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To cite this article: Anne Hudon, Kadija Perreault, Maude Laliberté, Pascal Desrochers, Bryn Williams-Jones, Debbie Ehrmann Feldman, Matthew Hunt, Evelyne Durocher & Barbara Mazer (2016) Ethics teaching in rehabilitation: results of a pan-Canadian workshop with occupational and physical therapy educators, *Disability and Rehabilitation*, 38:22, 2244-2254, DOI: [10.3109/09638288.2015.1123308](https://doi.org/10.3109/09638288.2015.1123308)

To link to this article: <https://doi.org/10.3109/09638288.2015.1123308>



Published online: 10 Jan 2016.



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## EDUCATION AND TRAINING

# Ethics teaching in rehabilitation: results of a pan-Canadian workshop with occupational and physical therapy educators

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### ABSTRACT

**Purpose:** Ethical practice is an essential competency for occupational and physical therapists. However, rehabilitation educators have few points of reference for choosing appropriate pedagogical and evaluation methods related to ethics. The objectives of this study were to: (1) identify priority content to cover in ethics teaching in occupational therapy (OT) and physical therapy (PT) programmes and (2) explore useful and innovative teaching and evaluation methods.

**Method:** Data for this qualitative descriptive study were collected during a 1-d knowledge exchange workshop focused on ethics teaching in rehabilitation.

**Results:** Twenty-three educators from 11 OT and 11 PT Canadian programmes participated in the workshop. They highlighted the importance of teaching foundational theoretical/philosophical approaches and grounding this teaching in concrete examples drawn from rehabilitation practice. A wide range of teaching methods was identified, such as videos, blogs, game-based simulations and role-play. For evaluation, participants used written assignments, exams, objective structured clinical examinations and reflective journals. The inclusion of opportunities for student self-evaluation was viewed as important.

**Conclusion:** The CREW Day provided ethics educators the opportunity to share knowledge and begin creating a community of practice. This space for dialogue could be expanded to international rehabilitation ethics educators, to facilitate a broader network for sharing of tacit and experiential knowledge.

### ARTICLE HISTORY

Received 8 June 2015  
Revised 16 November 2015  
Accepted 18 November 2015  
Published online  
23 December 2015

### KEYWORDS

Ethics; ethics education; knowledge transfer; occupational therapy; physical therapy; rehabilitation; teaching

### ► IMPLICATIONS FOR REHABILITATION

- According to the study participants, rehabilitation ethics education should include learning about foundational knowledge related to ethical theory; be grounded in examples and cases drawn from clinical rehabilitation practice; and contribute to building professional competencies such as self-knowledge and critical thinking in students.
- Regardless of the methods used by occupational therapy (OT) and physical therapy (PT) educators for teaching and evaluation, the value of creating spaces that support open discussion for students (e.g. protected discussion time in class, peer-discussions with the help of a facilitator, use of a web discussion forum) was consistently identified as an important facet.
- Educators from OT and PT programmes should work with various professionals involved in OT and PT student training across the curricula (e.g. clinical preceptors, other educators) to extend discussions of how ethics can be better integrated into the curriculum outside of sessions specifically focused on ethics.
- The CREW Day workshop was the first opportunity for Canadian rehabilitation ethics educators to meet and discuss their approaches to teaching and evaluating ethics for OT and PT students. Including international rehabilitation ethics educators in this dialogue could positively expand on this initial dialogue by facilitating the sharing of tacit and experiential knowledge amongst a larger and more diverse group of ethics educators.

## Background

Ethics education in the field of rehabilitation is increasingly the subject of discussion, notably with the goal of identifying approaches for better preparing students for their future practice.[1] For rehabilitation students and professionals, ethics skills and competencies are important tools to guide practice in the face of numerous challenges encountered when caring for their patients.[2] In Canada, as well as in other countries including Australia and the United States, ethical/professional practice is recognised as an essential competency for occupational therapy (OT) and physical therapy (PT) students.[3–6] Despite the intensifying discussion on this subject, recent Canadian studies demonstrate considerable variation in the amount of time dedicated to ethics education and the manner in which this content is included in different rehabilitation training curricula.[7,8] For example, a survey by Laliberté and colleagues [8] showed that the number of hours dedicated to ethics teaching ranged from 5 to 61 h and from 5 to 65 h in Canadian PT and OT programmes respectively. In some programmes, ethics is taught as a cross-cutting theme throughout the curriculum while in others it is included as a separate topic either as a module (e.g. within a course on professional practice) or (less frequently) as a dedicated ethics course.

At the same time, limited analysis has been undertaken to identify priority topics to be addressed in rehabilitation ethics education across university programmes. Multiple studies have reported ethical issues and challenges experienced by OT and PT students and professionals in their practice,[2,9,10] but to our knowledge, very few international or national rehabilitation-related organisations (e.g. OT or PT professional association) have proposed a set of detailed key ethics topics or specific guidance about what content should be included in ethics teaching to rehabilitation students.[3,4,11–13] In fact, the *Entry-to-practice physiotherapy curriculum: content guidelines for Canadian university programmes* appears to be the only normative document providing a certain amount of guidance for programmes concerning ethics teaching.[3] The document states that students should gain knowledge about ethical reasoning, ethical theories and bioethics, rationale for codes of ethics, therapeutic relationships, professional boundaries, professional values (e.g. integrity, honesty, compassion), issues related to informed consent, conflicts of interest and ethical business practices. Although this document is more comprehensive than most others, it still lacks the precision necessary to assist ethics educators in building their ethics teaching curriculum.

In addition, there is uncertainty about the teaching methods that should be used. In the Canadian survey by Laliberté and colleagues, rehabilitation ethics educators reported using seminars, case studies or web-based discussions in their teaching, as well as more innovative educational methods such as concept maps to stimulate ethical reflection. Other studies have evaluated or proposed the use of specific teaching methods adapted to the context of rehabilitation. For example, Edwards and colleagues [14] evaluated the change in ethical reasoning of PT students after completing a training programme focused on two ethics models (the Four-Component Model [15] and the Ethical Reasoning Bridge [16]) that included online activities and in-class workshop group discussions. The Four-Component Model, developed by Rest [17] integrates four abilities required for sound ethical reasoning: ethical sensitivity, moral reasoning and judgment, moral motivation and ethical implementation.[15] The Ethical Reasoning Bridge is a framework proposed by Edwards et al. based on research related to the decision-making of PT experts. It aims to highlight the ‘inquiry task of the medical practitioner as crossing a bridge where, on one side, information about a case that is universal and shared by all or most patients is sought and, on the other, information that is unique to a particular patient is sought’.[18, (p.1655)] Drolet and Hudon [19] also proposed a Quadripartite Ethical Tool that uses central contemporary ethical theories (deductive-universalist approach) and the values, virtues and ethical principles of the primary stakeholders in a given situation (inductive-particularist approach) to help PT students recognise and analyse ethical issues in their practice. While the literature about teaching methods for ethics is growing, there remains a lack of consensus on the most appropriate methods of teaching ethics to rehabilitation students, and no specific approaches have been broadly recognised as ‘evidence-based’. However, some of what is needed for ethics education in rehabilitation could be drawn from other health professional education efforts. Indeed, the evidences supporting how to teach graduate health students in different fields are growing stronger. But, while the evidence is beginning to identify types of approaches used, the details of their application are not always well understood.

Research on effective evaluation methods for ethics teaching in rehabilitation is scarcer still. In Canada, Geddes and colleagues [20] used the Defining Issues Test (DIT) and found a significant change in OT and PT students’ ethical reasoning after the completion of their two-year degree. In the United States, Swisher and colleagues [21] used the same measure to evaluate the change in PT students following an intensive ethics

course, and results indicated an increase in students' ethical reasoning. In addition, a recent study by Jones and colleagues [22] used cognitive maps to assess PT students' ethical learning after the completion of a six-week intensive ethics course and found that students' organisation of ethical components was richer and more elaborate. While these different evaluation methods aim to assess students' learning in terms of ethical decision-making and reasoning, as well as ethical knowledge, they are still limited in their capacity to assess the complex dimensions of students' ethical learning.

With little guidance on what content to include and a lack of evidence-based literature regarding teaching and evaluation methods specific to rehabilitation ethics, educators lack support when designing their courses and selecting the most appropriate topics and tools for their students. Our study had two primary objectives: (1) to identify priority content that should be covered in ethics education in rehabilitation programmes in Canada, and (2) to explore useful and innovative teaching and evaluation methods for ethics education in rehabilitation, as perceived by a group of Canadian ethics educators.

## Methods

To address these two objectives, we conducted a descriptive qualitative study. Data were collected during a 1-d workshop, the 'Canadian Rehabilitation Ethics Teaching Workshop Day' (CREW Day), held on 26 May 2014 in Montreal, Canada. The objective of the CREW Day was to facilitate knowledge exchange amongst educators about different issues and approaches to ethics teaching in rehabilitation.

### Participant recruitment

Ethics educators from the 14 OT and 14 PT programmes in Canada that existed at the time of the study (there are now 14 OT and 15 PT programmes) were invited to participate in the CREW Day (total of 28).[23] The initial pool of potential participants drew from individuals who had participated in a survey of Canadian rehabilitation ethics educators. Potential participants were sent an email introducing the study and inviting them to take part in the workshop. If these individuals responded that they were no longer teaching ethics or were unable or uninterested in participating, they were asked to provide the name of someone else involved in ethics education in their programme, to ensure that each programme would be represented. In programmes where no participants were identified, an email was sent to the programme director to request suggestions of potential

participants. Written consent was obtained from each participant. This project was approved by the research ethics board of the Centre for Interdisciplinary Research of the Greater Montreal (CRIR) (certificate # CRIR-906-1213).

### Workshop and data collection

During the CREW Day, both large (involving all participants) and small group (7 or 8 participants) activities were organised to explore questions such as: *What content should be included in ethics education in rehabilitation programmes? What methods should be used to teach ethics and to evaluate learning? What role should ethics play within each programme?* The workshop began with a large group icebreaker activity that provided an opportunity for participants to meet each other. Small group activities were used to ensure that all participants felt comfortable contributing to the discussion and had an opportunity to express their ideas and experiences. Large group discussions took place following the afternoon small group sessions in order to share the content of the separate discussions with the entire group and to facilitate knowledge sharing between participants.

All sessions were audio recorded. Because of the challenges in transcribing large group discussions, the main data sources consisted of research notes taken by six research assistants, and the products of brainstorming activities with the participants (e.g. posters with sticky notes grouped by theme or addressing targeted questions). One of the members of the research team listened to all of the audio recordings to ensure that the notes taken were comprehensive and reflected the full scope of the discussion. Where information was incomplete or unclear, these points were added or clarified.

### Data analysis

We undertook a content analysis of the data [24,25] that was organised around the research objectives. All research notes (taken by the note takers during the CREW Day) and the written texts generated by participants (e.g. posters with sticky notes addressing targeted questions or brainstorming written activities) were analysed using comparative methods (i.e. comparison and analysis between and within data sources) by three members of the research team (A.H., K.P., M.L.). More concretely, these researchers read all the written material and distilled content related to each specific study objective. A second member of the team verified each of the documents that was generated and added any missing information. For the first objective looking at priority content that should be covered in ethics

education, four overarching themes emerged, based on patterns and linkages within the data. For the second objective exploring useful and innovative teaching and evaluation methods for ethics education in rehabilitation, because it was more descriptive in nature, the team identified within the data all the teaching and evaluation methods discussed during the CREW Day. Lastly, the final analysis and interpretation of the results were discussed by all team members and consensus was obtained.

## Results

### Study participants

Twenty-three ethics educators participated in the workshop (Figure 1). Participants, 2 men and 21 women, taught ethics in one of 14 universities in seven Canadian provinces. A total of 11/14 OT and 11/14 PT programmes were represented.

### Objective 1: priority content: what and why?

Participants' discussions about priority content to cover in rehabilitation ethics education touched on four main themes: developing foundational knowledge; grounding theory in concrete areas of practice; addressing key topics to be covered in rehabilitation ethics teaching; and building professional competencies.

**Developing foundational knowledge.** Participants stated that foundational knowledge was required for students to be able to recognise and effectively analyse an ethical issue, and discussed how providing a theoretical background could introduce language – labelled by some participants as the 'language of ethics' – that students could use with their peers and their clinical preceptors to discuss moral, ethical and legal matters. Ethical or philosophical theories were found to be an important part of this foundational knowledge and discussions about which theories to teach included, for example, narrative ethics, ethics of care, critical disability ethics and principlism. There was no consensus about which theories *should* be taught or in how much detail. Many participants reported using multiple theoretical/philosophical approaches as foundational knowledge, and there was recognition of the necessity to avoid devoting too much time to purely theoretical approaches disconnected from practical or applied considerations. Several participants raised the problem of a lack of ethical theory specifically developed or applied within the context of rehabilitation.

Participants also mentioned that professional codes of ethics and other regulatory or guiding documents, such

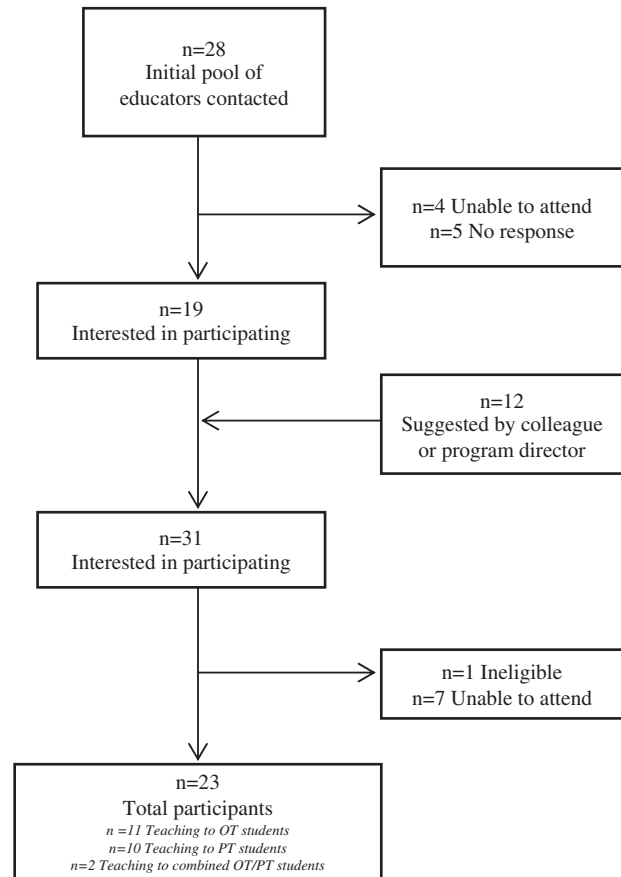


Figure 1. Flow diagram of recruitment process. OT, occupational therapy; PT, physical therapy.

as the International Classification of Functioning, are underpinned by ethical theories and have philosophy as their cornerstone. While professional regulations (codes of ethics, college regulations) were viewed as part of the essential knowledge to cover, some participants mentioned that these documents tend to make students think with a prescriptive or reductionist model, seeking right/wrong answers. Some participants viewed the professional regulation model as a compliance model, whereas a focus on ethical decision-making using a values-based model would foster greater reflection and discussion. Nonetheless, codes of ethics allowed educators to explicitly name professional responsibilities for future professionals and identify some of the important ethical challenges they are likely to face in clinical practice. Participants agreed that the ethics content that is taught should help students improve their ethical analytic skills over and above a purely legal approach. Hence, some participants had a more philosophical teaching approach and discussed core ethical theories (such as virtue ethics, Kantian or utilitarian theories), while others had a more practical teaching approach and proposed the use of the professional codes of ethics as a knowledge base.



**Grounding knowledge in concrete examples.** According to many participants, the ethical content that is taught needs to be anchored in ‘real’ clinical situations in order to ensure relevance. A few participants said that they started to teach ethics by presenting societal issues not related to OT or PT (such as abortion, corruption) and then converged towards ethical issues specific to OT or PT. Examples of the latter included day-to-day work issues or challenging cases drawn from the experiences of preceptors or students in clinical placements, or from common complaints received by the professional colleges. Participants felt that the relevance of ethics became clearer to students once they had experienced clinical practice in their rotations or if educators linked ethics to other issues familiar to students or relevant for the profession. Asking students to choose topics to be covered during class (e.g. a media event or an experience in a clinical placement) was also suggested as a useful way for educators to identify ethical issues relating to the students’ preoccupations.

**Addressing key topics to be covered in rehabilitation ethics teaching.** Table 1 presents the topics reported by participants as important to address in ethics

teaching. Based on our analysis, they relate to patient care, professional issues, and management and system issues.

Throughout the discussions, participants raised *patient care issues*. For example, the subject of informed consent specific to rehabilitation arose regarding the ‘best’ way to obtain a patient’s consent to ensure it is not simply a one-time event but rather an on-going process. Should clinicians be more attentive to the need for a renewed and engaging dialogue with patients about their rehabilitation goals and treatment preferences?

Another prominent aspect that was raised was *Professional issues* commonly faced by rehabilitation professionals. Participants talked about patients undertaking concurrent or alternative therapies and the impact this can have on treatment. They also discussed the ‘ethics of teamwork’ arising in team-based care due to differences in professional/personal values and commitments, as well as asymmetries of power. Other issues addressed professional boundaries such as the use of social media, the concept of professional humility (disclosing mistakes or uncertainty) and the scope of ethical responsibility.

Table 1. Topics reported as important content in ethics teaching.

Categories	Topics
Patient care	<ul style="list-style-type: none"> <li>• Abuse</li> <li>• Advocacy</li> <li>• Alternative therapies</li> <li>• Confidentiality (mandatory reporting, privacy, charting)</li> <li>• Cultural issues</li> <li>• Driving risk</li> <li>• Ethics of capacity/competence</li> <li>• Ethics of risk – right to live at risk</li> <li>• Informed consent/refusal</li> <li>• Patient autonomy</li> <li>• Quality of life/death</li> <li>• Self-determination</li> <li>• Treatment of vulnerable populations (dementia, mental health, chronic care, children, impaired mobility)</li> <li>• Truth telling</li> </ul>
Professionalism	<ul style="list-style-type: none"> <li>• Conflict management</li> <li>• Dual loyalties</li> <li>• Global health ethics</li> <li>• Inter-professional care and teamwork</li> <li>• Professional boundaries (social media, personal relationships with patients)</li> <li>• Professional humility/disclosure of mistakes</li> <li>• Professional values (client-centred, professionalism, dissonance between personal and professional values)</li> <li>• Purpose of rehabilitation (the end goal)</li> <li>• Scope of ethical responsibilities (to self, to patients, to communities, and to society)</li> <li>• Scope of practice, concurrent interventions</li> <li>• Whistle blowing</li> </ul>
Management and system	<ul style="list-style-type: none"> <li>• Business ethics</li> <li>• Conflicts of interest</li> <li>• Fraud</li> <li>• ‘Gaming the system – bending or breaking the rules to achieve particular aims</li> <li>• Justice (resource allocation, waitlist management, discharge planning, occupational justice)</li> <li>• Third-party payer issues (e.g. work accident insurance)</li> </ul>

Finally, *Management & system issues* emerged as essential to cover. A noteworthy topic was 'gaming the system', that is, when clinicians break the rules and play the system – the system being government policies or the organisational structure of the healthcare system or the social system – to obtain services for individuals who would not otherwise be eligible. This topic was controversial; participants did not agree on whether it should be integrated into course content, since a value-based approach could promote gaming the system to advocate for patients even if this contravened professional or legal codes.

***Building future professionals' competencies.*** Some participants explicitly stated that the deeper process of reflection mattered more than the specific content or issues taught. Indeed, the main purpose for teaching ethics content to OT and PT students was to help them develop the essential competencies for their future professional career identified as *self-knowledge* and *critical thinking*.

The *self-knowledge* competency helps students identify their own values, such as fidelity or truthfulness, to know what is guiding them in their therapeutic relationships, and to assist them in identifying and understanding when their own values are conflicting or are a source of cognitive dissonance. This self-awareness was thought to help students recognise their personal and professional limits. The second competency is *critical thinking*, which helps students develop deliberative abilities. In combination with clinical expertise, critical thinking enables students to build their ethical reasoning skills, leading to richer ethical deliberation and sounder ethical arguments, and thus facility with ethical decision-making skills that they can adapt and apply to particular situations.

## ***Objective 2: teaching and evaluation methods***

***Teaching methods.*** Methods found to be useful for stimulating reflection and discussion by OT and PT students included the presentation of videos or books, facilitation of discussion sessions (e.g. to share experiences from clinical placements), creation of blogs (e.g. on news events), use of activities such as playing board games, and incorporation of theatre/role-play. The use of audio-visual or artistic material was also reported as a teaching method. Examples included presenting images or cartoons to elicit reflection or encouraging the interpretation of an ethical project through dance, song or video. According to the participants, the didactic presentation of theoretical material to stimulate

discussion was very prominent in their teaching. However, they recognised the limits of lecturing and stressed the need for using other approaches to supplement this approach. Applying concepts to the realities of clinical practice was once again viewed as important, but also required particular teaching methods. For example, debriefing sessions following clinical placement were organised to specifically discuss ethical issues or by having students practice ethical decision-making for simulated situations. Also, asking students to work in small groups was a frequently mentioned method that promoted in-depth discussion.

Participants described a range of individuals being involved in teaching ethics, including students and other instructors. Learning between peers was mentioned, for instance, by having senior students read junior students' work or through seminars where students taught each other. Involving students from other professions allowed students to justify ethics-related decisions using language that could be understood by all students, regardless of their profession. Combining OT and PT students for an ethics course was viewed as enriching the discussion because it offered the possibility to share perspectives between professions. Inviting a clinical ethicist, members of the professional board/college or actual patients to present in class was thought to provide real-life examples that helped to counteract students' lack of recognition of the importance of ethics, a challenge faced by many participants. Several instructors who did not have advanced training in ethics also reported that involving these types of guests or invited lecturers was valuable for providing expertise in areas where they were less knowledgeable. Although not realistic for all participants, developing expertise in ethics was viewed as desirable not only for ethics educators, but also for clinician preceptors/supervisors, so that everyone shared the same 'language of ethics'. Sources of specific rehabilitation ethics knowledge and skill development were nonetheless viewed as rather limited. The need to create learning modules and opportunities for continuing education in ethics was suggested by several participants.

Regardless of the methods used, an important consideration that emerged was the value of creating safe spaces that supported open discussion (e.g. peer-discussions with the help of a facilitator or the use of a website). Furthermore, according to some participants, discussions about their own behaviour or that of peers and clinical preceptors in specific situations were useful as they helped to illustrate one course of action and elicited discussion about different options and the values being upheld or overshadowed in each.

**Evaluation methods and resources.** Participants reported using a variety of evaluation methods. These included written assignments that required students to respond to a clinical vignette, create a code of ethics, or keep a reflective journal. Other methods that were mentioned included in-class or online exams, objective structured clinical examinations, in-class presentations and online discussions or deliberations. Participants questioned the relevance of administering exams with closed-ended questions; this was in line with the idea that there were no 'do's and 'don't's or right and wrong answers in ethics, an idea that emerged during the day on several occasions, but that was disputed by some participants. However, it was also expressed that using more formal evaluation methods and grading schemes could serve to legitimise ethics in the eyes of students. Thus, using written exams, providing a formal grade instead of simply using *pass/fail* grading and incorporating grading into activities such as online discussions were reported as effective ways of enhancing the credibility of ethics and stimulating participation. Some of the methods used for teaching also emerged as highly relevant for evaluation. For example, group discussions and presentations were occasions for learning that were also sometimes graded.

Participants suggested that self and peer evaluation could be used in addition to assessments by the instructor or clinical supervisors. They mentioned the importance of having students self-evaluate (e.g. their values), an element coherent with participants' views on the importance of developing critical thinking and self-knowledge competencies. Formal peer evaluation was used in some cases (e.g. debates) in order to increase students' participation; for example, by giving them the responsibility to ask questions to their peers during presentations. Having clinical supervisors contribute to evaluation was proposed as a way for students to be exposed to additional clinical perspectives. The involvement of other evaluators also helped make using certain methods of evaluation feasible, such as reflective journaling, because it allowed for the sharing of work between multiple persons (i.e. not only the course coordinator).

Other principles reported as important for evaluation included assessing students often in order to intervene early with students who might be having difficulty, using multiple methods to evaluate (group and individual) and moving away from *pass/fail* models. Structuring ethics-related assignments in such a way that the course knowledge was carried over into other courses (e.g. reflections) or personal life (e.g. dinner-table conversations over current affairs associated with important ethical issues) was also viewed as beneficial and a way to

take ethics knowledge outside of the classroom. In so doing, ethics-related knowledge gained in class could be applied in real-life contexts, either in the students' personal, academic or professional life. This was particularly important in light of the limited space given to ethics and its timing within the curriculum.

## Discussion

The findings from this study provide insight into priority content to be addressed in ethics education in Canadian rehabilitation programmes, and suggest useful teaching and evaluation methods for this content, as perceived by educators themselves.

Our findings highlight the importance of incorporating theoretical foundations of ethics, including different theories and frameworks that enable students to be initiated to the 'language of ethics', support discussion of ethics-related topics and build their skills in ethical reasoning. These theoretical foundations can help students organise their thoughts and develop new ways of addressing ethical issues with greater nuance, by fostering ethical analyses that are grounded in relevant philosophical and axiological foundations.[19] However these foundations should not be taught as single frameworks for perceiving and reflecting on ethical issues, as such an approach could restrict students' ability to appreciate the multiple perspectives and insights that need to be used in their efforts to think through ethical challenges.[26] Rather, they should be viewed as multiple 'lenses' that students can use interchangeably when struggling with a particular issue.[26]

Most of the findings about specific topics to be discussed in class aligned with those presented in the rehabilitation ethics literature.[2,27] In addition, some less frequently discussed topics were also brought to light by the CREW Day participants, such as the ethics of teamwork in rehabilitation,[28] the ethics of risks for patients [29] and the scope of ethical responsibility for the therapist. The topics mentioned by participants were diverse and most were related to the day-to-day care provided by rehabilitation professionals, providing a concrete and practical basis for discussion of ethical issues with students. It is noteworthy that participants clearly stated that they tried to use actual examples from students' clinical experiences or shared their own experiences as practicing professionals, in order to increase the relevance of the topics discussed. This reflects a commitment to enhance the credibility and usefulness of ethics for students and to clearly emphasise the idea that ethics is relevant to clinical practice. Grounding ethics teaching in clinical experiences may



also be a way for educators lacking ethics training to increase their comfort in teaching ethics content. Some participants mentioned having a lack of expertise related to ethics content they were required to teach and having few training opportunities to develop such expertise. By focusing on clinical situations to frame ethics teaching, educators can not only highlight the applicability of ethics, but they also ground the teaching in clinical practice, an area in which they have more expertise.

Two competencies, *self-knowledge* and *critical thinking*, were emphasised by participants as important to foster in students, and are well aligned with major competencies found in Canadian OT and PT curriculum content guidelines.[3,4] Self-knowledge is a transversal aptitude that is important in all the different spheres of action of rehabilitation professionals.[30] Kinsella and colleagues found that *taking time to reflect* emerged as a main theme depicting OT students' perceptions of ethical practice.[31] The same can be said about critical thinking that involves engaging critically in clinical activities while being able to analyse experience. This is done 'in order to lead [students] to new understandings of the way they think and operate in the clinical setting'.[32] While *self-knowledge* and *critical thinking* are often seen as prerequisites to the subjects taught in rehabilitation programmes, participants talked about the importance of developing these competencies inside their ethics teaching as well as in other courses. Protected time allotted to ethics education would thus serve as a place for teaching more basic and foundational skills that would then benefit students during the remainder of their professional training. It is difficult to create a safe place for ethical discussion, and ethics courses are an important venue to support such a shared reflection.[33]

Participants discussed a variety of teaching and evaluation methods that they perceived as useful, however, they did not mention previous validation as reasons for selecting the particular methods they used in teaching their students. This is in line with the scarce literature on the subject, as there has been little research to validate existing methods for ethics teaching in rehabilitation.[21,22,34] Rather, participants discussed what was working practically in their classroom, and this allowed the tacit and experiential knowledge of ethics educators to be collected. Nevertheless, comparisons can be drawn between some teaching methods presented in the literature and what participants discussed during the CREW Day. For example, some participants mentioned using ethical case examples or clinically based case stories in small groups to help develop their students' ethical reasoning skills. This is

similar to teaching methods described in the literature, which highlight the usefulness of ethical reasoning activities.[16] However, the literature usually describes the use of a specific ethical reasoning framework to help analyse ethical cases (e.g. Ethical Reasoning Bridge model or the Quadripartite Ethical Tool), but such frameworks were not often named or identified by the CREW Day participants. The use of an ethical framework could help educators clarify the process of analysis for students and could be more explicitly stated. However, the results from this study show that even if no current evidence-based teaching content, methods and evaluation for teaching ethics in rehabilitation have been formally recognised, the current practices and tacit knowledge of Canadian educators are in line with some evidence-based educational approaches already used in other disciplines. Since the literature in rehabilitation is scarce about the effectiveness of specific teaching methods, it would be important for rehabilitation ethics educators to continue looking for validated methods in other professional disciplines that have a longer history in ethics teaching, such as medicine, education and nursing. Literature about effective pedagogical and educational methods in general, not specifically related to ethics teaching, should also be explored and used by educators.

Although experiential learning through clinical placements is essential for future health professionals, adding critical reflection allows students to go further by providing an approach to think through and analyse their practice; this was viewed as a prerequisite for students to become health professionals who are 'flexible, self-aware and understanding of alternative perspectives'.[35] In terms of approaches, some participants mentioned using arts-based methods such as dance and video-making. The proposed usefulness of integrating arts-based methods is also consistent with the increased interest in medical humanities and, in recent years, in rehabilitation, which aims to nurture understanding, compassion, and empathy.[33,36] Also, art, literature or reflective writing have been shown to be effective in enhancing narrative reasoning capabilities with PT students.[37]

The findings from this study in terms of ethics knowledge and skills go far beyond the standards and benchmarks described in the entry-to-practice curriculum documents used for the accreditation of OT and PT schools in many countries. For example, the entry-level competencies document for OT in Australia recognises the importance for students to comply with their code of ethics.[6] The document insists on professional behaviour, which should be consistent with ethical and legal requirements, but does not provide any more detail. The

American Physical Therapy Association's *Minimum required skills for physical therapist graduates at entry-level* only mentions ethics in the practice management skill section, where the billing of clients and the supervision of a PT assistant should be made according to ethical standards.[11] In Canada, the *Profile of practice of occupational therapists in Canada* includes ethics-related issues about patient advocacy, compliance with codes of ethics, and suggests discussing significant values for the profession such as integrity, altruism, attention to diversity and injustice, personal well-being, critical inquiry, and the promotion of the public good.[4]

We believe that the content and methods emerging from the participants' experiential knowledge could be more specifically integrated into entry-to-practice rehabilitation curriculum guidelines, while still leaving room for flexibility in teaching. For example, an exhaustive list of rehabilitation ethics topics could be added to these guidelines to help educators select new topics and ideas. A better description of foundational ethical theories, ethical theoretical frameworks and a list of teaching methods could be provided to increase the number of tools that are available. In summary, the entry-level curriculum standards in many countries could be improved in light of the content discussed by the participants in the CREW Day in order to generate newer discussions and ideas around the topic of ethics teaching.

### Study limits

A 1-d workshop was too short to cover all the topics that were planned, nor did allow participants to explore all subjects in depth. A second limitation resulted from having different levels of expertise in ethics teaching among the participants. Partway through the workshop, the research team perceived that differences in training between participants might have affected the confidence of some participants in expressing their thoughts and experiences during large group discussions. A third limitation was in having different languages spoken in the discussions (English and French) as some participants might not have contributed as much as they would have wanted when discussions were in a language that they did not speak fluently. Our study design did not allow us to identify which teaching methods are the most frequently used or the most effective, nor did it allow us to obtain consensus on essential topics or teaching/evaluation methods, and these issues should be investigated in future research. Finally, three authors of this manuscript were also participants in the CREW Day (in their capacity as ethics educators in OT/PT programmes), so it is possible that their input or personal viewpoints biased the

analysis and presentation of the results. To counter this limitation, members of the writing team (who were also present during the CREW Day) paid particular attention to carefully reviewing the full range of themes that emerged from the analysis and reported results.

### Suggestions for future work

Many implications for future work in rehabilitation ethics can be drawn from this exploratory study. The workshop was the first occasion for Canadian rehabilitation ethics educators to meet and discuss what and how they are teaching in the classroom. Including international rehabilitation ethics educators could positively expand on this initial opportunity for dialogue, by facilitating the sharing of tacit and experiential knowledge amongst a larger and more diverse group of ethics educators, and also by stimulating the emergence of research questions for studying ethics teaching and evaluation methods around the world. This sharing of ideas could also allow for the identification of useful ethics frameworks, facilitate the development of new ideas and even the creation of a bank of useful tools to assist ethics educators to better frame and improve their curricula.

Since the competencies of self-knowledge and critical reflection are transversal and ethical reasoning should be applied to practically relevant situations, when appropriate, OT and PT programmes could pursue discussions with various professionals involved in OT and PT students' training across the curricula (e.g. clinical preceptors, other educators) in order to extend discussions on ethics outside ethics-dedicated sections of the curriculum. Making place for discussions about ethics with other rehabilitation professionals (speech therapy, audiology) and promoting inter-professional ethics teaching initiatives could also be interesting avenues to develop. In the longer term, the impact of ethics education on OT and PT professionals' actual practice should be evaluated. This could be done, for example, by studying cohorts of professionals who had received different ethics education and comparing their residual ethics knowledge and their ethical decision-making skills using valid evaluation tools.[38]

### Conclusion

This study is one of the first to focus on the knowledge and practices related to ethics education in Canadian academic OT and PT programmes. The CREW Day participants identified priority content to cover in rehabilitation ethics education and discussed current teaching and evaluation methods that they perceived as useful in their practice. The results of this study highlight

the diversity in perceptions of what knowledge should be covered, as well as what are valuable teaching and evaluation methods. The primary ideas for effective ethics teaching include the creation of spaces that support discussion between students and opportunities for student self-evaluation and reflection.

## Acknowledgements

We wish to thank the ethics educators who participated with such great enthusiasm at the CREW Day workshop in Montreal in May 2014. We also thank Renaud Boulanger, Erin Ashley Douglas, Sabrina Morin Chabane and Tatiana Orozco for their assistance during the CREW Day.

## Declaration of interest

The authors declare that they have no competing interests. This project was financed by the *Edith Strauss Rehabilitation Research Project* Foundation, the Canadian Council of Physiotherapy University Programmes, The Centre for Interdisciplinary Research in Rehabilitation of Greater Montreal (CRIR) and the Faculty of Medicine at the University of Montreal. Anne Hudon is supported by a doctoral fellowship from the *Fonds de recherche du Québec-Santé* (FRQ-S) and from the MENTOR programme in collaboration with the Canadian Institutes of Health Research (CIHR) and the Quebec Research Rehabilitation Network (REPAR). Maude Laliberté holds a doctoral fellowship from the *Fonds de recherche du Québec-Santé* (FRQ-S). Matthew Hunt is supported by a research scholar award from the FRQ-S.

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