

Chronic pain and healthcare education in Canada: Bridging the divide

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Hansel Lui from the Michael G. DeGroote Institute for Pain Research and Care discusses inadequacies in healthcare education regarding chronic pain management in Canada and opportunities to close these gaps

In this article, Hansel Lui, part of our team at the Michael G DeGroote Institute for Pain Research and Care and the National Pain Centre, provides an additional perspective on 'pain care in Canada' – one of the underlying elements of the opioid crisis in Canada. This is the amount of training for pain care that is provided to healthcare professionals. Much has been said about the role of physician prescribing in the origins of the opioid crisis, especially in North America. It is the case that most prescriptions for opioids are for the treatment of pain, either acute or chronic. Chronic pain is a pervasive health issue in Canada, yet education on its management is underrepresented in healthcare curricula. Recognition that chronic pain is not a simple biological problem but often a complex biopsychosocial phenomenon has led to further recognition that optimal treatment requires an understanding of this complexity and the availability of appropriate interdisciplinary treatment. However, this degree of understanding has not yet transitioned from the field of pain experts into the general level of knowledge and awareness of the broad range of practicing healthcare professionals in Canada. In its 2014 'First Do No Harm' [FDNH] document, the Canadian Center on Substance Use and Addiction [CCSA] made the point that effectively addressing the opioid crisis required not only an understanding of addiction but also an understanding of pain, its origins, impact and appropriate treatment. Fifty percent of the recommendations in the document addressed issues related to pain, including the education of healthcare professionals. This article explores recent progress, including adopting IASP guidelines, innovative teaching methods, and opportunities to close gaps in pain education.

The prevalence of chronic pain

Chronic pain is a disease in its own right, recognized by the World Health Organization. It affects nearly 7.6 million Canadians, or one in five people, significantly impacting daily life, mental health, and overall wellbeing. Chronic pain does not discriminate by age or background. Its effects are disproportionately felt by vulnerable populations, including seniors, Indigenous Peoples, people living in poverty, and those with mental health or substance use disorders. As Canada's population ages, the prevalence of chronic pain and its far-reaching impacts are expected to grow.

The need for revised pain curricula

Despite its prevalence and complexity, healthcare education has insufficiently addressed pain management. A 2009 study revealed that pre-licensure healthcare programs in Canada dedicated, on average, between 13 and 41 hours to pain education across their entire curricula. This is striking when compared to veterinary programs, which dedicated an average of 87 hours to formal pain content. The insufficient focus on pain education in healthcare training, combined with long wait times for specialized services, intensifies the challenges faced by individuals living with chronic pain. This lack of pain education in pre-licensure healthcare curricula has also been reported in the United States, Spain, Norway, and the United Kingdom.

The International Association for the Study of Pain (IASP) developed pain curriculum outlines for specific healthcare disciplines in response to the lack of pain content in pre-licensure healthcare education. These IASP discipline-specific guidelines emphasize the biopsychosocial framework, recognizing the interplay of biological, psychological, social, and environmental factors in the patient's experience of pain. The international guidelines also encourage interprofessional collaboration to address complex pain conditions. However, the extent to which these guidelines have been adopted into Canadian healthcare education remains largely unknown.

An opportunistic update

In a previous OAG article, we described the Canadian Pain Care Forum [CPCF], an ad hoc national group providing a forum for sharing information and updates on pain-related activities in Canada. In the past year, we have had an opportunity to summarize a number of presentations for the CPCF on the topic of pain content in the curricula of a variety of prelicensure healthcare educational programs across Canada. In this summary, we explored the integration of IASP guidelines into the updated Canadian healthcare education context. Between 2021 and 2023, healthcare professionals from psychology, physiotherapy, occupational therapy, nursing, pharmacy, and medicine presented at the CPCF on pain education in their fields. These presentations were solicited to provide an update on pre-licensure healthcare pain curricula in Canada and their alignment with international pain guidelines. The talks were reviewed and summarized, and the content mapped onto the IASP curriculum guidelines.

Improvements in pain education

The results indicated that the Canada-wide medicine curriculum aligned with 64.5% of the IASP guidelines, while the national physiotherapy curriculum aligned with 37.5%. The nursing curriculum at McMaster University demonstrated an 89.5% similarity to the IASP guidelines, the pharmacy curriculum at the University of Waterloo covered 58.3% of the guideline topics, and the occupational therapy curriculum at Université de Montréal matched 84.5% of the guideline topics. These findings highlight the ongoing variability in the adoption of IASP guidelines across healthcare disciplines. Additionally, the presentations revealed several innovative strategies that accrediting bodies and institutions have employed to enhance pain education and address existing gaps.

One such method was the development of online supplementary pain content. In 2020, the Association of Faculties of Medicine of Canada (representing Canada's 18 medical faculties) developed a competency document while considering the IASP guidelines. The document outlined curriculum objectives on the competencies needed to diagnose, treat, and manage pain and substance use. This work was undertaken as part of the commitment of the AFMC to address the opioid crisis following a 2016 Opioid Summit convened by Health Canada and the CCSA. With these curriculum objectives, the AFMC created ten online hour-long modules on the foundations of pain and opioid use. The modules aim to increase trainee physician knowledge in understanding chronic pain as a condition and act as a framework for medical school educators to teach about pain. Although these modules are not mandatory content, they serve to provide physicians with additional training on pain management and addiction.

Another notable development was establishing a stakeholder-endorsed strategic plan to revise pain content in the national physiotherapy curriculum. A group of stakeholders was recruited to address the deficiency of pain content in Canadian physiotherapy education. This collaborative effort involved individuals living with pain, physiotherapy students, educators, program directors, and national physiotherapy leaders. Together, they created a preliminary competency profile outlining essential pain management skills for physiotherapists. IASP physiotherapy task force members were recruited to review the preliminary competency profile to ensure the items aligned with international recommendations. Implementing these items into the educational programs is currently underway as the curriculum is being revised. The strategic plans to improve the Canadian physiotherapy pain curricula can serve as a template to facilitate improving pain education in other professions and geographic regions. Collaboration between educators, stakeholders, and healthcare professionals is pivotal in advancing pain education and aligns with the IASP guidelines' interprofessional focus.

In addition to national efforts, individual institutions have also taken steps to integrate international pain curricula into their healthcare education programs. For instance, while the Canadian Association of Schools of Nursing Entry-to-Practice Competencies for Registered Nurses document does not mention pain content, McMaster University's nursing curriculum revision heavily incorporated the IASP guidelines for nursing education. . This alignment likely explains the high concordance between McMaster's curriculum and the IASP recommendations. These efforts demonstrate that even without direction from accrediting bodies, institutions can independently adopt international guidelines to enhance pain education effectively.

Call to action

While these initiatives represent significant progress, much work remains to ensure that all healthcare professionals receive comprehensive training in pain management. In addition, to be fair and consistent, it is probably time to formally revisit the work of Watt-Watson et al. in 2009 (3) and survey healthcare professional education curricula across the country that will identify those elements of pain knowledge that have been incorporated into curricula, those elements that may have become part of accreditation

and licensing processes and those which remain to be addressed and systematically integrated into curricula. Accrediting bodies, institutions, and stakeholders must collaborate to bridge the remaining gaps and align healthcare curricula with international standards. By advancing pain education, healthcare professionals can provide better care, improve patient quality of life, and reduce the societal burden of chronic pain.

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