' knowledge about AIDS.

Discussion

The purpose of this scoping review was to map the literature concerning the sexual health knowledge of university and/or college students. A comprehensive search strategy and independent screening yielded 91 articles that together offer health-care providers a snapshot of the sexual health literature. The scoping review highlights the key findings, the implications of the absence of research carried out in a Canadian context, the most common research design and data collection methods, and the variety of variables of interest that have been examined as a component of sexual health.

The vast majority of the studies focused on HIV/AIDS were carried out in African countries. This may be attributable to the high prevalence of HIV/AIDS on the African continent (Brown et al., 2008; Chng et al., 2005; Hoque & Ghuman, 2011; Mill et al., 2004; Mkumbo, 2013; Nkuo-Akenji et al., 2007; Nwezeh, 2010; Odu et al., 2008; Ogbuji, 2005; Onah et al., 2004; Oppong Asante & Oti-Boadi, 2013; Oyefara & Bisiriyu, 2007; Petro-Nustas, 2000; Reddy & Frantz, 2011; Tagoe & Aggor, 2009; Unadike et al., 2012). Overall, the United States was found to have conducted the greatest amount of research on sexual health knowledge within the university student population. No research literature on the sexual health knowledge of university students in Canada or in Central and South America was found. How do Canadian students compare with students in other countries in terms of sexual health knowledge? Might aspects of Canadian or Central and South American culture have an impact on students' sexual health knowledge? This gap in the literature highlights the need for research in these geographical regions in order to furnish health-care providers with valuable evidence to inform their practice.

The results of this scoping review draw attention to several aspects of sexual health, including STIs, HIV/AIDS, contraception, and HPV. One area that has not received adequate attention is students' specific knowledge about condoms. The use of condoms can prevent STIs as well as pregnancy. Further research is needed to measure students' knowledge about this form of protection (Weinstein et al., 2008).

In the articles reviewed, the most common research design was a cross-sectional descriptive or comparative means of describing the sexual health knowledge of students. A wide range of measurement tools were used, and most studies developed their own instruments. Data collection was primarily by means of surveys using a true/false method of evaluation. Tools varied in terms of focus on knowledge, attitudes, and behaviours regarding sexual health, with no single tool measuring all aspects of sexual health. Due to the lack of reliable and valid tools, the Public Health Agency of Canada (2012) has developed the Canadian Sexual Health Indicators (CSHI) survey. This is a comprehensive tool that encompasses positive and negative aspects of sexual health, including traditional inquiries and new questions on self-efficacy and access to information and services. The CSHI survey was developed following a thorough review of existing sexual health measures and focus groups with key informants, and was pilot-tested with 1,185 people aged 16 to 24 (Cronbach's $\alpha = 0.883$) (PHAC, 2012). While this tool was not used in the articles included in the present review, it can be useful for practitioners and researchers in measuring all aspects of sexual health, including university students' sexual health knowledge.

Sexual health and well-being are important components of holistic nursing care (Evans, 2013). According to Hayter et al. (2012), nurses require specific communication skills to discuss sensitive sexual health issues, as well as knowledge specific to their patient population, so as to avoid a one-size-fits-all approach. The results of this review could help nurses practising in the area of sexual health among university students to better understand the current state of knowledge within this population. Further research is needed to examine the sexual health knowledge of diverse subpopulations of university students, such as international students, students with disabilities, and students from the LGBTQ community. Overall, the present results offer researchers, health-care providers — including nurses — and health-service administrators an understanding of the gaps in sexual health research with university students, especially in Canada. These findings can be used by researchers to inform their investigations into the sexual health knowledge of young adults and by health-care providers seeking to become better informed about sexual health knowledge, thus strengthening their provision of holistic care.

Limitations

This scoping literature review has several limitations. First, all major electronic databases were used, and although every effort was made to ensure a comprehensive search, some articles may have been missed. Second, the review included only articles written in English. It is likely that valuable research on sexual health knowledge has been published in other languages. Third, the review did not undergo consultation with experts in the field, as recommended by Arksey and O'Malley (2005) as an optional sixth stage. However, two members of the review team (AS and DL) had expertise in the area of sexual health service use among university students. Lastly, the review did not cover sexual health knowledge among diverse groups of university students, such as international students and students from the LGBTQ community, which could differ from that of the populations described in the primary studies that were included in the review.

Conclusion

This scoping review describes current research activity in the area of sexual health knowledge among university students, while also identifying gaps in the literature. The objective of the review was to describe the range of current research evidence and the instruments used to measure sexual health knowledge among university students, and not to analyze the findings of the 91 selected articles. The scoping review was an appropriate first step given that this literature has not previously been synthesized. The findings reveal the need for further investigation of sexual health knowledge among university/college students in the Western hemisphere, as well as the need for a standardized measurement tool that is reliable and valid. The findings provide important contextual information for nurses and other health-care providers working with young adults, especially university/college students, in the area of sexual health so that they can provide holistic care. As researchers continue to explore this important nursing and health promotion topic, health-care providers can use the knowledge generated to help prevent negative health outcomes and increase students' overall sexual well-being.

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Conflict of interest statement: The authors declare no conflict of interest.

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CJNR 2015, Vol. 47 Nº 3, 39–55

Evaluating the Effectiveness of a Nurse Practitioner-Led Outreach Program for Long-Term-Care Homes

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An observational prospective cohort study was conducted on 1,353 observations from a convenience sample of 311 long-term-care (LTC) residents to evaluate the effectiveness of a nurse practitioner-led outreach program on the health outcomes, emergency department (ED) transfers, and hospital admissions of LTC residents. The results show that ED transfers by the NPs were 27% less likely to be non-urgent than transfers made by MDs (OR = .73; 95% CI .54–.97) and that ED transfers by the NPs were 3.23 times more likely to be admitted to hospital than transfers by MDs (OR = 3.23; 95% CI 1.17–8.90). These findings highlight the potential benefits of the NP-led outreach program for LTC residents and for the health-care system.

Keywords: nurse practitioner, outreach program, long-term care, ED transfer, acuity level, hospital admission

Résumé

Évaluation de l'efficacité d'un programme d'extension des services dirigé par des infirmières praticiennes pour les maisons de soins de longue durée

Maher M. El-Masri, Abeer Omar,
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Dans le cadre d'une étude de cohorte prospective observationnelle, 1 353 observations provenant d'un échantillon de commodité composé de 311 bénéficiaires de soins de longue durée ont été soumises à un examen visant à évaluer l'efficacité d'un programme d'extension des services dirigé par des infirmières praticiennes en ce qui a trait aux résultats sur la santé, aux transferts vers le service des urgences et à l'hospitalisation des bénéficiaires de soins de longue durée. Les résultats indiquent que les patients transférés au service des urgences par des infirmières praticiennes étaient dans une proportion de 27 % moins susceptibles d'être non urgents que ceux transférés par des médecins (rapport de cotes = 0,73; intervalle de confiance à 95 % de 0,54 à 0,97), et 3,23 fois plus susceptibles d'être admis à l'hôpital que ceux transférés par des médecins (rapport de cotes = 3,23; intervalle de confiance à 95 % de 1,17 à 8,90). Ces constatations ont permis de mettre en évidence les avantages possibles d'un programme d'extension des services dirigé par des infirmières praticiennes pour les bénéficiaires de soins de longue durée et le système de soins de santé.

Mots-clés : infirmière praticienne, programme d'extension des services, soins de longue durée, transfert vers le service des urgences, évaluation de l'efficacité, admission à l'hôpital

While older adults with urgent health problems must receive appropriate emergency and hospital care, the transfer of those with non-urgent health problems from long-care-care (LTC) homes to emergency departments (EDs) may contribute to overcrowding and unwarranted use of EDs (Canadian Association of Emergency Physicians, 2013). Statistics show that over 50% (*n* = 573) of LTC residents who presented to EDs in Windsor, Ontario, between January and November 2007 had semi-urgent or non-urgent case presentations, indicating that they could have been successfully treated in their LTC homes if adequate services had been available (Ontario Ministry of Health and Long-Term Care, 2008, 2009). The data also show that only 44% of these LTC residents were admitted to hospital. Lack of access to LTC-based assessment and treatment services often necessitates the transfer of residents to hospital EDs (Jensen, Fraser, Shankardass, Epstein, & Khera, 2009). The availability of such services is expected not only to save residents from the undue physical and emotional ramifications of avoidable transfers and hospital admissions, but also to decrease the costs associated with ambulance transfer to EDs and subsequent long waits there, while possibly easing the burden of overcrowding and long wait times (Ontario Ministry of Health, 2008, 2009).

The transfer of LTC residents to the ED is a potential source of stress, posing added health risks to this frail population (Bandurchin, McNally, & Ferguson-Paré, 2011). Hospitalized older patients also incur risk of a number of adverse outcomes (e.g., confusion/delirium, decline in functional abilities, falls, infections, pressure sores, and death) unrelated to their admitting diagnoses (Boockvar et al., 2005; Creditor, 1993; Dosa, 2005; Murtaugh & Freeman, 1995; Taylor & Oppenheim, 1998). Such outcomes pose a significant health challenge to LTC patients and a financial burden on an already strained health-care system due to increased length of stay for treatment of these complications (Canadian Patient Safety Institute, 2012; Valiquette, Abou Chakra, & Laupland, 2014). Further, the development of the complications and their treatment may lead to care requirements that exceed the resources of LTC homes, making it difficult to return the patients to their LTC homes.

Reducing the transfer of older people with non-urgent health problems from LTC homes to hospital EDs is an issue of intense interest in health care and a priority for the Ontario Ministry of Health and Long-Term Care (Carter & Porell, 2005; Jensen et al., 2009; Physician Hospital Care Committee, 2006; Ronald, McGregor, McGrail, Tate, & Broemling, 2008; Walker, Teare, Hogan, Lewis, & Maxwell, 2009). In response to evidence of (a) adverse health outcomes (Boockvar et al., 2005; Dosa, 2005; Murtaugh & Freeman, 1995), and (b) the costly and avoidable use of health-care resources associated with hospital transfers and admissions

(Canadian Institute for Health Information, 2011), the Ministry has provided funding through its Local Health Integration Networks (LHINs) for a model of care designed to improve access to primary health care for LTC residents through 14 LTC Mobile Teams led by nurse practitioners (NPs) (Ontario Ministry of Health, 2014). The goal of this model of care is to provide consultation and/or timely onsite assessment and treatment (Erie St. Clair Local Health Integration Network, 2009). This study evaluated one of these teams, which was dispatched out of a Windsor-area hospital to two local LTC homes.

Although several Canadian studies have examined the role of NPs and other advanced practice nurses in LTC homes, very little research has explored the impact of ED-based NP outreach programs on the health outcomes and costs associated with their implementation. American studies (Carter & Porel, 2005; Intrator, Castle, & Mor, 1999; Kane, Flood, Bershadsky, & Keckhafer, 2004) have found the presence of an onsite NP at LTC homes to be associated with decreased hospital admissions. However, the majority of studies that have examined the role of NPs (Eisch, Brozovic, Colling, & Wold, 2000; Klaasen, Lamont, & Preetha, 2009; McAiney et al., 2008; Rosenfeld, Kobayashi, Barber, & Mezey, 2004) and other advanced practice nurses in LTC homes (Bakerjian, 2008; Ryden et al., 2000) have been almost exclusively descriptive in nature (Martin-Misener et al., 2014; McAiney et al., 2008) and/or have focused on satisfaction with and/or perceptions about the model of care (Martin-Misener et al., 2014; Klaasen et al., 2009; Rosenfeld et al., 2004; Stolee, Hillier, Esbaugh, Griffiths, & Borrie, 2006). Further, our study examined a unique model of care in which the NPs were members of the ED staff who served at the LTC homes as part of an outreach approach. The general aim of the study was to evaluate the effectiveness of implementing an NP-led outreach program on health outcomes, ED transfers, and hospital admissions of LTC residents. Specifically, the study was designed to (a) compare the rate of case resolution among non-hospitalized/non-transferred LTC residents across NPs, MDs, and RNs; (b) compare the rate of ED transfer of LTC residents across NPs, MDs, and RNs; and (c) compare LTC residents who are transferred to the ED with regard to their (i) acuity level; (ii) rate of hospital admission; and (iii) ED wait time across NPs, MDs, and RNs.

Description of the NP-Led Outreach Program

The mandate of the Erie St. Clair LHIN outreach program, which was instituted in the fall of 2009, was to decrease the frequency of avoidable ED visits by residents of LTC homes across Windsor and Essex County. The program was initially staffed by two NPs (1.5 full-time equivalency).

The role of the outreach NPs was to assist LTC staff with assessment and management of health problems experienced by residents. Although employed by the hospital as members of the ED staff, the NPs worked out of the LTC homes as members of the LTC staff. They worked collaboratively with the LTC nursing and medical staff as members of a health-care team, but had full, independent diagnostic and treatment authority as per their scope of practice. They also did regular follow-up rounds on cases that were under their care and made decisions to transfer patients. RNs worked under the direction of the NPs and MDs but were able to request patient transfers for cases that they saw as requiring immediate medical attention when neither the MDs nor the NPs were on site.

During the course of the study, a third part-time NP was added to the program. Working in collaboration with LTC physicians and staff, the program was to supply outreach NPs who would (a) provide or suggest onsite treatment for case presentations that were non-urgent but had the potential to become urgent, and (b) suggest and facilitate transfer of urgent cases to hospital. The outreach NPs also advocated for residents and families with regard to advanced directives and resuscitation options, which may have helped to prevent unnecessary hospital visits. Lastly, they acted as liaisons between the hospital and the LTC home to streamline necessary hospital admissions and to ensure that returning residents were stable and had appropriate discharge information. As liaisons, the outreach NPs could also arrange for direct services (i.e., diagnostic imaging) without sending the resident through the ED.

Method

Design

An observational prospective cohort design was developed between 2011 and 2014 to explore the impact of implementing an NP-led outreach program on the health outcomes of LTC residents. Following ethical clearance from the respective institutional Research Ethics Boards, staff members in the participating LTC homes and EDs were oriented to the study by the investigating team through oral presentations and written materials. Prior to commencement of data collection, the study was piloted for 2 weeks on a small number of case presentations to examine the feasibility of data-collection tools and procedures and to ensure that all four research assistants had a similar understanding of the data-collection process. Modifications to data-collection procedures or tools were made when appropriate and a final data-collection protocol was developed based on the pilot feedback, which was qualitatively assessed through meetings with the research assistants.

As part of data-collection procedures, the research assistants collected initial baseline data on all consenting residents, which included their demographic characteristics, prognostic and/or confounding factors, co-morbidities, and baseline Barthel scores. New case presentations were identified primarily by the research assistants, who screened the medical records of the LTC residents every 48 hours. Nursing staff at the LTC homes and the NPs assisted with the identification of new cases by flagging them to the research assistants. Once a resident presented with a case presentation or complaint that required NP or medical attention, the research assistants collected data pertaining to the case every 48 hours. To measure and control for overall health status at the time of the case presentation, the research assistants calculated the Barthel score from data that they extracted on the 10 items of the Barthel Index from the resident's medical records. Data collection on a case presentation was closed when an endpoint was reached either by (a) documented resolution of the problem, (b) transfer or death of the resident, or (c) reaching the maximum 21-day follow-up time without a resolution of the case presentation. For those who were transferred to the ED, data abstracted from the hospital medical records included (a) level of acuity as indicated by Canadian Triage Acuity Scale (CTAS) scores, (b) wait time at the ED, and (c) admission status.

Measurement and Variable Definitions

A "case presentation" was defined as an LTC resident presenting with an acute health complaint or exacerbation of an existing chronic condition that required medical or advanced nursing attention but was within the NP's scope of practice. Given that a case presentation, as opposed to the individual participant, was the unit of analysis, a single resident could contribute more than one case presentation to the analysis. The "case resolution" of a case presentation was defined in terms of the endpoint of the presenting health problem measured on a nominal scale indicating whether it was resolved or unresolved. The endpoint of a resolved case was ascertained via written or oral communication by the managing health-care provider indicating that the presenting problem was resolved or required no further attention. The endpoint for an unresolved case was established if the problem persisted after 21 days of follow-up. The outcome of an unresolved problem was further defined to specifically capture its nature (e.g., transferred to hospital, death, or other). An "ED visit" was defined as the transfer of an LTC resident to the ED for a specific case presentation. A "hospital admission" was defined as the admission of an LTC resident to a hospital floor/unit for at least 24 hours. The rates of ED visits and hospital admissions were each measured on a binary scale (i.e., occurred/did not occur). For LTC residents who were transferred to the ED, the CTAS mandated for use in all Canadian EDs (Bullard, Unger, Spence, & Grafstein, 2008; Murray, Bullard, & Grafstein, 2004) was used to measure the "level of acuity." While the CTAS classifies acuity into five categories (i.e., non-urgent, less urgent, urgent, emergent, and resuscitation), in this study we collapsed these categories into either urgent (urgent, emergent, and resuscitation) or non-urgent (less urgent and non-urgent). "Overall health status" was measured using the Barthel Activity of Daily Living Index, a 10-item functional ability scale with established reliability and validity (Collin, Wade, Davies & Horne, 1988; Mahoney & Barthel, 1965; Oveisgharan et al., 2006). The Barthel score ranges from 0 to 100, with 0 indicating complete dependence and 100 indicating complete independence. Each of the 10 items on the Barthel Index measures a specific functional ability (feeding, bowels, bladder, etc.) that can be used to assess the overall health of older individuals.

Sample and Setting

The study was conducted within a regional community-based hospital system comprising two campuses and four LTC homes in the Erie St. Clair LHIN region of southwestern Ontario. The hospitals had a combined total of approximately 350 beds and a combined ED capacity of approximately 80 patients. The LTC homes had a combined total of 287 beds (ranging from 42 to 96 per home). Two of the homes were participating in the outreach program (159 beds), while two were not (128 beds). However, not all residents in the participating LTC homes were always seen by the outreach NPs. The study was implemented with a convenience sample of 311 eligible residents, who provided a total of 1,353 case presentations. These numbers exceeded our power analysis estimates, which suggested that a minimum of 848 observations were needed to provide 80% power using an alpha of .05 to yield an odds ratio of 1.5 for the primary outcome of ED transfer.

Residents were recruited by the research assistants, who provided them or their substitute decision-makers with an oral explanation and a letter describing the study and the data-collection procedures. Letters were mailed to the substitute decision-makers of residents who were deemed by the LTC management to be cognitively impaired. A person was eligible for enrolment if he/she was at least 60 years of age and living in one of the four participating LTC homes. Residents were excluded if they were deemed terminal and/or in a critical health state at the time of recruitment. A resident could contribute more than one case presentation to the study. A case presentation for which the resident had been transferred to a hospital other than one of the participating local hospitals was excluded. A case presentation was subject to exclusion if its management was deemed to be beyond the scope of NP practice (no such presentation was reported in the study).

Data Analysis

All data-analysis procedures were performed using SPSS statistical software (Version 22.0). Prior to the analyses, data were explored to ensure that all bivariate and multivariate statistical assumptions of the proposed analyses were met. Basic descriptive statistics such as general frequencies of categorical variables and means and standard deviations of continuous variables were performed to describe the demographic and other prognostic factors of participants. A series of chi-square and one-way analysis of variance analyses were performed to compare the unadjusted outcomes of the findings across NPs, MDs, and RNs. Given that a participant could contribute more than one case presentation during the course of the study, a series of generalized estimating equation models were performed to account for the clustered nature of the data when examining each of the study outcomes. A 95% confidence interval or a two-tailed alpha of 0.05 was used as the criterion for statistical significance (Hosmer & Lemshow, 2001).

Results

Sample Characteristics

Only 32 (9.6%) of the 333 residents who were screened for eligibility during the data-collection phase were deemed ineligible, yielding a sample size of 311. The average number of case presentations per resident was 4.3 (*SD* ± 3.3), with only 19% (*n* = 60) contributing a single case presentation and 44.4% (*n* = 138) contributing two to four. Only 17.1% (*n* = 232) of all case presentations were subject to ED transfer; of these, 55.6% (*n* = 129) were single ED transfers and the remaining 44.4% (*n* = 103) were repeat ED transfers.

The mean age of participants was 84.2 years (*SD* ± 9.37). The majority were Caucasian (97.8%) and female (70.1%). Only 17% of participants were married or in a relationship at the time of data collection. The participants were living with a wide range of chronic illnesses, including hypertension (72.7%), dementia (61.7%), arthritis (39.5%), diabetes mellitus (32.8%), stroke (27.3%), chronic obstructive pulmonary disease (23.2%), coronary artery diseases (23.2%), and congestive heart failure (16.1%).

Unadjusted Bivariate Comparisons

Table 1 presents the unadjusted comparisons of case presentations and each of the study outcomes compared across NPs, MDs, and RNs. While

Table 1 ***Unadjusted Comparisons of Case Presentations and Patient Outcomes Across NPs, MDs, and RNs***

Outcome	**Health-Care Provider**			**Total**		
	NP (*n* = 374)	**MD (*n* = 636)**	**RN (*n* = 343)**	**(*N* = 1,353)**	**χ^2/F**	***P***
Case presentation:* n *(%)					60.01	< .001
Acute	286 (76.5)	554 (87.1)	330 (96.2)	1,170 (86.5)		
Chronic	88 (23.5)	82 (12.9)	13 (3.8)	183 (13.5)		
Case resolution:* n *(%)					80.95	< .001
No	151 (40.4)	199 (31.3)	209 (60.9)	559 (41.3)		
Yes	223 (59.6)	437 (68.7)	134 (39.1)	794 (58.7)		
ED transfer:* n *(%)					327.78	< .001
No	349 (93.3)	597 (93.9)	175 (51.0)	1,121 (82.9)		
Yes	25 (6.7)	39 (6.1)	168 (49.0)	232 (17.1)		
	Subsample of ED Transfers					
	(*n* = 25)	**(*n* = 39)**	**(*n* = 168)**	**(*N* = 232)**		
ED wait time M ± SD	1.16 ± 1.07	1.64 ± 1.77	1.45 ± 1.33	1.45 ± 1.39	0.91	0.40
Acuity level:* n *(%)					3.68	0.16
Non-urgent	0 (0.0)	1 (2.6)	14 (8.3)	15 (6.5)		
Urgent	25 (100.0)	38 (97.4)	154 (91.7)	217 (93.5)		
Hospital admission:* n *(%)					7.69	0.02
No	8 (32.0)	23 (59.0)	103 (61.3)	134 (57.8)		
Yes	17 (68.0)	16 (41.0)	65 (38.7)	98 (42.2)		

F = F-ratio for one-way analysis of variance.

the results indicate that a larger proportion of cases managed by MDs (68.7%) experienced a positive resolution compared to NPs (59.6%) and RNs (39.1%; $\chi^2 = 80.95$, $p < .001$), it is important to note that, overall, NPs were more likely to treat chronic or exacerbated chronic conditions than MDs and RNs ($\chi^2 = 61.13$, $p < .001$). Specifically, 52.5% of chronic case presentations and 46.9% of exacerbated chronic conditions were managed by an outreach NP. Further, 96.2% of cases that were managed by an RN were acute, as compared to 87.1% of those managed by an MD and 76.5% of those managed by an outreach NP.

Of the 232 case presentations that were transferred to the ED, 10.8% ($n = 25$) were transferred by NPs, 16.8% ($n = 39$) by MDs, and 72.4% ($n = 343$) by RNs. ED transfer comparisons across NPs, MDs, and RNs show that while 49% of case presentations managed by RNs were transferred to the ED, only 6.1% of those managed by MDs and 6.7% of those managed by outreach NPs were transferred to the ED ($\chi^2 = 327.78$; $p < .001$). One-way analysis of variance results indicate that the mean ED wait times ($F = 2.09$; $p = .129$) were not different across residents based on their transferring health-care provider.

The results show that only 42.2% of all ED transfers from LTC homes were admitted to hospital. Of all ED transfers made by NPs, 68% were admitted to hospital, compared to 41% of transfers made by MDs and 38.7% of transfers made by RNs ($\chi^2 = 7.69$, $p = .02$).

No difference was found in the acuity level of residents who were transferred to the ED across transferring health-care providers ($\chi^2 = 9.01$, p 0.34). It is interesting to note, however, that all those who were transferred to the ED by an outreach NP were classified as urgent.

Adjusted Multivariate Comparisons

Table 2 displays the results of GEE analyses comparing each of the study outcomes across NPs, MDs, and RNs while adjusting for confounding effects and the clustered nature of the data. Results of these analyses indicate no differences in case resolution among NPs, MDs, and RNs. Interestingly, variables independently associated with case resolution are age (OR = .99; 95% *CI* .96–.99), type of case (i.e., acute vs. chronic) (OR = .32; 95% *CI* .21–.46), and number of comorbidities (OR = 1.10; 95% *CI* 1.01–1.21).

Table 2 shows that NPs are not different from MDs with regard to their rate of ED transfer after adjusting for gender, case presentation, age, Barthel score, and number of co-morbidities. However, an RN was almost 20 times more likely than an NP or an MD to transfer a resident to the ED (OR = 19.93; 95% *CI* 12.37–32.11). Age (OR = .96; 95% *CI* .94–.99), Barthel score (OR = 1.03; 95% *CI* 1.02–1.04), and number of

Table 2 ***GEE Analysis: Impact of Health-Care Provider on Study Outcomes***

Variables	**Case Resolution**		**ED Transfers**		**Acuity Status**		**Hospital Admission**	
	OR	**95% CI**	**OR**	**95% CI**	**OR**	**95% CI**	**OR**	**95% CI**
Gender								
Male	0.78	0.58–1.05	0.92	0.53, 1.58	0.89	0.74–1.07	0.84	0.40–1.74
Health-care provider								
RN	0.99	.64–1.55	19.93	12.37–32.11	0.97	0.83–1.22	0.87	0.43–1.8
NP	0.75	[0.53, 1.05]	1.04	0.55–1.99	0.73	0.54–0.98	3.23	1.17–8.9
MD (reference)	–	–	–	–	–	–	–	–
Case presentation								
Chronic	0.32	0.21–0.46	1.17	0.54–2.51	1.05	0.84–1.31	0.61	0.21–1.78
Acute (reference)	–	–	–	–	–	–	–	–
Age	0.98	0.96–0.99	0.96	0.94–0.99	1.00	0.10–1.01	1.01	0.99–1.04
Barthel Index	0.10	0.99–1.01	1.03	1.02–1.04	1.00	0.10–1.01	0.98	0.97–1.00
Number of co-morbidities	1.10	1.01–1.21	1.16	1.00–1.35	0.99	0.94–1.04	1.14	0.94–1.38

co-morbidities (OR = 1.16; 95% *CI* 1.00–1.35) were also independent predictors of ED transfer.

The results also show that transfers by NPs were 27% less likely to be non-urgent than transfers by physicians (OR = .73; 95% *CI* .54–.97), while RNs and MDs had no difference in the acuity of their transfers. Interestingly, none of the other variables in the model were significantly associated with the acuity status of ED transfers. The results also show that ED transfers made by NPs were 3.23 times more likely to be admitted to hospital than transfers made by MDs (OR 3.23; 95% *CI* 1.17–8.90), whose admission rates were not different from those of RNs. Interestingly, the transferring health-care provider was the only significant predictor of hospital admission.

Discussion

Although the concept of outreach programs in LTC homes is not a new one, the outreach model that we evaluated is unique with regard to the mandate and scope of practice of the NPs who worked as outreach care providers out of the ED to the LTC home. Further, outreach NPs in our study made regular visits to the LTC homes, as opposed to being called in when a situation that required special attention arose. These features make our outreach NP-led program unique and enabled us to compare the role of the outreach NPs with the roles of RNs and MDs who were stationed at the LTC homes as their primary place of practice.

Our findings suggest no association between the implementation of an outreach NP program in LTC facilities and the rate of health outcomes or case resolution of the presenting case or health complaints. That is, the adjusted rate of case resolution was not different based on whether the presenting case was managed by an MD, an RN, or an outreach NP. Although other research has reported an association between implementation of NP models at LTC homes and enhanced health outcomes (Willging, 2004), our study is the first to inferentially compare the health outcomes of NP-provided care with those of RN- and MD-provided care.

It is interesting to note that NPs were more likely than MDs and RNs to manage chronic conditions or exacerbated chronic conditions ($p < .001$). This result suggests that although the rate of case resolution did not differ among outreach NPs, MDs, and RNs, cases treated by NPs tended to be more chronic and challenging than those managed by RNs and, to some extent, by MDs. In fact, our adjusted analysis shows that chronic conditions were less likely to be resolved than acute conditions, further indicating that the utilization of an outreach NPs is beneficial in terms of providing an efficient resource for managing exacerbated chronic conditions on site.

Our findings suggest that having an outreach NP at the LTC facility is associated with better judgement with regard to ED transfer. NPs were not only less likely to transfer residents to the ED, but also less likely to transfer non-urgent cases. For example, our frequency data show that while the outreach NPs transferred only 10.8% of the cases they managed, all of these cases were classified as at least urgent based on the CTAS score. RNs and MDs transferred 72% and 16.8%, respectively, of the residents they managed, and 93.3% and 6.7%, respectively, of all non-urgent ED transfers. A possible explanation for this finding is that RNs may not be equipped with the assessment and treatment skills or practice jurisdiction necessary to independently treat certain health conditions, and thus opt to transfer them to the ED. While our findings support the argument that the use of NPs in LTC homes reduces the need for acute care and ED services (Kane, Keckhafer, Flood, Bershadsky, & Siadaty, 2003; Klaasen et al., 2009), we believe that our study is unique in that it is likely the first to compare ED transfer across NPs, MDs, and RNs using adjusted GEE analyses.

Interestingly, our adjusted findings suggest that while RNs were about 20 times more likely than MDs to transfer an LTC resident to the ED, no difference was found between MDs and NPs for the rate of ED transfer. However, the adjusted odds ratios of our acuity findings indicate that while ED transfers made by RNs and MDs were not statistically different in acuity level, transfers made by outreach NPs were 27% less likely to be non-urgent than those by MDs. These findings suggest that NPs are more likely than RNs and MDs to exercise sound clinical judgement with regard to the ED transfer decision. It is important to keep in mind, however, that this finding may have been confounded by the fact that outreach NPs were dispatched from the ED with the specific mandate of reducing the rate of unnecessary ED visits; thus, it is possible that they were more sensitized than MDs and RNs to the issue of unwarranted ED transfers.

Although no difference was found in ED wait time across ED transfers made by outreach NPs, MDs, and RNs, our findings indicate that ED transfers made by an outreach NP were three times more likely to be admitted to hospital than transfers made by MDs or RNs. This finding is consistent with that reported by McAiney et al. (2008) and is not at all surprising given that ED transfers made by the outreach NPs were more likely to be at least urgent in terms of acuity level than transfers made by MDs or RNs. This finding highlights the positive impact that outreach NPs can have not only on ED transfers but also on hospital admissions. It is anticipated that reduction of unwarranted ED transfers and hospital admissions will be associated with a reduction in costs related to the management of such unwarranted situations.

It is important to note that our study was conducted in the context of an observational design, and therefore the potential for bias and confounding cannot be ruled out. Of special note is the fact that the NPs in our study were aware that their role was being evaluated. They also were dispatched to the LTC homes with the specific mandate of reducing unwarranted or non-urgent ED transfers. These limitations ought to be kept in mind when interpreting or generalizing our findings. Further, although NPs were posted to two of the four sites in our study, not every case presentation at these two sites was managed by the NP. Thus, it is not possible to meaningfully compare LTC homes that were part of the NP outreach program and those that were not with regard to the study outcomes. That said, we adjusted for the LTC site in our adjusted analysis, and thus it is unlikely that the LTC site differences affected our results.

In conclusion, the findings of this study support the need for outreach NP-led programs to improve the care of LTC residents and reduce the burden on the health-care system through unwarranted ED transfers and hospital admissions. The fact that none of the ED transfers made by the NPs were non-urgent and the vast majority were legitimate candidates for hospital admission indicates that the program is meeting its goal. Thus, we recommend that the NP-led outreach program be further developed and expanded as a model of care at LTC facilities. We were not able to directly measure the financial impact of the program, but it is possible that the difference between NPs and their MD and RN counterparts in terms of the rate of unnecessary ED visits and hospital admissions will ultimately translate into reduced health-care costs associated with ambulance transport, ED care, and unwarranted inpatient hospital care.

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Acknowledgements

This study was funded by a peer review grant from the Ontario Ministry of Health and Long-Term Care.

We wish to thank the team of research assistants — Khazem Eldabagh, Fabrice Mowbray, Aaron Varghese, Israa El-Masri, and Jennifer Peters — for their invaluable contributions to the data-collection process. We extend our thanks to the staff and leadership of the Erie St. Clair LHIN and the LTC homes that participated in the study for their invaluable support of this project. We also wish to thank Shauna Carter and Catherine Schooley for their insight regarding their roles as outreach NPs.

Conflict of interest statement: None of the authors has any conflict of interest to declare.

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CJNR 2015, Vol. 47 Nº 3, 56–72

Social Exclusion and Health: The Development of Nursing Knowledge

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The concept of social exclusion has been proposed as an important social determinant of health. However, use of the concept in health and health promotion research is in its infancy. In nursing discourse, in particular, exploration and application of the concept of social exclusion is minimal. The purpose of this article is to explore the relevance of the concept of social exclusion in the development of nursing knowledge. Current knowledge regarding social exclusion is examined and its use in health-related research is explored. To conclude, a conceptualization of social exclusion for the development of nursing knowledge is proposed.

Keywords: social exclusion, social determinants of health, health disparities, health promotion, philosophy/theory

Résumé

L'exclusion sociale et la santé : le développement des connaissances en sciences infirmières

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Il a été proposé que le concept d'exclusion sociale soit considéré comme un important déterminant social de la santé. Cependant, le recours à ce concept dans la recherche en santé et en promotion de la santé en est encore à ses balbutiements. Dans le discours des sciences infirmières en particulier, l'étude et l'application du concept d'exclusion sociale sont toujours minimes. L'objectif du présent article est d'explorer la pertinence du concept d'exclusion sociale dans le développement du savoir en sciences infirmières. Les auteures y examinent les connaissances actuelles relatives à l'exclusion sociale et leur utilisation dans la recherche liée à la santé. L'article propose en conclusion une conceptualisation de l'exclusion sociale adaptée au développement des connaissances en sciences infirmières.

Mots-clés : exclusion sociale, déterminant social de la santé, promotion de la santé, conceptualisation, connaissances en sciences infirmières

Social Exclusion and Health

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Introduction

Health is not equally distributed among all members of society. Profound health inequities exist in Canada and elsewhere in North America, rooted in complex structures of injustice (Raphael, 2007a). As a result, some individuals, groups, and communities bear greater health burdens than others and experience unique health challenges. Health is influenced by sociopolitical and contextual forces and the deep-seated exclusionary processes that shape them. Addressing such injustices is consistent with the mandate of the Canadian Nurses Association (CNA) (2009). CNA asserts that nurses must strive for social justice in health and in health promotion. Based on the social, moral, and professional imperative to examine the root causes of health inequities, nurses can address, explore, and advocate for equitable health-care practices (CNA, 2009, 2010) in a variety of ways, such as through nursing research.

It has been proposed that the concept of social exclusion sheds light on some of the structural processes at the source of health inequity, and has been recognized as a social determinant of health (Raphael, 2009, 2007b).[1] Thus, social exclusion is an important concept in nursing and in the development of nursing knowledge. The significant impact of social exclusion is becoming increasingly evident in the health literature, especially the literature related to understanding and promoting the health of vulnerable groups (Hyman, Mercando, Galabuzi, & Patychuk, 2014). However, in-depth examination is needed to determine its relevance to and significance for a nursing science aiming to better understand and reduce health inequities.

The purpose of this article is to explore the relevance of the concept of social exclusion in the development of nursing knowledge specifically for nursing research. Theoretical knowledge with respect to social exclusion will be explored, its use in health research examined, and a conceptualization of social exclusion for the development of nursing knowledge proposed.

Conceptualizations of Social Exclusion: Historical and Political Context

Social exclusion has been recognized as a key determinant of health (Raphael, 2009). In Canada, however, researchers and policy-makers are

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[1] "Social determinants of health are the conditions in which people are born, grow, live, work and age, including the health system. These circumstances are shaped by the distribution of money, power and resources at global, national and local levels, which are themselves influenced by policy choices. The social determinants of health are mostly responsible for health inequities — the unfair and avoidable differences in health status seen within and between countries." (World Health Organization, 2014)

only beginning to apply existing knowledge and to further explore the role of social exclusion in health. Social exclusion emerged as an analytical concept in the social policy of France's socialist governments in the 1970s. The impetus was partly based on the concern about the exclusion faced by certain social groups who were left unprotected by social insurance safety nets (Percy-Smith, 2000). Paul Lenoir, a French social-policy analyst known for identifying the concept of social exclusion in 1974, identified 10 groups labelled *les exclus,* or "the excluded" — a select set of people who, due to social processes, were left on the margins of society (Lenoir, 1974; Silver, 1995).

In the 1980s and 1990s the phrase was taken up by the European Union, which led to the creation of the Social Exclusion Task Force. Policy initiatives began to introduce discourses on social exclusion in the political arena. The phrase was often used interchangeably or replaced with words such as "poverty," and was most often associated with exclusion from employment (Peace, 2001). There was a shift in conceptual understanding, which may be reflective of neoliberal influences along with a focus on participation in the labour market. Policies developed from this "new" understanding of social exclusion were critiqued as actually excluding groups from the political discourses of social exclusion (Peace, 2001).

In the late 1990s and early 2000s, social exclusion discourse emerged in Canada, building upon the discourse in Europe (Yanicki, Kushner, & Reutter, 2014). At that time, social and health policy in Canada emphasized neoliberal ideologies,[2] with responsibility being placed on the individual unit and little recognition of the social structures that contribute to inequalities. With this emphasis came erosion of social safety nets, increased poverty, and growing inequality (Toye & Infanti, 2004). Individual rather than collective responsibility was also dominant in health discourses (Low & Theriault, 2008). With the surge in racialized newcomers in the late 1990s, the racialization of poverty and the overrepresentation of racialized people in low-end jobs reflected the growing inequities (Galabuzi, 2009). Canada, once praised for its progressive social and health policies, is now the only developed nation to lack a national policy on poverty and social exclusion (Yanicki et al., 2014), as well as a national housing strategy ensuring access to safe and affordable housing for all.

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[2] Neoliberal ideology refers to the philosophy of individualism, whereby individuals are viewed as "the fundamental basis of society" (Gill, 2000, p. 3). Neoliberalism is associated with government withdrawal from policy areas such as social welfare, including the provision of housing and income security, optimizing conditions for market activity (Harvey, 2006; Raphael, 2007b).

Social exclusion discourse gained in popularity, as evidenced in key documents issued by governmental and non-governmental organizations. Health Canada's (2002) definition of "social exclusion" centred on the lack of participation in social relationships and in the construction of society. The focus on participation can be attributed to an individual's contribution to society, often marked by labour-market participation, without critical examination of hegemonic structures of inequality. Health Canada (2001) also acknowledged that exclusion encompasses the inability of certain groups to exercise their social, cultural, and political rights. It acknowledged the importance of social belonging, citing an individual's "inability" without discussing in depth the structural inequalities or political processes that cause social exclusion.

Meanwhile, the Laidlaw Foundation commissioned a series of research papers, Perspectives on Social Inclusion, to refocus child and family policy (Freiler & Zarnke, 2002). These papers brought several researchers, perspectives, and foci to the forefront of social exclusion/inclusion discourse in Canada. They addressed issues related to inequality and the social structures that influence exclusion. In response to the current Canadian context, the Canadian Council on Social Development (2001) produced documents on social exclusion and inclusion. Social exclusion discourse has continued to evolve in governmental and non-governmental documents (Canadian Mental Health Association, 2012; Noel & Fortin, 2012; Ogilvie, 2013). The terminology shifted from social exclusion to social inclusion, and today exclusion and inclusion are commonly treated as overlapping and interconnected concepts.

Prevailing Perspectives and Conflicting Ideologies

There is no one universally accepted definition of social exclusion. Discourses on the subject appear to be divided in terms of underlying ideologies of the concept or framework. The ways in which politicians, policy-makers, academics, and researchers define social exclusion are influenced by political and ideological elements. These often subtle influences impact the understanding and application of social exclusion in nursing and health research. In public policy discourse, social exclusion is sometimes used interchangeably with poverty (Percy-Smith, 2000) and is understood as a process of alienation from society, reinforcing deprivation and causing isolation from mainstream society (Vleminckx & Berghman, 2001). The Canadian scholars Galabuzi (2009) and Labonte (2009) view structural processes and social inequalities as key elements in social exclusion. Galabuzi (2009) cites the multidimensionality of social exclusion, stressing that poverty is only one of its many contributing factors and outcomes. For Galabuzi and Labonte (2002),

> Social exclusion describes the structures and dynamic processes of inequality among groups in society. Social exclusion refers to the inability of certain groups or individuals to participate fully in Canadian life due to structural inequalities in access to social, economic, political, and cultural resources. These inequalities arise out of oppression related to race, class, gender, disability, sexual orientation, immigrant status and religion. (p. 1)

Labonte (2009) points to the need for a "critical eye" in exploring social exclusion, to ensure that the root causes of exclusion, such as oppressive hierarchies, are challenged.

Despite the references to social structures and institutions, their application in public-policy terms focuses on the individual as the unit of analysis and the site of intervention. There has been an emphasis, in Europe and in Canada, on combating social exclusion through the promotion of education and employment opportunities, in which "workless households" are targeted (Dobrowolsky & Lister, 2006).

Numerous authors have acknowledged the dynamic and complex relationship between social exclusion and social inclusion (Guildford, 2000; Labonte, 2009; Popay et al., 2008). Discussions on social inclusion, similar to those on social exclusion, must be examined by means of the philosophical roots and politics influencing its use and our understanding of it. Social inclusion is not simply the opposite of exclusion; confusion and interchangeability of the terms result in further ambiguity of both concepts. The social inclusion literature places the emphasis on the outcome of being included in community life with equal access to opportunities and well-being (Sen, 2001; Guildford, 2000). Inclusionary and exclusionary situations are often entangled rather than being treated as mutually exclusive (Caxaj & Berman, 2010).

Labonte (2009) argues that "forcing" the inclusion of groups into the society that has historically and politically excluded them, without critically examining structures and hierarchies, may perpetuate oppressive hierarchies and health inequities. Labonte points out that uncritical application of social inclusion discourse can divert attention away from hierarchies of exclusion and those who benefit from them. Labonte (2009), Galabuzi and Labonte (2002), and Raphael (2007b) warn that conceptualizations of social inclusion must move beyond the rhetoric and address the exclusionary processes and hierarchies of inequality that produced the need for inclusion in the first place.

The Canadian nursing scholars Yanicki and colleagues (2014) provide a comprehensive review and synthesis of the literature on social inclusion/exclusion in Canada. They identify three overarching discourses on social exclusion/inclusion: (1) the discourse on recognition, (2) the discourse on capabilities, and (3) the discourse on equality. They situate the discourses in an Integrated Framework for Social Justice, within which social inclusion/exclusion is seen as both a relational and a structural concept:

> As a relational concept, SI/SE [social inclusion/exclusion] involves experiences and dynamic relational processes enabling or constraining participation and (un)just social relations. As a structural concept, SI/SE involves structures that shape equitable or inequitable access to wealth, resources, rights, power and prestige, as well as the structures that sustain (in)equities, oppression and differential opportunities. (p. 6)

Situating the social exclusion discourse within a social justice framework politicizes the concept and highlights the underlying structures, influences, and experiences of exclusion, while also calling nurses to action with regard to the promotion of health equity (Yanicki et al., 2014).

Several frameworks have been proposed in an effort to understand social exclusion. For the purposes of this article, understandings discussed in the health-related literature on social exclusion will be used. Social exclusion has been described based on four aspects: (1) exclusion from civil society, (2) exclusion from access to social goods, (3) exclusion from social production, and (4) economic exclusion (Galabuzi, 2009; Galabuzi & Labonte, 2002; Percy-Smith, 2000; Taket et al., 2009). The first aspect is the social exclusion that results from institutional mechanisms such as discrimination based on social identity or category. The second refers to the denial of health care, education, housing, income, or language services; however, some authors treat the concepts of social goods and human rights or basic human needs as interchangeable (Burchardt, Le Grand, & Painchaud, 2002; Galabuzi, 2009). The third aspect is the denial of opportunities to contribute to and actively participate in society. Barry (2002) refers to the structural inequalities that influence exclusionary processes, thus acknowledging the element of social injustice in the denial of opportunities. In the social exclusion literature, a focus on participation without an examination of exclusionary processes may actually perpetuate inequalities and promote further exclusion. If individual responsibility is promoted while hegemonic systems of inequality are left unchanged, the hierarchical and exclusionary nature of political, social, and economic institutions goes uncontested. The fourth aspect is the lack of access to economic resources and opportunities (Galabuzi & Labonte, 2002; Percy-Smith, 2000).

Percy-Smith (2000) proposes a framework for understanding the process of social exclusion in a broader context, noting how it is intrinsically shaped by broad societal forces. Local contexts such as local governments and particularities of place, combined with national contexts such as social assistance, welfare programs, and economic policy, are influenced by globalization, which can result in social exclusion. Percy-Smith argues that any definition of social exclusion that ignores complex political elements is inadequate and morally problematic.

Research Exploring Social Exclusion and Health in Canada

In Canada, researchers are only beginning to explore the role of social exclusion in health (Wilson, Eyles, Elliott, Keller-Olaman, & Devcic, 2007). Internationally, much headway has been made in research examining health and social exclusion. In Canada, however, researchers investigating the subject have tended to focus on material deprivation and poverty (Stewart et al., 2008; Wilson et al., 2007), while some are starting to go beyond this focus and employ a broader, social determinants of health approach (Chambers et al., 2014; Reid, 2004). Further, in Canada there has been limited exploration by nursing scholars that includes a discussion of the relevance and implications of social exclusion for nursing.

Research on social exclusion and health has traditionally focused on economic disadvantage, primarily issues of poverty and material deprivation. Stewart et al. (2008) adopted a critical sociological perspective and used a social determinants of health framework to explore the relational processes that lead to social exclusion/inclusion. They conceptualized social exclusion broadly as the social processes that prevent full engagement in social institutions and that result in economic, political, and social deprivation. Their study consisted of two phases exploring and comparing experiences of social exclusion among lower- and higher-income participants in Toronto, Ontario, and Edmonton, Alberta. The first phase consisted of qualitative individual and group interviews ($n = 119$) and the second consisted of a quantitative comparative survey ($n = 1,167$). A purposive sample was used for the first phase and a cross-sectional telephone survey for the second. The data revealed significant relationships between health and social exclusion and indicated that limited financial resources, poor health, and societal scrutiny inhibited lower-income participants from becoming involved in the community.

Similarly, Wilson et al. (2007) explored relationships between social exclusion and health using a quantitative comparative method. Social exclusion was conceptualized as occurring when people do not participate in key social activities and experience material deprivation. A mixed methods research design was employed. Quantitative data were collected using a cross-sectional household survey ($n = 300$) in two economically and socially contrasting neighbourhoods in Hamilton, Ontario. In-depth qualitative interviews were also conducted with 40 randomly selected participants from the initial, quantitative, phase. The purpose of the interviews was to further examine participants' engagement in neighbourhood activities, their relationships with neighbours, and their perceptions of their neighbourhood. Differences were found between the neighbourhoods in terms of the characteristics and experiences of social exclusion: those in the lower-income neighbourhood experienced more aspects of and higher levels of social exclusion. While demographic information was collected related to education, employment status, and income level, the potential influences on social exclusion were not discussed.

Social exclusion has also been explored as it relates to mental health. Benbow, Rudnick, Forchuk, and Edwards (2014) used a social justice lens to qualitatively examine social exclusion and poverty among 190 female and 190 male psychiatric survivors in Canada. Specifically, the authors adopted a capabilities approach to social justice. Approximately 67% of participants had experienced homelessness at least once in their lives. The majority of participants were single and had never been married. Elementary school was the highest education level for the majority of participants (47%). Four themes emerged: *poverty* — "you just try to survive"; *stigma* —"people treat you like trash"; *belonging* — "you feel like you don't belong"; and *shared concern and advocacy* — "everyone deserves housing." Individual and community agency were acknowledged as important elements in understanding one's role in effecting change, empowerment, and action.

Reid (2004) used feminist action research to explore the relationship between exclusion, poverty, and women's health with 30 low-income women in British Columbia. Qualitative data were gathered using one-to-one qualitative interviews, participant observation, research team meetings, and field notes. The research was framed in the social determinants of health. The findings revealed exclusion at the cultural, institutional, and material levels, with an in-depth analysis of each level. At the cultural level, the participants experienced exclusion in the form of stereotyping and labelling. At the institutional level, exclusion took the shape of degradation and disrespect as systems failed to address their needs. At the material level, the participants experienced exclusion from access to basic needs. Reid's work is notable for her multidimensional understanding and application of social exclusion and her politicizing of health, social exclusion, and poverty among low-income women.

Towards Improvements in Social Exclusion Research in Canada

Overall, Canadian social exclusion research is in its infancy as it relates to health and almost non-existent as it relates to nursing specifically. Although nurses are able to draw on the health literature, we need specific exploration and examination within nursing research. While the findings of Canadian studies shed light on the components of social exclusion and health, the literature is sparse. In striving for further development of the concept of social exclusion, it is important to note that social exclusion is at times defined and conceptualized vaguely or narrowly in research. When the breadth of social exclusion is included in its conceptualization, its complexity often does not translate into research purpose and methods. "Measurability" using particular quantitative surveys designed for specific purposes may in fact trump theoretical understandings. There appears to be a disconnect between use of the concept of social exclusion in the theoretical literature and in the health-related research literature.

In the theoretical literature, structural inequality is identified as an important aspect of social exclusion, yet this is rarely discussed in research studies. The notion of agency within structures of inequality is also minimally examined. However, the theoretical literature features much work on social exclusion as it relates to health among a variety of groups, based on an examination of inequalities (Arthurson & Jacobs, 2004; Daly & Silver, 2008; Galabuzi, 2006, 2009; Martin, 2004; Morgan, Burns, Fitzpatrick, Pinfold, & Priebe, 2007; Peace, 2001). Situating research in the political context of a study through policy analysis research is also lacking in current social exclusion research in Canada.

Further, the intersections of multiple dimensions of inequality are rarely explored. Often, when inequalities are explored, examination is done in static silos, especially when health disparities are examined as a form of social exclusion. In the absence of an intersectional understanding of inequality, those groups or experiences that fall between the cracks of siloed frameworks are likely to be excluded. Internationally, progress has been made in the social exclusion literature with the recognition of its multiple dimensions (Macdonald & Marsh, 2002; Mumtaz, Sakway, Shanner, Bhatti, & Laing, 2011; Tong, Lai, Zeng, & Xu, 2011). Lastly, in building on current research, recognition of social exclusion as a determinant of health requires an analysis of how such exclusion leads to changes in health status and how nurses can best promote health.

Conceptualization of Social Exclusion for Nursing Knowledge

Our theoretical exploration of social exclusion reveals the importance of providing a sound conceptualization in advancing the science of nursing. Thus, in promoting health within the development of nursing knowledge, the concept of social exclusion must be clearly defined.

For the purpose of nursing research, we suggest a conceptualization of social exclusion that is situated within a social justice framework. Social justice is at the heart of social exclusion/inclusion discourses in Canada (Yanicki et al., 2014), as well as being a foundation for nursing science (CNA, 2010). Social justice has many and varied understandings based on diverse philosophical underpinnings. According to the World Health Organization (WHO) (1986), it is a prerequisite for health and exists when social organization is such that there is equitable distribution of benefits and equitable responsibility for burdens throughout society; the focus is on "changing social relationships and institutions to promote equitable relationships." Many nursing scholars have embraced a more multidimensional understanding of social justice. Yanicki and colleagues (2014) go beyond the WHO definition; their conceptualization of social justice for nursing practice and knowledge development takes the following into account:

> (a) power/powerlessness, (b) respect and valued recognition/misrecognition, stigma and fear of difference, (c) capability development/capability deprivation, and (e) equality and citizenship/social inequality and oppression, also making note of the concepts of participation, empowerment and globalization. (p. 6)

In nursing science, social exclusion within a social justice framework can refer to the deeply embedded social processes whereby certain groups are unable to fully participate in and benefit from social and political institutions and experience economic, political, social, and health inequities due to structural inequalities. Structural inequalities shape social exclusion and arise out of the often intersecting experiences of oppression as it relates to race, class, gender, disability, sexual orientation, and immigrant status (Galabuzi, 2009). While it does not deny them agency, social exclusion situates certain groups in disadvantaged positions in society, which ultimately impacts their health and well-being.

For instance, the increasingly expanding population of homeless mothers and their children (Anderson & Rayens, 2004; Community Social Planning Council of Toronto, 2004; Gaetz, Donaldson, Richter, & Gulliver, 2013), like other vulnerable groups, face a multitude of health challenges (Cheung & Hwang, 2004; Dashora, Slesnick, & Erdem, 2012). Intimate-partner violence, the absence of a national housing policy, extreme poverty, and mental health problems, all of which are complicated by the inaccessibility of affordable child care, are some of the factors that shape homeless mothers' health experiences and situate them in socially excluded positions (Benbow, Forchuk, & Ray, 2011). For homeless mothers in Canada, health is shaped by these sociopolitical contexts and a variety of other influences such as gender (Marmot, Friel, Bell, Houweling, & Taylor, 2008; Raphael, 2007a, 2007b). As a result of, and contributing to, their homelessness, these mothers are excluded from the full economic, political, social, and health benefits of society (Benbow et al., 2011; Galabuzi, 2009; Labonte, 2009). The position of homeless mothers in Canadian society makes them susceptible to unique forms of social exclusion that can influence their health in significant and debilitating ways. An examination of social exclusion in nursing can deepen our understanding of both the process and the outcomes of being socially excluded, with an emphasis on how health is impacted and can be promoted.

Nursing Research Implications and Future Directions

The proposed definition of social exclusion and our exploration of the literature suggest significant implications for nursing research. Overall, we need further conceptual and methodological development of social exclusion and further exploration of the role of individual agency within exclusionary structures. Policy analyses, in addition to exploration of agency using various data-collection methods, would deepen our understanding of how the processes of exclusion shape health in the Canadian context.

Intersectionality[3] as a guiding theory in social exclusion research would enrich the literature and offer insight into the multidimensionality and interconnectedness of social exclusion. Nursing researchers seeking to better understand social exclusion and health can work with socially excluded groups to explore the structural inequalities that shape their health experiences, as a first step in promoting health. Through such research we will be able to explore the root causes of social exclusion and how nurses can best respond to it.

Concluding Comments

If we accept the premise that a central aim of nursing is to promote health by addressing health inequities, it follows that social exclusion is a concept with a great deal of relevance. Yet the question remains: do the confusion, ambiguity, and conflicting philosophical underpinnings of this concept compromise its use in social justice–informed nursing knowledge? We need to develop clear definitions as well as transparency with respect to the philosophical and political underpinnings of the concept. Increased clarity is also needed in all social exclusion discourses, particularly if we embrace a perspective that acknowledges power differentials and the importance of understanding health within a broad social and

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[3] Intersectionality is a theoretical framework informed by several critical theories, including critical race theory and feminist theory. It examines the crossroads (Crenshaw, 1991) or intersection of multiple social identities and experiences of exclusion and marginalization. Sharing the central tenets of other critical theories, intersectionality serves as a lens for examining the cultural, historical, political, and social forces that interact to create systems of power, injustice, and social organization (Crenshaw, 1993).

political context. We have suggested a conceptualization of social exclusion in nursing knowledge development as both a process and an outcome of structural inequalities, while also emphasizing the intersectional influences of experiences. This definition is highly congruent with social justice–informed nursing practice. Social exclusion has great significance and relevance in addressing health inequities and in advancing nursing science. However, much work needs to be done to ensure the advancement of this important area of knowledge development.

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CJNR 2015, Vol. 47 Nº 3, 73–76

Happenings

Reflections on a Canadian Online Telehealth Course: Going Forward With Telehealth Nursing

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Telehealth is the provision of health care through the use of information and communication technology (ICT), a mode of delivery that is becoming mainstream in various acute and home care settings in Canada and abroad.

Telehealth is now gaining acceptance by patients and health-care providers, as it is seen as an effective and convenient alternative to face-to-face interactions. Its potential is closely tied to a booming and quickly evolving technology industry. Yet, ironically, the training and professional development necessary for the optimal use of telehealth are lagging behind, leaving nurses and allied health professionals ill equipped and unprepared for the rapid changes taking place. Many providers are being trained on the job, through trial and error, as telehealth is not yet a standard part of health-professional curricula. This has resulted in feelings of frustration and resistance (Bulik & Shokar, 2010). The situation is similar for nurses engaged in telepractice, despite the fact that telehealth nursing is one of the fastest-growing areas of nursing (Allen, Aylott, Loyola, Moric, & Saffarek, 2015).

In order to address this training issue, the Office of Continuing Education at the Université de Moncton took the initiative in 2012 to develop, with the support of Health Canada and the university's Consortium National de Formation en Santé, a French-language online telehealth course, offered free of charge and open to various health professionals.

The online course consists of seven modules that offer an overview of the history and functionality of telehealth in a variety of contexts using an eLearning platform. As well as the history of telehealth and an introduction to its services, the modules cover the use of various ICTs (including mobile health applications), organizational and professional aspects of telehealth service delivery, and the use of technology to facilitate health-care communication among practitioners. While there is no fixed timeline for completing the course, users must pass an online quiz at the end of each module before moving on to the next.

To date, 171 people have signed up for the course, 60 of whom have completed it and received a certificate. Of the registrants so far, roughly 30% have been nurses, 30% administrators, and 40% physicians, medical technicians, social workers, respiratory therapists, educators, and so on. As the course is offered in French, the majority of participants have been from the two Canadian provinces where francophones are prominent, New Brunswick and Quebec, while six have come from French Africa (Mali, Cameron, Morocco, Algeria, and Madagascar) and four from Haiti and Great Britain. During its first two years (2012–13), 57 users contributed to an evaluation of the program by reflecting on their experiences with the course content, structure, and format and on their overall satisfaction with the course; however, since the evaluations were anonymous, no relationships can be extrapolated between the registrant and his/her progression in the course.

Despite the variable levels of use and familiarity with telehealth in their practice, the majority of respondents ranked the course as high in quality and indicated having learned much about many different aspects of telehealth, such as the domain-specific jargon, the use and functionality of various telehealth technologies, the range of current and future initiatives in Canada and abroad, the challenges inherent to the implementation of telehealth, and the scope of practice of telehealth nurses and technicians. This variability in terms of users' preparation for the course led to divided feedback on the depth of information covered. There was an obvious dichotomy, with some users finding the course pertinent and interesting and others complaining that the content was too intense and complex. This phenomenon is often seen in education when there is no screening mechanism as to the learner's level of knowledge on a particular topic. It can easily be avoided by tailoring the offering, thereby allowing learners to pick and choose the content that most interests them. Giving learners a choice motivates them to move forward without having to review content that they consider redundant or irrelevant to their practice.

The majority of learners were already using some form of telehealth in their practice, which had sparked an interest in learning about both its current and its future potential for improving care for patients and families. The integration of health-related examples demonstrated the relevance of the content for their day-to-day work. The acquisition of knowledge about this evolving trend in health-care delivery gave them confidence in their ability to trouble-shoot and to pursue the type of employment in which telehealth plays an important role. However, despite being offered case-based examples, videos, and exercises, some users were dissatisfied with the content-driven approach. A common criticism of traditional, content-focused online courses is that they allow for only limited interactivity and engagement; the content often remains theoretical with little opportunity for application of knowledge or hands-on practice. One solution to the challenges inherent in online learning might be the introduction of interactive eLearning platforms that incorporate simulated, virtual environments where learners can apply their new knowledge immediately while simultaneously interacting with one another to create communities of practice.

Overall, users were satisfied with the course. They found that it met their learning needs and gave them access to information that generally is not readily available to nurses and health professionals interested in telehealth. However, an important message can be gleaned from several of their comments with regard to the presentation of online content. Since user-friendliness is an essential characteristic of any online course, developers must be clear and straightforward in their language and instructions, to ensure full comprehension and avoid misunderstandings; in addition, the layout and course structure must be logical and easy to use, as online learners have little patience with technical difficulties that may arise.

Despite the fact that this course consisted of a general overview of telehealth, participants from various professions responded enthusiastically and it can be considered a success. However, because of the rapid evolution of technology and the specific competencies required for the skilful delivery of telehealth care, the content needs to be tailored even further. In the next iteration of the course, the content will be profession-specific and more flexible, allowing users to pick and choose according to their knowledge, interests, and needs. The Université de Moncton will soon be offering an online telehealth nursing course to address the growing need for telenurses with specific competencies and skills. The provision of profession-specific telehealth content, in the context of interactive online virtual communities of practice, supports the paradigmatic shift towards learner-centred approaches to education and will eventually influence the quality of telehealth care offered to patients and families.

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Acknowledgements

The online telehealth course was made possible through funding from Health Canada as part of the Roadmap for Canada's Linguistic Duality 2008–2013 and the support of the Consortium National de Formation en Santé (CNFS) of the Université de Moncton. The CNFS, founded in 2003, is a pan-Canadian group of 11 colleges and universities offering French-language education in various health-care disciplines alongside six regional partners.

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