

Nursing Students Respond to Opioid Crisis with Naloxone Education

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ABSTRACT

This report describes how graduate students in nursing education have developed capacity among student nurses in response to the opioid crisis in Canada by using education on harm reduction practice and naloxone administration.

Keywords: naloxone, student nurses, harm reduction

RÉSUMÉ

Ce rapport décrit comment les étudiants diplômés en sciences infirmières ont développé la capacité des étudiants en soins infirmiers en réponse à la crise des opioïdes au Canada en leur offrant un enseignement sur les pratiques de réduction des méfaits et l'administration de naloxone.

Mots clés : naloxone, étudiants en soins infirmiers, réduction des méfaits

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BACKGROUND AND RATIONALE

As future nurses and graduate students in nursing, we aim to contribute meaningfully to responding to the opioid crisis in Canada. Last year a reported four thousand people experienced opioid-related deaths in Canada; this number is expected to rise. In 2016, Nova Scotia experienced 53 confirmed opioid poisoning deaths; the number rose to 66 in 2017 (Nova Scotia, *n.d.*). These statistics indicate that this crisis will significantly impact the early years of our nursing careers, and point to an urgent need for multi-sectorial, inter-professional response to address this crisis. Responses to this national crisis include safe injection sites, advocacy for drug decriminalization, and promotion of access to and understanding of naloxone's function in blocking opioid receptors and reversing overdose. The 2018 federal budget, announced this past spring, allocated over \$230 million to improve access to treatment, reduce stigma, and improve methods for obtaining data related to the national opioid crisis. We see a critical role for nurses and nursing education to advance care, advocacy, and research to end this emergency.

In April 2018, the Canadian Nurses Association (CNA), the Canadian Association of Nurses in HIV/AIDS Care (CANAC) and the Harm Reduction Nurses Association (HRNA) issued a joint statement supporting harm reduction approaches for substance use (Canadian Nurses Association, 2018). The statement recognizes that "harm reduction" is an evidence-based, pragmatic public health model to reduce the adverse health, social, and economic effects of substance use. It further argues that harm reduction is consistent with the CAN's Code of Ethics. The first tenet of the code is the provision of safe, compassionate, competent, and ethical care. Harm reduction uses the principles that meeting clients where they are, prioritizing their safety, treating them with compassion and nonjudgment, and applying the ethical concepts of respect for autonomy, beneficence, nonmaleficence, and justice, will result in the best possible client outcomes. Recognizing signs of overdose and competence in naloxone administration are low-cost, safe, and relatively simple skills to empower nurses in developing harm reduction-based practices which will hopefully save lives.

In January 2018, the College of Registered Nurses of Nova Scotia (CRNNS) and the College of Licensed Practical Nurses of Nova Scotia (CLPNNS) announced changes to the scope of practice of registered nurses (RNs) and licensed practical nurses (LPNs) in the province to enable them to independently administer naloxone (take-home kits) to clients in need. This change in legislation provided further impetus for developing student nurses' understanding of harm reduction and naloxone administration.

Nova Scotia began the Take Home Naloxone (THN) program in 2016, through which eligible individuals in the province may be trained and receive a kit from any of 282 participating pharmacies. Eligibility includes anyone who may witness or be at risk of opioid toxicity. Under the THN program, participants may include not only healthcare professionals, but also members of the public. Since its initiation, the THN program received 60 reports of overdose reversals from naloxone kit usage and has distributed more than 1,500 kits (THN, *n.d.*). Each kit costs the province approximately \$31 and is provided for free to eligible individuals; kits are to be replaced if used or every two years prior to expiration. The kits include gloves, alcohol swabs, face shield, 2 Vanishpoint syringes and two 1 ml vials of naloxone HCL 0.4mg/ml. The THN program coordinator provides approximately three group training sessions every week in communities across the province. In addition, every participating pharmacy provides individual user training.

AUTHORS' INVOLVEMENT

With changes to the scope of practice of RNs and expanding use of the THN program, as registered nurse graduate students in the School of Nursing at Dalhousie University, the authors organized the school's first-ever naloxone administration and harm reduction training for students as a first step to demonstrating commitment to advancing this education across nursing schools. The authors do not have any conflicts of interest in relation to this activity or manuscript. Expert trainers from Direction 180, a Halifax-based methadone clinic, and the Nova Scotia THN Program of the Nova Scotia Health Authority, facilitated the training. Response to the program was overwhelming from all nursing programs including undergraduate, nurse practitioner, professional stream, Master of Science in Nursing and PhD students.

Recognizing that administration of naloxone for prevention of opioid toxicity is not yet a required competency in the undergraduate nursing curriculum, this learning opportunity equipped students with practical training that they will carry forward into their nursing careers. Aligned with this initiative, in 2016 the Canadian Association of Schools of Nursing participated in the national Opioid Summit and committed to increasing educational opportunities to advance the Nurse Role in Combatting the Opioid Crisis in Canada (Canadian Centre on Substance Use and Addiction, 2017).

THE INNOVATIVE PRACTICE

This training experience, which first occurred in April 2018, was innovative in that it was (1) entirely new to the university, and to our knowledge, to Canadian schools of nursing, and (2) designed to offer harm reduction and Naloxone administration training in collaboration with local harm reduction community organizations. The training was particularly innovative in that it was graduate-learner organized which has not been published about. The trainee (student) group included men and women, undergraduate, MScN, NP and PhD learners. These students first participated in an interactive lecture led by the facilitator from the THN program. The lecture covered the myths and misunderstandings about substance use, overdose symptoms and response and importantly, how nurses can counsel clients to reduce harm while supporting them as they use substances. The trainer discussed the federal Good Samaritan Act of 2017 that protects people who respond to an overdose or call 911 from being charged with simple drug possession. Students learned people using drugs are at greatest risk of overdose after a period of not using, such as on release from incarceration or rehabilitation programs, as tolerance drops very quickly. The students learned crucial points when counselling clients in harm reduction, such as to use a small amount at first, to avoid mixing drugs, to not use alone but also to not share equipment. Additionally, students were informed of the risks associated with different forms of opioids and of various methods of drug use, such as snorting and injection. Students engaged in frank discussion. For example, the students discussed the risks and precautions for administering rescue breathing in this situation; and the facilitator assured participants that even if they felt unsure if the client was experiencing an overdose, naloxone administration is safe.

Participants then acquired and demonstrated skills proficiency through the hands-on element of the training. Each participant responded to a simulated client situation following the THN's 5 Steps to Save a Life: stimulating the client, calling for emergency assistance, preparing and administering the muscular injection, delivering chest compressions, and remaining with the client to provide aftercare or a second

dose of naloxone. At the end of the training, all participants completed an evaluation form and described the experience as overwhelmingly positive. Students expressed feeling better enabled to respond to opioid emergencies in their school, work, and public environments.

IMPLICATIONS AND RELEVANT FUTURE DIRECTIONS

The Dalhousie University administration supported this student initiative, and the School of Nursing plans to offer regular training opportunities for students in the future, the next being scheduled for Orientation week in the fall of 2018. In recent months, several schools of nursing in the United States have introduced naloxone training into their curricula for September 2018 (Bird, 2018). We recommend that all health professional students receive this training and we believe that this training opportunity would be well suited to interprofessional education sessions across clinical programs. Future research can examine the impact of this training on health professional students and graduates' attitudes and competencies with respect to naloxone administration and harm reduction in practice, application of learning in the community and acute care contexts, and effect on opioid-related deaths.

This naloxone training experience seems de-stigmatizing, practical, and capacity-building. In future iterations we may evaluate students' self-report of impact on perception of readiness to address the opioid crisis. With the likely success of this training initiative, we urge student leaders across Canada to collaborate with local organizations to generate, implement, evaluate, and refine education opportunities for future nurses to develop harm reduction competency and naloxone administration skills.

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