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EDUCATING FOR THE PARAMEDICINE OF TODAY: EXPLORATORY FINDINGS RELATED TO PRIMARY CARE PARAMEDIC TRAINING IN NORTHERN ONTARIO

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ABSTRACT

Background: Long distance ground and air transportation is often used in Canada to ensure that rural and remote communities have access to medical care. This, coupled with the increasing utilization of community paramedicine, positions paramedics in an increasingly autonomous role. As such, it is important to consider how these professionals are being prepared to work in socially just and socially responsible ways with the diverse populations they serve. Scant literature examines health care provider (HCP) students' preparedness to provide socially just and responsible care overall, and even less focuses specifically on paramedic students. This study explored HCP students' perceived preparation to enact social justice and social responsibility (SJSR) in practice.

Methods: Part of a larger qualitative explorative case study, findings discussed in this article focus on paramedic students. Based in a constructivist ontology, semi-structured qualitative walking interviews (Carpiano, 2009) were conducted with primary care paramedicine (PCP) students at one college in a northern region of Canada. Once transcribed, interviews were analyzed using thematic analysis (Peel, 2020).

Results: Participants reported a mixture of feeling prepared and uneasy about enacting SJSR. Students' personal backgrounds and work and academic experiences impacted their sense of preparation. Students listed several areas of concern including: a devaluing of SJSR within their curriculum and marking structure, poor role-modelling, and a superficiality of SJSR-related content.

Conclusions: While the study had few paramedic student participants, considering results within the context of the larger Canadian PCP education landscape may be beneficial. Currently, efforts are in place to educate future paramedics on SJSR; however, enhancements and additional work may help to guide PCP curriculum and create more robust accreditation standards within Canada. Considerations include restructuring curriculum to incorporate SJSR longitudinally, connecting SJSR to the role of the paramedic, and long-term, to change the current PCP diploma programs to baccalaureate degrees, potentially recruiting learners with previous post-secondary certifications.

BACKGROUND

In Canada, paramedicine is, like nursing and other health professions, regulated at the provincial level. Yet despite lobbying by the profession, primary care paramedicine in Ontario, is not regulated by its own college (Ontario Paramedic Association, n.d.-c). Rather, two entities regulate the profession: the Emergency

Health Services Branch of the Ministry of Health and Long-Term Care (MOHLTC) and eight Base Hospital programs associated with the MOHLTC (Ontario Paramedic Association, n.d.-b). Before entry to practice, Ontario paramedics must pass a two-year primary care paramedic (PCP) course to earn their diploma and write the Advanced Emergency Medical Care Assistant exam, passing with 70% or greater (Ontario Paramedic Association, n.d.-a). Only advanced paramedicine training programs require accreditation, which is currently done through the Canadian Medical Association. The general 2-year PCP training programs in Ontario have no accreditation requirement (Ontario Paramedic Association, n.d.-b) impacting curriculum standardization and quality assurance.

For many people, the expansive geography of northern Ontario necessitates air or long-distance ground transportation to access health and medical care. Care and support during travel is generally provided by paramedics who are often patients' first points of contact with the healthcare system. Ontario paramedics play an increasingly vital role in providing safe and equitable care through, for example, community paramedicine, providing in-home care to seniors with extensive care needs awaiting long-term care admission (Ontario, 2014; Ontario, 2021; Shannon et al., 2022). However, recent reports from Ontario recount instances of unsafe care and prejudicial attitudes held by paramedics (Blackburn, 2022; Grimaldi, 2021; Loriggio, 2022). This is not new to healthcare, but other professions such as nursing (Canadian Association of Schools of Nursing [CASN], 2022) and undergraduate medicine (Committee on Accreditation of Canadian Medical Schools [CACMS], 2023) have implemented quality assurance measures like accreditation guidelines to address the issue. Accreditation and standardization have led to initiatives and movements in health education including an increased focus on cultural competency (Gallegos et al., 2008), cultural safety (Ramsden, 2002), cultural humility (Stubbe, 2020), and the emergence of social accountability (Boelen & Heck, 1995; Global Consensus for Social Accountability of Medical Schools, 2010). Educating about these and concepts such as intersectionality (Crenshaw, 1989), social determinants of health (SDOH) (Mikkonen & Raphael, 2010), anti-racism (Blanchet Garneau et al., 2018), and anti-colonialism (Binagwaho et al., 2022) is considered part of educating on SJSR. However, with no accreditation requirements, mandatory inclusion of these topics has yet to be seen in Ontario's PCP programs (Allana & Pinto, 2021). In place of accreditation requirements, paramedics in Ontario have entry-to-practice competency requirements that are set out by the Paramedic Association of Canada and include general objectives including acknowledgement of cultural differences and "valu[ing] patient advocacy" (Paramedic Association of Canada, 2011, p. 30).

In addition to entry-to-practice competencies, PCP programs have listed program standards as a part of the Ontario public college system, which helps guide program structuring and learning outcomes. Of importance are the guidelines which emphasize effective and appropriate communication with patients; utilizing relevant theory and best practice; and meeting ethical, professional, and legal responsibilities (Ontario, 2008). Ontario colleges also require students to take a general education component so "that graduates have been engaged in learning that exposes them to at least one discipline outside their main field of study ... increas[ing] their awareness of the society and culture in which they live and work" (Ontario, 2008, Requirement section, para. 2). Yet, while these concepts are presented as integral to the role of a paramedic, clarity on how they are best taught and demonstrated within primary care paramedicine is lacking. For

example, while the standards exemplify effective and appropriate communication with “advocat[ing] for patient’s rights”, how advocacy is enacted in the PCP role is not defined (Ontario, 2008, The vocational learning outcomes). Allana & Pinto (2021) assert that the PCP curriculum does not emphasize curriculum regarding SDOH such as “assessing social risks, integration with community services and patient advocacy” (p. 71), despite the fact “that many emergency calls are non-urgent, exacerbated by social factors ... and related to gaps in primary care” (p. 69).

The social accountability and multicultural education movements in nursing and medicine discussed above ultimately resulted in a lack of conceptual clarity across North America and in the emergence of two broad approaches: cultural competence and critical culturalism (Reitmanova, 2011). These two approaches seem to continually govern many health care programs today. This means that students are taught to either become competent in their knowledge of an “other” or to think critically about the circumstances and power dynamics that perpetuate health inequities between various demographic groups (Reitmanova, 2011). This is but one example, and much is being done across the health disciplines to help learners acquire this knowledge.

Other examples include programs which have engaged peer-to-peer cross-cultural interaction to help learn about social determinants of health, and health inequities by partnering mainstream public health students with Indigenous health-focused public health students (Dickson & Manolo, 2014), or have used community-based learning wherein students are partnered with a family facing health inequities and are encouraged to create care plans and interventions that work for their designated clients (Biswas et al., 2020).

Despite a lack of agreement on what constitutes best practice, O’Meara and colleagues posit that education is an enabling factor for the expanding role of the paramedic profession (O’Meara et al., 2014). That is, if paramedics are to be working in increasingly community-based roles, their education will have to prepare them for how to do that in an equitable and safe manner.

Given the expanding scope of paramedics in Ontario, its geographically large northern region, the diversity of the patient population, and reports of inequitable, unsafe, and prejudicial care, the focus of this study is whether PCP students in one northern Ontario region felt prepared to enact socially just and socially responsible care in future practice.

POSITIONALITY

Acknowledging that all research is conducted from a particular standpoint, shaped by the researcher’s own social identities, experiences, and perspectives, we start the next section by positioning ourselves. At the time of writing, the principal investigator (PI) Alexis Starkes is a graduate-trained nursing student located in northwestern Ontario, Canada. In addition to being a researcher, she is also a healthcare worker, health educator, and staunch supporter of health and healthcare equity and access. This background has informed and influenced the work herein and the perspectives that are held related to the content and structure of this research. Dr. Helle Møller is an Associate Professor in Health Sciences at Lakehead University where she teaches graduate-level students. She is a medical anthropologist and former registered nurse with work and research experience in northern contexts including Greenland, Nunavut, and northern Ontario. Her

work focuses on SDOH, social justice and equity in the context of health, healthcare and health education, locally, nationally and internationally.

METHODS

Guided by social constructivist ontology, the larger explorative qualitative study was constructed as a multiple case study involving as different “cases” institutions within one northern community that educate health professionals (nursing, undergraduate medicine, and paramedicine). Reporting on one of the student groups within one case study that comprised PCP, practical nursing, and baccalaureate nursing programs, this article focuses on the experiences of the college-enrolled PCP students. The guiding principle of social constructivism holds that all meaning is constructed socially within and between people, their environments, and their contexts. This principle lends itself well to understanding complex fields like education and the subjective experiences of individuals within them (Creswell & Poth, 2017). Constructivist ontology supports the exploration of phenomena and allows “for multiple facets of [a] phenomenon to be revealed and understood” (Baxter & Jack, 2008, p. 544). After receiving ethical approval from the participating institutions’ ethics boards (Protocol [redacted]), data collection occurred from October 2022 to December 2022.

RECRUITMENT

Using purposive recruitment (Campbell et al., 2020), students were invited to participate through flyers, direct recruitment via faculty and instructors, in-class recruitment presentations provided by the PI, and snowball recruitment (Chan, 2020).

INTERVIEWS

Semi-structured walking interviews (Carpiano, 2009) were used to gather participant perspectives regarding their academic preparation. Semi-structured interviews allow for the flexibility that is required to construct meaning while also providing structure to guide the flow of conversation (Adams, 2015). Interviews were audio recorded and transcribed verbatim by the PI using Express Scribe Transcription Software Version 11.10.

THEMATIC ANALYSIS

Interview transcripts were de-identified before being uploaded to NVivo® (Lumivero, 2023) for coding and support with thematic analysis (Peel, 2020). A mix of inductive and deductive coding was used. A priori themes were established through review of the pertinent literature on educating healthcare students on SJSR in healthcare, while new codes and themes emerged through repeated engagement with transcripts. This organic development of new themes aligns with a social constructivist approach where meaning is constructed between participants’ expressed experience and the researchers’ understanding of their experience, inductively developing a “pattern of meaning” (Creswell & Poth, 2017, p. 24). Findings were organized into basic, organizing, and global themes. Basic themes consisted of individual participant quotes, while organizing themes consisted of clusters of similar quotes. Global themes are what are presented here and are a synthesis of the lower groupings. Analysis of the larger study occurred until data saturation (Creswell & Poth, 2017) was reached, indicated by the lack of emergence of new themes

across case data (in this instance, composed of PCP, baccalaureate nursing, and practical nursing student interviews).

While data saturation was met as evidenced by a lack of emergence of new themes across each case within this multiple case study, saturation of themes as they relate to solely PCP students may be seen as unsubstantiated. However, the themes reported on within the larger study were supported by the data provided across the PCP student subgroup.

Additionally, an environmental scan of institutional documents (retrieval and analysis of curriculum outlines and institutional initiatives related to SJSR) allowed for an adaptive triangulation (Carter et al., 2014) to support or refute the interview data findings. Refer to the original study for a more robust description of the thematic analysis (Harvey, 2023).

With regards to the data published within this paper, triangulation was limited given that documents pertaining to this specific program within the case were difficult to retrieve. Additionally, findings reported by students included lived experiences and perceptions of preparation and thus were unable to be substantiated given the methodology used within this study (i.e. no use of observation to corroborate reported occurrences, or qualitative scales to corroborate perception).

RESULTS

Of the 24 participants interviewed for the larger project, four were PCP students. Interviews varied in length from 45 minutes to 1.5 hours. The main findings from PCP interviews included: 1) students feeling prepared enough, 2) the fine line between valuing and devaluing of SJSR throughout their programs (as compared to other course material), 3) the sense that only so much is taught about SJSR and that more exists, and 4) the influence of instructors and mentors on the student experience. Findings are referenced with numbers that correspond to de-identified transcripts which have been anonymized to protect the participants' identities. The themes discussed are part of the larger case. PCP focused findings should be considered exploratory because of the small number of PCP participants.

PREPARED ENOUGH

Of the PCP students interviewed, three reported that they felt prepared to enact social justice and social responsibility (SJSR); however, most qualified this stating that they would be learning much on the job: "... learning on the fly. You're going to just hope that the program is recruiting, like good people, who ... ultimately want the best for the community" (PCPT3). Participant transcripts are titled as "PCPT#" to maintain that the authors are operating with transcripts that portray participant stories rather than portraying participants as numbers.

A sense of confidence in their abilities to enact SJSR in their work, despite how they felt the program was disseminating the information, appeared to correlate with having had relevant background experience. While participant identities and experiences may influence their understanding of the concepts of SJSR. This topic is beyond the scope of this paper. For more discussion and information on this, refer to the larger study: Harvey, A. (2023). Student perspectives on preparation to be just and socially responsible providers:

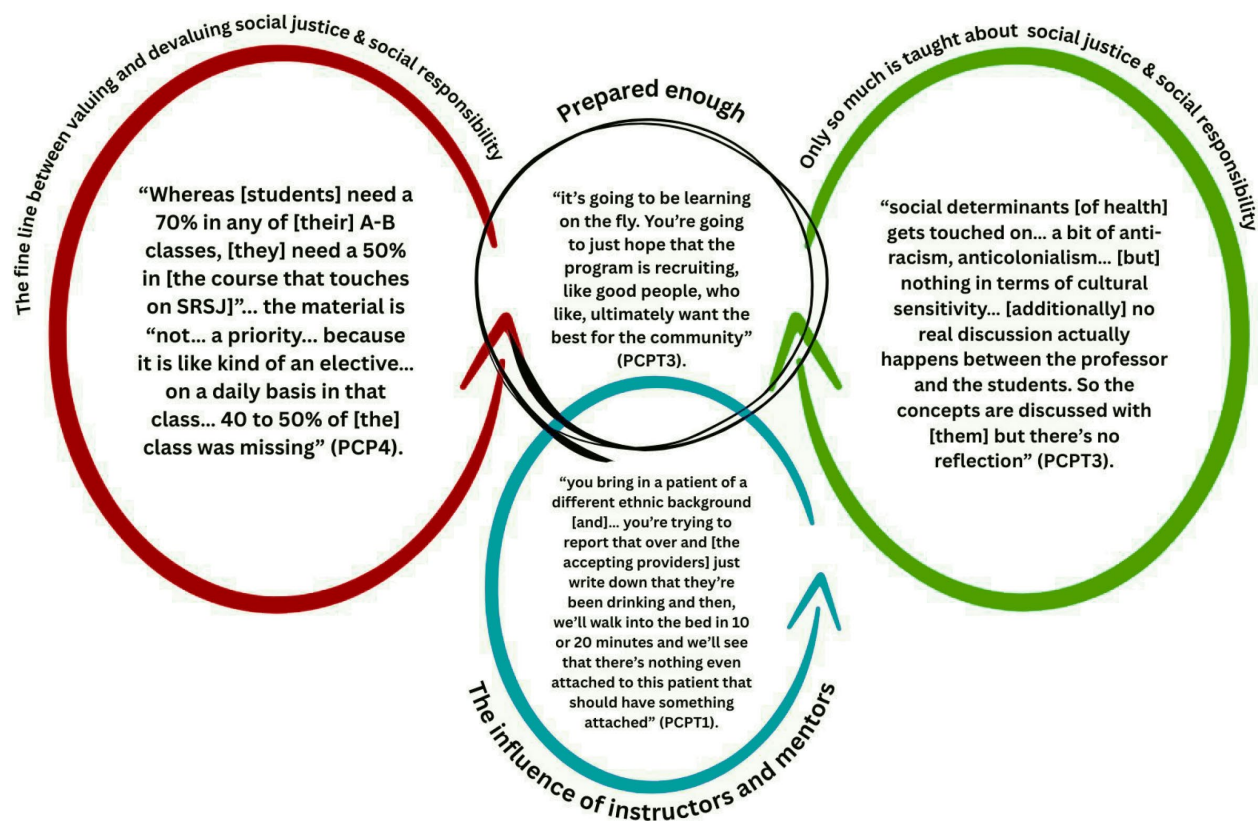


Figure 1. Main themes reported by PCP participants.

A northwestern Ontario qualitative case study [Master’s thesis, Lakehead University]. Lakehead University Knowledge Commons. <https://knowledgecommons.lakeheadu.ca/items/6d66819d-1ec5-4bdb-8e27-4ef47520ac04>

Such experience was gained either from working a person-facing profession, volunteering, or from time spent in other post-secondary academic programs (PCPT1, PCPT2, PCPT3, PCPT4).

While most PCP students felt that they were being prepared somewhat by their current program and everyone mentioned a required “Human Diversity” course which reportedly included topics such as “SDOH,” “population health,” and “diversity” (PCPT1, PCPT2, PCPT3, PCPT4), no single course or pedagogical model was felt to be the most effective for teaching SJSR. Students cited exposure to SJSR concepts through “lecture-based [courses] and just doing ... assignments and projects” (PCPT2), watching “documentaries” (PCPT4), reading books such as “The Seven Fallen Feathers” (PCPT1), and doing “scenarios as students together ... [and] talk[ing] about it after” (PCPT1).

THE FINE LINE BETWEEN VALUING AND DEVALUING SOCIAL JUSTICE AND SOCIAL RESPONSIBILITY

While all PCP students referred to the Human Diversity course when asked whether they had a designated course focused on SJSR-related concepts, reservations were reported about the effectiveness of course delivery and implementation. Two students noted that the Human Diversity course was comparable to an elective as the grading scheme was different from their other required courses (PCPT3, PCPT4). Although in-class participation marks were given, attendance was not mandated, resulting in many students

not attending regularly (PCPT3): with “40 to 50% of [the] class ... missing” daily (PCPT4). The structuring of the course marking system and the low “50% [to pass] in that class” compared to “70% in any of [their] A-B classes” (such as Anatomy & Physiology) resulted in an “expectation difference, between an elective and core courses” (PCPT4). This was reported to cause students to prioritize other courses and dismiss these topics as unnecessary to succeed in their field (PCPT4). While the environmental scan confirmed that the course was, as the program’s website posited, a “forced” elective, the specifics of the grading scheme could not be confirmed (Confederation College, 2025, p. 8).

ONLY SO MUCH IS TAUGHT ABOUT SOCIAL JUSTICE AND SOCIAL RESPONSIBILITY

Despite the focus on SJSR-related concepts in the Human Diversity course, students felt that that kind of content “we kind of just learn on the road” (PCPT1). Students described the course as lecture-based (PCPT2, PCPT3, PCPT4), with minimal discussion, reflective practice, or application of learned concepts. One student stated that although “social determinants [of health] gets touched on very briefly ... a bit of anti-racism, anticolonialism does come up ... no real discussion actually happens between the professor and the students. So, the concepts are discussed ... but there’s no reflection” (PCPT3). Students also relayed how the Human Diversity course touched on different populations and their circumstances but did not link these topics to “SDOH” (PCPT4) or “advocacy” (PCPT1). Within the environmental scan, the course description on the institution’s website states the course is meant to teach students about diverse populations using an anti-oppressive and social justice framework (Confederation College, n.d.). However, with no access to a course syllabi or further information regarding course delivery, pedagogical methods could not be ascertained.

THE INFLUENCE OF INSTRUCTORS AND MENTORS

Lastly, students talked about multiple experiences with challenging community practice that contradicted the learned curriculum (PCPT1, PCPT2, PCPT4). While students reported being taught about diversity and respectful communication, several instances were mentioned where discriminatory language was utilized while in placement: bariatric-sized equipment referred to as “fat mat[s]” instead of trademarked names like “Mega-Mover[s]” (PCPT4), or Indigenous clientele being labeled as “HBD or has been drinking” without confirmation of blood alcohol content (PCPT1). Furthermore, students felt that many healthcare professionals were facing pressure due to high demands across the field, often leading to lackluster care, and for paramedics, a lack of leadership related to the outflux of senior paramedics during the COVID-19 pandemic (PCPT2, PCPT4).

DISCUSSION

As evidenced by the expanding scope of paramedicine across Canada into more community-based work, there is a need for curriculum that departs from the typical focus of emergency response (O’Meara et al., 2014; Weber et al., 2024). However, it would be remiss not to discuss the implications of such a change within the context of our study. As PCP participants and current literature point to, the case’s program context is constrained due to the condensed 2-year program model (Colleges Ontario, 2025; O’Meara et al., 2014), an outpouring of senior leadership and thus mentors (PCPT2, PCPT4; Glazier, 2023), and a healthcare system that is consistently burdened with understaffing and high

demand (Glazier, 2023). These points are important as no data within a social constructivist study can be separated from its context (Creswell & Poth, 2017).

Thus, we proceed with our discussion of our exploratory findings while considering the local and contemporary context (i.e., location, current workforce limitations, curricular models, and lack of standardized requirements), as well as the limited number of PCP student participants. Feeling prepared enough (rather than well prepared) to enact social justice and social responsibility (SJSR) within their future practice appears to be the result of a combination of experiences: (a) being somewhat exposed to SJSR through various methods; (b) not having enough time to learn all aspects of the profession; and (c) not spending time on discussion, reflection, or applying SJSR-related theoretical concepts—resulting in learning (or not) while on the job rather than prior to practice. As was mentioned earlier, much work has been done in undergraduate medicine and nursing to bring SJSR into curriculum, and thus many of the pedagogical methods discussed by participants (e.g., fictional literature-guided curriculum, use of films, and scenario or case-based learning) have been seen throughout the literature within other health-related disciplines instructing on SJSR (Mkandawire-Valhmu et al., 2019; Ryder et al., 2013; Uy & Dimaano, 2019). Thus, it is possible that implementation of such pedagogy would translate well to instructing PCP students on SJSR. The reflection, discussion, and debriefing that students relayed as missing from their Human Diversity course are important for the development of critical practices that not solely recognize the other culture and background of a client, but understand the history, context, and power dynamics that may have led to the development of the health inequities they live with. These are all key components of culturally safe practice (Curtis et al., 2019). In this same vein the importance of interweaving SJSR-related content longitudinally throughout curriculum (rather than offering a stand-alone course) has been advocated for within the literature on health professions education to better support students in developing an understanding of health inequities and an ability to reflect on them (Beavis et al., 2015; Chooniedass et al., 2025; Dogra et al., 2009; Forsyth et al., 2019).

The fine line between valuing and devaluing of social justice and social responsibility is related to having a stand-alone course dedicated to SJSR with a grading scheme that differed from other mandatory coursework, as relayed by students. When considered in tandem with participants' reports that only so much is taught about SJSR, and with the lack of critical discussion-based reflection and connection between SJSR curriculum and their future practice, a disconnect between good intent and effective outcomes appears to exist. While the program is reported to have meaningful content that students can discuss when prompted, students lack a meaningful connection of SJSR curriculum to their reality as future paramedics—a crucial component within the field of adult learning (Palis & Quiros, 2014).

Lacking clarity in how these concepts relate to their field of work indicates a focus on teaching about multiculturalism rather than a focus on developing cultural safety or cultural humility among students (i.e., critical culturalism according to Reitmanova, 2011). Multiculturalism, rather than focusing on students gaining an understanding of intersectionality, power dynamics, and how to work with and for individuals from differing backgrounds, teaches students cultural and other “facts” about different population groups. Banks (2014) describes this as being a consequence of Anglocentrism in curriculum, which Kline (2013) posits, often results in multicultural education being included as

an add-on course rather than strategically positioned throughout curriculum. Additionally, critical pedagogues cite the need for particularly adult learners to see the relevance of the curriculum and make connections to their own experience and lives to maintain engagement (Palis & Quiros, 2014). That is, students will not effectively learn if they have no stake in the topics being taught, whether this is through a grading scheme impacting their average, or understanding how intersectionality and power dynamics create health inequities that affect different populations, including populations with which the learners may identify or serve in their future practice.

A move away from dedicated courses for multicultural education and onto integrative approaches such as community placements and multi-year courses and workshops has been seen elsewhere (Murray et al., 2012; Ross et al., 2014, 2019) and may also be evolving in PCP programs. The constraints posed by the 2-year timeframe of the PCP program is raised across the field and is gaining traction locally, which may lead to curriculum reform (Colleges Ontario, 2025). Related to time constraints, theory and in-class instruction is only part of the learned curriculum; role-modelling and the influence of instructors and mentors is another.

Students' reports suggested that practice often contradicted the classroom curriculum. They reported hearing derogatory and stereotypical remarks about patients under their care from role models while in practicum. While these instances may be attributed to provider burnout due to the current demands on the system (Kuilanoff, 2021), such negative role-modelling may lead to trainees internalizing preceptor biases and teachings, as suggested in the review by Alshareef and Flemban (2025). Role modelling contributes to a "hidden curriculum" which has been described as "more than simple transmission of knowledge and skills, it is also a socialization process ... The hidden curriculum consists of what is implicitly taught by example day to day, not the explicit teaching of lectures" (Mahood, 2011, p. 983). Hidden curriculum through role modeling poses the risk of perpetuating racism and discrimination across health professions, systems, and society (Hopkins et al., 2016). Role-modelling can serve as a very positive tool within education, or it can work to spread biased attitudes (Alshareef & Flemban, 2025) and create a culture of biomedical superiority with health professionals seen as experts and clients as inferior—an outright contradiction of SJSR.

This last point is particularly important considering the tension that exists between the standard models of PCP education and professional expectations and the tenets that underlie SJSR. PCP has traditionally been focused on emergency medical management which requires unilateral decision-making and knowledge of what is best for the client, whereas SJSR highlights power dynamics, the importance of cultural safety, and patient-centred care. Although SJSR tenets appear to misalign with PCP practice, with the profession moving into community paramedic roles and consequently working within the primary care model, these tenets in fact align well (Butscher, 2025).

CONCLUSION

The PCP student-related findings discussed in this study are exploratory given the small number of participants. However, they provide information worthy of consideration within the scope of the community paramedic. Findings suggest that a potential need for curricular reform exists and is worthy of further exploration when reconsidering profes-

sional priorities within PCP locally. As such, findings should be seen as the beginning of a much larger conversation demonstrating the need for additional research on the topic. The following conclusions are not generalizable to the whole of Canada or the PCP profession but are discussed considering the perspectives of the study's PCP participants and the contemporary context within which they learn and work.

With seemingly little space for curricular reform, and much to learn in the way of SJSR, efforts across other health disciplines may not be a good fit for PCP. While the expansion of paramedicine into a 4-year degree is possible and beginning to take root in Canada (e.g., University of Toronto Scarborough, 2023), the current demand for paramedics in Canada seems to outweigh the appetite for a 4-year PCP program (Rowland & Brydges, 2023). However, a focus on restructuring curriculum to incorporate more reflective practice exercises within the greater curriculum on SJSR-related topics may be worthwhile. Similarly, the devaluing of SJSR content via weighting of marks and the lack of conceptual connection to the profession of paramedicine is important to examine. While literature examining this phenomenon is absent, efforts to balance the weighting of marking schemes across the curriculum and/or better highlighting the connection between SJSR and the profession's expanding roles may result in students focusing more effort on SJSR-related content instead of prioritizing other courses as reported. Furthermore, making SJSR content more relevant to professional practice through more instruction on SDOH, intersectionality, and the connection to health inequities could potentially be implemented without further straining the curriculum.

Appropriate role modelling is important. The context of the current study is one in which the medical system is struggling to align health care needs and available human resources while navigating severe burnout following the COVID-19 pandemic. Ensuring appropriate role modelling involves a lot more than providing training to preceptors and educational staff. It may involve remedying a medical system that was not built to sustainably handle current demands—a topic beyond the scope and length of this article. Kuilanoff (2021) provides an excellent discussion of the topic. Lastly, incorporating critical reflection exercises and debriefing to foster students' development of critical practice and deeper understanding of themselves and the contexts within which they work may be more lucrative. This has been utilized elsewhere, through incorporation into already-existing curriculum (Crampton et al., 2016; Denizard-Thompson et al., 2021; Essa-Hadad et al., 2015; Harrison et al., 2020; Snyman & Geldenhuys, 2019; Uy & Dimaa-no, 2020; van den Heuvel et al., 2014).

These exploratory results provide a starting point for a much larger conversation around students' preparation and the efforts to equip PCP students across northern Ontario to work towards SJSR. Should future studies result in similar findings, certain initiatives may be warranted. These include consideration of additive versus longitudinal curriculum on SJSR-related content, though we acknowledge the challenges this would introduce given the condensed nature of two-year PCP programs. It may also be worthwhile to consider long-term initiatives. These include creating more baccalaureate degree programs for PCP throughout the province and continuing to recruit learners with previous degrees or experience in the social and health sciences to ensure that future paramedics are coming into the field with a good understanding of SJSR-related topics.

Ultimately, future research into this phenomenon should employ a larger sample of participants from several educational institutions across Ontario and or Canada to better elucidate trends in preparation to enact SJSR. These approaches would provide more robust data to better understand this phenomenon.

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