

An in-depth analysis of ethics teaching in Canadian physiotherapy and occupational therapy programs

Maude Laliberté, Anne Hudon, Barbara Mazer, Matthew R. Hunt, Debbie Ehrmann Feldman & Bryn Williams-Jones

To cite this article: Maude Laliberté, Anne Hudon, Barbara Mazer, Matthew R. Hunt, Debbie Ehrmann Feldman & Bryn Williams-Jones (2015) An in-depth analysis of ethics teaching in Canadian physiotherapy and occupational therapy programs, *Disability and Rehabilitation*, 37:24, 2305-2311, DOI: [10.3109/09638288.2015.1015687](https://doi.org/10.3109/09638288.2015.1015687)

To link to this article: <https://doi.org/10.3109/09638288.2015.1015687>



Published online: 23 Feb 2015.



Submit your article to this journal [↗](#)



Article views: 1022



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 10 View citing articles [↗](#)

EDUCATION AND TRAINING

An in-depth analysis of ethics teaching in Canadian physiotherapy and occupational therapy programs

Maude Laliberté^{1,2,3}, Anne Hudon^{1,3}, Barbara Mazer^{3,4}, Matthew R. Hunt^{3,4}, Debbie Ehrmann Feldman^{1,3}, and Bryn Williams-Jones²

¹École de réadaptation, Université de Montréal, Montréal, Canada, ²Programmes de bioéthique, Département de médecine sociale et préventive, École de santé publique de l'Université de Montréal, Montréal, Canada, ³Centre for Interdisciplinary Research in Rehabilitation of Greater Montreal, Montréal, Canada, and ⁴School of Physical and Occupational Therapy, McGill University, Montréal, Canada

Abstract

Purpose: The purpose of this study was to examine current approaches and challenges to teaching ethics in entry-level Canadian physiotherapy (PT) and occupational therapy (OT) programs. **Methods:** Educators responsible for teaching ethics in the 28 Canadian PT and OT programs ($n = 55$) completed an online survey. **Results:** The quantity of ethics teaching is highly variable, ranging from 5 to 65 h. Diverse obstacles to ethics teaching were reported, relating to the organization and structure of academic programs, student issues and the topic of ethics itself. Specific challenges included time constraints, large class sizes, a lack of pedagogical tools adapted to teaching this complex subject, a perceived lack of student interest for the subject and a preference for topics related to clinical skills. Of note, 65% of ethics educators who participated in the survey did not have any specialized training in ethics. **Conclusion:** Significant cross-program variation in the number of hours dedicated to ethics and the diversity of pedagogical methods used suggests that there is little consensus about how best to teach ethics. Further research on ethics pedagogy in PT and OT programs (i.e. teaching and evaluation approaches and effectiveness of current ethics teaching) would support the implementation of more evidence-based ethics education.

Keywords

Canada, curriculum, ethics teaching, occupational therapy, pedagogy, physiotherapy

History

Received 25 May 2014
Revised 21 October 2014
Accepted 2 February 2015
Published online 23 February 2015

► Implications for Rehabilitation

- Ethics educators in Canadian PT and OT programs are experimenting with diverse educational approaches to teach ethical reasoning and decision-making to students, including lectures, problem-based learning, directed readings, videos, conceptual maps and clinical elective debriefing, but no particular method has been shown to be more effective for developing ethical decision-making/reasoning. Thus, research on the effectiveness of current methods is needed to support ethics educators and programs to implement evidence-based ethics education training.
- In our survey, 65% of ethics educators did not have any specialized training in ethics. Ensuring that educators are well equipped to support the development of necessary theoretical and applied competencies can be promoted by initiatives including the creation of tailored ethics teaching and evaluation tools, and by establishing communities of practice among ethics educators.
- This survey identified heterogeneity in ethics teaching content, format and duration, and location within the curriculum. In order to be able to assess more precisely the place accorded to ethics teaching in PT and OT programs, careful mapping of ethics content inside and across rehabilitation programs is needed – both in Canada and internationally. These initiatives would help advance understanding of ethics teaching practices in rehabilitation.

Introduction

Healthcare practitioners' ethical conduct can affect patient care, health outcomes, the therapeutic relationship and the public's perception of a profession and its members [1]. Physiotherapy (PT) and occupational therapy (OT) professionals often encounter ethical challenges in their practice, including evolving practice requirements, complex funding structures, and the need to

Address for correspondence: Maude Laliberté, MSc, PT, École de réadaptation, Université de Montréal, Bureau 402-5, C.P. 6128, succursale Centre-ville, Montréal, Québec, Canada H3C 3J7. Tel: +514 343 6111 #43502. E-mail: maude.laliberte@umontreal.ca

manage wait lists within a system of limited resources and increased demands [2–6]. These issues require professionals to develop the capacity to analyze ethically charged situations, reason clearly and enact ethically sound decisions that are aligned with the profession's values. Codes of ethics can provide ethical guidance to PT and OT professionals, but when facing an ethical dilemma or challenge, clinicians must also be able to conduct a critical and reflective analysis [7]. Thus, it is essential to provide future professionals with the knowledge and tools to effectively address the ethical issues that they will encounter in clinical practice.

The teaching of ethics in health professional programs has received broad support [8], and is recognized as an essential competency in medicine and the allied health professions [9]. The guidelines of the World Confederation for Physical Therapy reinforce the necessity of ethics education in all entry-level programs [10]. The World Federation of Occupational Therapists position statements also identify ethics (defined as professional ethics, values, responsibility, attitude and behavior) as a competency that entry-level occupational therapists should demonstrate [11]. In Spain, for example, university PT and OT educators consider ethical commitment to be a fundamental value to be instilled in their students [12].

Despite the importance of developing ethics competencies for professionals, there are still very few studies addressing the state of ethics teaching in entry-level Canadian PT and OT programs [13]. A 1991 survey of PT, OT and speech/language therapy programs in the UK revealed little consistency in the understanding of what should be included in an ethics program or the most appropriate pedagogical methods to be used [14]. In 1994, Brockett replicated the survey in Canadian OT programs and found that while most included ethics teaching, they focused on norms of practice and codes of ethics rather than on ethical decision-making skills [3]. But while norms of practice – such as current laws or codes of ethics – can provide authoritative guidance about how to act with professionalism [15], students and trainees would also benefit from ethics education that provides specific training in ethical decision-making. Thus, ethics educators must ask themselves: Are we providing future PT and OT professionals with the necessary tools to develop ethical decision-making skills so that they are prepared to address the ethical issues that they will encounter in clinical practice?

It has been argued that a professional's capacity for ethical reasoning may predict clinical performance, which suggests a relationship between a student's ability to resolve ethical dilemmas and their capacity to manage other issues that arise in practice [16]. A study by Swisher and colleagues [7] showed that following a 6-week intensive ethics course, PT students demonstrated improved ethical reasoning. A longitudinal study in Ontario, Canada, found a significant evolution in the ethical judgement of PT and OT students during their professional training, which included a specific ethics education component [17]. In other disciplines, such as medicine [18,19], an improvement in ethical reasoning following ethics education has also been demonstrated.

Even though most PT curricula include specific objectives aimed at enhancing students' capacities for ethical reasoning, there is no consensus on the content or approaches required to best achieve this goal [5,7]. Furthermore, the documents that govern Canadian PT and OT academic curricula provide only general guidance regarding ethics content, but do not contain detailed requirements regarding the ethical issues or competencies that should be taught [20,21]. In a recent investigation of online course descriptions, we identified a large variation in ethics curricula in Canadian PT and OT programs in terms of content, place within the program, and type of courses [13]. The number of

credits allotted to courses with descriptions or titles that included terminology associated with ethics (e.g. ethics, professionalism and regulation) ranged from 2.1% to 17.4%. Courses also varied in terms of place in the program (e.g. beginning or end of curriculum), and the type of course in which ethics content was included (e.g. a specific course dedicated to ethics or integration within clinical courses or communication courses) [13]. The methodology of reviewing online course descriptions is limited, as these may not accurately represent the actual course content, objectives or pedagogical approaches [22,23].

Finally, there may be barriers to effective ethics teaching and learning, such as students' lack of clinical experience to fully appreciate the relevance of ethics content and the perception that ethics is a low priority topic [24]. Ethics teaching is largely unstructured across Canadian programs [3,25] and limited knowledge exists about the nature and characteristics of current ethics teaching in Canadian PT and OT university entry-level training programs.

Objective

The objectives of this survey were to examine the place of ethics teaching in entry-level Canadian PT and OT program curricula, to identify and describe pedagogical methods used and to explore obstacles to ethics teaching.

Methods

We conducted an online survey (using the Survey Monkey platform) that included 16 closed and open-ended questions. The survey was created by the researchers based on recent literature about ethics teaching and included questions related to participants' background as ethics educators, ethics content in their teaching, pedagogical approaches used and obstacles faced. The survey was then pilot-tested by two members of the research team who are ethics educators at different universities. Revisions were made to improve clarity, flow and comprehensiveness. A list of potential participants was generated by a previous study of individuals responsible for teaching ethics in Canadian PT and OT programs [13], supplemented by snowball sampling (potential participants were asked to identify other ethics educators/coordinators/administrative staff who might be interested). A research assistant emailed and called prospective participants to identify their willingness to participate. An email was sent to participants ~2 weeks after the first contact to remind them to complete the survey. The survey was distributed in the winter of 2013 and completed in either French or English, at the participant's choice. In cases where multiple participants responded from the same program, we aggregated and analyzed the data by university program. For example, if a program had many participants, we looked at their descriptive data to identify the key respondent in relation to ethics teaching (i.e. the specific course they were involved in and their role: coordinator of a course, main ethics educator, coordinator of the program and lecturer) and prioritized their answer if there was discordance between the responses. The University of Montreal Health Research Ethics Board (CERES) approved the project.

Results

The survey was sent to 103 individuals and was completed by 55 (53.4% participation); at least one participant per program completed the survey, thus providing a comprehensive mapping of PT and OT ethics teaching in Canada. Findings relate to the place of ethics in PT and OT curricula, the training level of ethics educators, the educational approaches used and the obstacles to ethics teaching encountered by ethics educators.

Where in the curriculum is ethics being taught?

The location of ethics teaching within the curricula and the amount of time dedicated to ethics is highly variable across Canadian university programs. In PT programs, ethics teaching ranges from 5 to 61 h and in OT programs, from 5 to 65 h. Two PT and four OT programs teach >35 h in their curricula (Figure 1).

The format of ethics teaching also varied across programs. Some participants reported that their programs teach ethics as a cross-cutting theme throughout the curriculum, while others stated that it was taught as a separate topic with a specific named course. Participants who reported a specific number of hours dedicated to ethics teaching rather than an approximate range tended to teach in programs in which ethics had been mapped across their programs. However, most educators expressed uncertainty about total hours of ethics teaching, not knowing if or where ethics content was included outside of their own courses.

Who teaches ethics content in Canadian PT and OT programs?

Among the 42 participants who teach an ethics course or a course with substantial ethics content, nearly two-thirds (64.3%) do not have post-graduate training in ethics; the others have completed either a graduate course in ethics (21.4%) or a graduate diploma related to ethics (e.g. PhD in theology, philosophy or bioethics; 13.5%; Table 1).

Table 1. Training level of ethics educators in Canadian PT or OT programs.

Training level in ethics	Teaching in PT	Teaching in OT	Teaching in PT/OT ^a	Total percentage
No graduate training	10	12	5	64.3
PhD in ethics	1	2	2	11.1
Master's in ethics	0	1	0	2.4
Ethics graduate course	2	3	4	21.4
Total	13	18	11	100

^aParticipants teaching in combined PT/OT courses or to both PT and OT students.

How is ethics taught in Canadian PT and OT programs?

The most popular educational approaches are directed reading, lectures and problem-based learning. These traditional methods are used in nearly all programs. Many other approaches are widely used including: seminars, case-study analysis, web-based discussions, quizzes and interactive student participation methods such as debates, ethics deliberations or role-play exercises. Some programs also used more innovative educational approaches such as conceptual maps to illustrate an ethical reflection. Two participants from different universities reported using experiences during clinical electives as a starting point for ethical reflection and discussion. Participants also used external resources such as the ethics e-learning module of the College of Physiotherapists of Ontario (<http://www.collegept.org/Resources/ElearningModules/Ethics>) or the Values-Exchange website (David Seedhouse website: <http://www.values-exchange.com/>). Videos were also used as a pedagogical tool to illustrate ethical or professionalism issues; one participant used video clips of professional misconduct as the basis for individual written assignments (Table 2).

What are the obstacles to teaching ethics?

Participants identified diverse obstacles to ethics teaching, which can be divided into three categories: (1) organizational factors related to academic programs and their structure, (2) factors related to students and (3) factors related to the topic of ethics itself (Table 3).

Organizational factors related to academic programs and their structure

The most frequently reported barrier is the priority given by programs to clinical courses, with very limited time allotted to ethics. Participants viewed this as problematic given that ethics is a complex topic that requires time to develop expertise and learn the skills of ethical decision-making. Program structure is also a significant obstacle for many educators. For example, the timing of ethics teaching in the curriculum constitutes a challenge for programs with multiple entry points (i.e. baccalaureate and master level). When ethics is taught prior to clinical practice, it is more difficult for students to understand its value, since they have not

Table 2. Ethics educational approaches in Canadian PT or OT programs.

Ethics educational approaches	PT programs (n = 14)	OT programs (n = 14)	Total (n = 28)	Total percentage
Directed readings	13	14	27	96.4
Lectures	13	13	26	92.9
Problem-based learning	13	12	25	89.3
Seminars	7	5	12	42.9
Student interactions	4	7	11	39.3
Debate	1	3		
Ethics deliberation simulation	3	3		
Role play	0	1		
Case studies	1	7	8	28.6
Web-based discussions	3	4	7	25.0
Quizzes	2	3	5	17.9
Other	6	5	11	39.3
Inter-professional seminars	1	0		
Videos	2	1		
Conceptual maps	0	1		
Online courses	1	1		
Student-led presentations	1	0		
Clinical elective debriefings	1	1		
Artistic representations	0	1		

Table 3. Obstacle to ethics teaching identified by survey participants.

Themes	Obstacles	PT programs	OT programs	Total
Organizational factors	Competition with clinical courses	9	12	21
	Structure of the curricula	9	9	18
	Lack of educator training	3	4	7
	Engaging all educators	3	2	5
	Lack of resources	2	1	3
	Large class sizes	3	0	3
Factors related to students	Lack of clinical experience	3	3	6
	Lack of interest	1	4	5
	Hidden curriculum	1	0	1
	Student background	2	1	3
	Perceived as “just a soft skill”	3	0	3
Factors specific to ethics	Lack of teaching/evaluation tools	2	4	6
	Complex nature	2	4	6
	Lack of recognition	3	1	4

yet been exposed to ethical issues related to the practice of their profession. Many participants also highlighted the lack of a systematic or integrated approach to teaching ethics in their respective curricula; in some programs, ethics is perceived as a separate, isolated topic and its concepts are not discussed in other courses.

Another obstacle is the lack of resources – both physical and human – required to facilitate small-group discussions and engage students with innovative pedagogical methods. Also, class sizes are typically large. One participant expressed: “Only lecturing is not, to my mind, the best way of teaching ethics. Students need practice in analyzing actual cases. With 80 students it is difficult to schedule adequate opportunities and time for students to present”. Other participants discussed the value of training with other healthcare professional students (e.g. PT and OT students in the same class, or with medical students). While such training would be pertinent for addressing teamwork and inter-professional ethical issues, in many programs it is difficult to schedule. Participants also described a lack of specialized ethics training among ethics educators: “Programs think anyone can teach it [ethics] – We wouldn’t do this with other content.” Finally, difficulty in convincing educators of clinical courses to include ethics content (such as ethical issues) in their course plans was reported as a barrier to an integrated approach to ethics teaching.

Obstacles related to students

Many participants reported that students lack interest and do not value ethics courses as much as skill-based courses (e.g. manual therapy courses). This lack of interest in or appreciation for the pertinence of ethics teaching was also attributed to students’ limited clinical experience, especially early in their training. Also, while ethics itself is very complex, it is nonetheless perceived as a “soft skill”, so students (and at times other faculty members) do not place much value in ethics teaching as they think common sense is sufficient. Yet, participants noted that ethics cannot be reduced to good intentions, abiding by the law or following ethical codes of conduct. Others reported that while ethics requires in-depth analysis with reflective practice, it is easier for students to develop knowledge than reflective practices. Finally, one participant reported the “hidden curriculum” as an obstacle where students sometimes learn ways of dealing with ethical issues and adopt approaches to decision-making based on the example set by their clinical tutors and supervisors, but which may be out of step with the ethical decision-making skills and knowledge learned in class.

Obstacles related to the topic of ethics

Participants reported that there is a lack of available specific teaching and evaluation tools, including a lack of stimulating educational resources for ethics teaching, that are relevant to the Canadian PT and OT context. They also face challenges integrating ethical theory that can address issues in rehabilitation ethics as ethical theory was traditionally applied to more medical situations. Participants also underlined the importance of addressing the ethics of teamwork in clinical practice, including divergent roles and values of interdisciplinary teams.

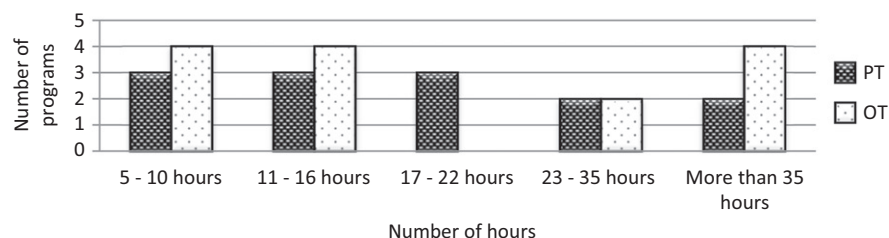
The responses of participants reflected the view that ethics for clinical practice is a very complex topic. This complexity is challenging for educators seeking to prepare students to be able to respond effectively to ethical issues that they will encounter in future practice. Teaching ethics can also help raise students’ awareness of the assumptions, values and beliefs that they carry into practice. To achieve these goals, students require opportunities and sufficient time to practice the in-depth ethical analysis of cases, as a high level of sophistication is needed to deal with complicated ethical issues.

Participants noted that with the expanding scope of the core curriculum, often taught in a more compressed timeframe due to the shift to a Master’s level of training, ethics teaching does not appear to be a priority in PT and OT training programs. A challenge is therefore to ensure that ethics content is presented and reinforced as students progress through the program by engaging all educators to include ethical issues in their clinical course scenarios.

Discussion

Our survey revealed broad variation between Canadian PT and OT programs in the number of hours dedicated to teaching ethics in their respective curricula, which ranged from 5 to 65 h. This is in line with the findings of Barnitt [14] and Brockett [3] who found little consistency between ethics curricula in rehabilitation programs. However, there is a marked increase in ethics teaching in 2013 as compared with 1994 when Canadian OT programs were providing only 2–15 h of ethics teaching [3]. Some programs stand out with significantly more hours dedicated to ethics throughout a student’s training. Most participants nonetheless expressed uncertainty related to the total number of hours dedicated to ethics (outside their own courses). These results reveal that ethics content is not often rigorously mapped across the curriculum and that a great deal of ethics teaching may be informal. Moreover, it can be difficult for participants to determine what should be included in the “ethics teaching”

Figure 1. Range of hours dedicated to ethics teaching in Canadian programs.



category of the curriculum. Some participants might include teaching on cultural issues, or conflict resolution as part as the ethics curricula, while others may not. Therefore, even though participants identified the number of hours dedicated to ‘ethics’, important differences may well exist regarding what content (and thus time) was included as part of ethics training. Furthermore, there are structural differences in the Canadian PT/OT programs: some programs are a bachelor-master’s continuum (4.5 years) (four PT programs and five OT programs, all in the province of Quebec) and others are a 2-year master’s degree (17 programs). It is thus difficult to interpret the discrepancies in the number of hours of ethics teaching due to differences in the overall number of courses/credits.

PT and OT ethics teaching has traditionally been done through large group lectures [26]. Even though other pedagogical methods are now widely used in Canadian programs (e.g. problem-based learning and case-study analysis), some educators have introduced innovative pedagogical methods (e.g. videos and conceptual maps or elective debriefing). Our survey showed that there is a wide range of approaches used to provide opportunities to develop ethical reasoning. We also observed that PT and OT programs have taken the digital technology turn [27], with many ethics educators enhancing their courses with web-based university management systems, video or online courses. Some studies demonstrate that a combination of pedagogical methods is more effective than a single approach [28,29]. A study conducted with masters-level healthcare students revealed that the combination of lectures and student-led presentations was more effective than either alone [28]. In a group of introductory psychology students, a lecture and case-study combination resulted in better performance in identifying and resolving ethical issues than lectures alone [29]. Thus, even if there may be no consensus on the *best methods* to be used in the ethics teaching in Canadian health professional programs, ethics educators are experimenting with a wide variety of teaching tools in order to identify those that are effective and adapted to their particular contexts. Research on the effectiveness of current methods of teaching and evaluation is needed to support ethics educators and programs to implement evidence-based ethics education training.

Our study highlights many obstacles to ethics teaching in Canadian PT and OT programs. The barriers to ethics teaching found in our survey resemble those identified in the literature in rehabilitation [24] and medicine [30–35]. One important finding is that many ethics educators have limited formal training in the subject matter. In our survey, 65% of ethics educators did not have any specialized training in ethics. This finding echoes Brockett’s earlier study, where programs relied on their faculty members to teach ethical reasoning while recognizing that they did not hold formal qualifications in the subject [3]. In all content areas, educators must have the necessary theoretical and applied competencies and experience in order to provide students with relevant and up-to-date training [36]. The World Confederation of Physical Therapy encourages universities to deliver education by qualified faculty members who ‘have appropriate education and/or credentials to teach basic and foundational sciences (e.g.

anatomy, histology, physiology, imaging and pharmacology), behavioral and social sciences (e.g. psychology, *ethics* and sociology), movement sciences (e.g. kinesiology, biomechanics and exercise science) and research methodology’ (our emphasis) [37]. Across teaching domains, such expertise could, minimally, be developed by educators through the reading of academic papers, attending conferences and receiving mentoring/advice from more experienced and knowledgeable colleagues [36].

However, as stated earlier, ethics education involves helping students to learn how to recognize ethical issues and to develop a sound analysis to guide their responses [15]. Therefore, an ethics educator would require the appropriate knowledge to guide the process of ethical issue identification, and the ethical reasoning analysis process. The lack of ethics training of PT and OT educators in our survey could also reflect the lack of development of ethical reasoning tools in the PT and OT professions. Some theoretical tools specific to rehabilitation are beginning to emerge, such as ethical frameworks to analyze ethical issues [38,39] or books [40–42] and these developments should contribute to a stronger knowledge of rehabilitation ethics.

Training future professionals should not be based solely on providing the tools to be efficient service providers; it is essential to also teach the ethical complexities affecting practice [12]. The expertise of future physiotherapists and occupational therapists is based on competencies that go beyond technical abilities since human relationships are at the heart of these professions [43–45]. Attributes of a ‘good’ professional include multidimensional competencies (such as having the role of communicator, collaborator, advocate and professional) that have been identified in the Canadian Essential Competency Profile for physiotherapists [46], occupational therapists [47] and physicians [48]. Ethics teaching can contribute to developing professionalism and advocacy competencies. Thus, it is surprising that low priority is given by so many programs to ethics courses, as demonstrated by a lack of resources (human and space in the curricula) to allow for optimal pedagogical strategies. This situation could further reinforce the perception by many students and other faculty that ethics is a low priority topic. Also, a lack of resources may negatively affect students’ development of complex skills associated with ethical decision-making, ultimately affecting the quality of the clinical services they provide.

In order to precisely assess the place accorded to teaching ethics in PT and OT programs, further mapping of ethics content inside and across rehabilitation programs is needed. Such an initiative could also be conducted internationally thus helping to advance knowledge of ethics teaching in rehabilitation programs more globally.

To support ethics educators, the creation of a national or an international community of PT and OT ethics educators could help address obstacles and promote improved rehabilitation ethics training. This community could share ethics training tools, resources and knowledge; and they could also be engaged in the provision of continuing education for faculty and other educators. For example, our group organized a workshop in May 2014 (the Canadian Rehabilitation Ethics Workshop: CREW day) as a

knowledge exchange activity. This workshop allowed us to bring together educators from all Canadian PT and OT programs to share their experiences, knowledge, reflections and concerns about the current state of Canadian rehabilitation ethics teaching (*what is currently taught*), and to then explore innovative models to improve rehabilitation ethics education (*what should be taught*) in their respective programs. This was also a first step to building a community of practice dedicated to ethics education that could help develop shared best practices. Future research will base knowledge exchange initiative on the Ottawa Model of Research Use (OMRU) [49], a model that promotes the development and use of new knowledge [50].

Limitations

This study aimed to examine ways and challenges of teaching ethics in entry-level Canadian PT and OT programs. Participants included at least one educator from each of the 28 Canadian university PT and OT departments, thus ensuring representation from all programs. However, our methodology prevented us from knowing whether respondents were the current “key ethics educator” in each program. Another limitation is that we did not define “ethics” in the survey and there may have been some variability in answers based on participants’ own definitions; Aguilar [51] described a similar issue with studying “professionalism”. Our survey thus presents participants’ views of what they defined as ethical content. As an example, none of the participants discussed clinical electives as part of the ethical curricula, probably as this informal approach to teaching ethics is neither extensive nor systematic [52]. However, two programs conduct clinical elective debriefing to discuss and analyze specific ethical issues that occurred during student electives. Also, participants might have been unaware of the ethics content of courses other than their own. This could lead to an underestimation of the hours or the topics covered. Finally, the survey contained many closed questions to facilitate inter-university comparison, along with open-ended questions to capture nuances between programs. The inclusion of closed questions, however, limited our ability to develop a complete or detailed picture of ethics teaching within Canadian PT and OT programs. In order to develop a clearer portrait of approaches and challenges to teaching ethics, and potential solutions, it would be useful to further explore the experiences of ethics educators.

Conclusion

The survey findings provide an informative picture of the state of ethics teaching in Canadian PT and OT entry-level programs. There is a diversity of ways to integrate ethics in PT and OT curricula and a panoply of educational approaches used, suggesting that there is little consensus about best practices or the best approach to teaching ethics. Further research on teaching and evaluation approaches, and assessment of the effectiveness of current ethics teaching in rehabilitation programs would support the implementation of more evidence-based ethics education and training. Obstacles to ethics teaching identified in this study are shared across Canadian PT and OT programs. The creation of a community of PT and OT ethics educators – and the sharing of ethics training tools, resources and knowledge – would, we propose, help to address some of these obstacles and promote improved rehabilitation ethics training.

Acknowledgements

The authors wish to thank the survey participants. A special thanks to Vickie Sonier and Valérie Badro for their help as research assistants.

Declaration of interest

Maude Laliberté holds a doctoral fellowship from the Fonds de recherche du Québec-Santé (FRQ-S). Anne Hudon was supported by a doctoral fellowship from the MENTOR program in collaboration with the Canadian Institutes of Health Research (CIHR), the Quebec Research Rehabilitation Network (REPAR) and the FRQ-S. Matthew R. Hunt and Debbie Feldman was supported by salary award from the FRQ-S. Financial support for this research was also received from the CIHR #EOG-120255, the Canadian Arthritis Network and the Dominion of Canada General Insurance administered by the Physiotherapy Foundation of Canada.

References

1. Cohen JJ. Professionalism in medical education, an American perspective: from evidence to accountability. *Med Educ* 2006;40: 607–17.
2. Kornblau BL, Burkhard A. Ethics in rehabilitation: a clinical perspective. 2nd ed. Thorofane (NJ): Distributed in Canada by Login Bros; 2012.
3. Brockett M. Ethics, moral reasoning and professional virtue in occupational therapy education. *Can J Occup Ther* 1996;63: 197–205.
4. Barnitt R. Ethical dilemmas in occupational therapy and physical therapy: a survey of practitioners in the UK National Health Service. *J Med Ethics* 1998;24:193–9.
5. Carpenter C, Richardson B. Ethics knowledge in physical therapy: a narrative review of the literature since 2000. *Phys Ther Rev* 2008; 13:366–74.
6. Kulju K, Suhonen R, Leino-Kilpi H. Ethical problems and moral sensitivity in physiotherapy: a descriptive study. *Nurs Ethics* 2013; 20:568–77.
7. Swisher LL, Kessel Gv, Jones M, et al. Evaluating moral reasoning outcomes in physical therapy ethics education: stage, schema, phase, and type. *Phys Ther Rev* 2012;17:167–75.
8. Davidson G, Garton AF, Joyce M. Survey of ethics education in Australian university schools and departments of psychology. *Aust Psychol* 2003;38:216–22.
9. Verma S, Paterson M, Medves J. Core competencies for health care professionals: what medicine, nursing, occupational therapy, and physiotherapy share. *J Allied Health* 2006;35:109–15.
10. World Confederation for Physical Therapy. WCPT guideline for physical therapist professional entry level education. London: WCPT; 2011.
11. World Federation of Occupational Therapists. WFOT Entry-level competencies for occupational therapists. Australia: WFOT; 2008.
12. Escámez J, García López R, Jover G. Restructuring university degree programmes: a new opportunity for ethics education? *JME* 2008;37:41–53.
13. Hudon A, Laliberté M, Hunt M, et al. What place for ethics? An overview of ethics teaching in occupational therapy and physiotherapy programs in Canada. *Disabil Rehabil* 2014;36:775–80.
14. Barnitt R. ‘Deeply troubling questions’: the teaching of ethics in undergraduate courses. *Br J Occup Ther* 1993;56:401–6.
15. Delaney C. Ethics education will help clarify issues. *Aust J Physiother* 2009;55:1.
16. Sisola SW. Moral reasoning as a predictor of clinical practice: the development of physical therapy students across the professional curriculum. *J Phys Ther Educ* 2000;14:26–34.
17. Geddes EL, Salvatori P, Eva KW. Does moral judgement improve in occupational therapy and physiotherapy students over the course of their pre-licensure training? *Learn Health Soc Care* 2009;8: 92–102.
18. Self DJ, Baldwin DC, Wolinsky FD. Evaluation of teaching medical ethics by an assessment of moral reasoning. *Med Educ* 1992;26: 178–84.
19. Self DJ, Olivarez M. Retention of moral reasoning skills over the four years of medical education. *Teach Learn Med* 1996;8: 195–9.
20. Canadian Association of Occupational Therapy (CAOT). The profile of occupational therapy practice in Canada. Ottawa: CAOT Publications ACE; 2007:31.

21. Council of Canadian Physiotherapy University Programs, Canadian Physiotherapy Association, Canadian Alliance of Physiotherapy Regulator, Accreditation Council of Canadian Physiotherapy Academic Programs. Entry-to-Practice Physiotherapy Curriculum: Content Guidelines for Canadian Physiotherapy Programs; 2009:70.
22. Parkes J, Fix TK, Harris MB. What syllabi communicate about assessment in college classrooms. *JECT* 2003;14:61–83.
23. Parkes J, Harris MB. The purposes of a syllabus. *Coll Teach* 2002; 50:55–61.
24. Solomon P, Geddes EL. Influences on physiotherapy students' choices to pursue learning related to ethics in a problem-based curriculum. *Physiother Can* 2000;52:279–85.
25. Brockett M, Geddes EL, Westmorland M, Salvatori P. Moral development or moral decline? A discussion of ethics education for the health care professions. *Med Teach* 1997;19:301–9.
26. Finley C, Goldstein M. Curriculum survey: ethical and legal instruction – a report from the APTA Department of Education and the APTA Judicial Committee. *J Phys Ther Educ* 1991;5:60–4.
27. Chipchase L. Physiotherapy education in a digital era: blending and flipping. *Phys Ther Rev* 2013;18:405–6.
28. Sapp M. Teaching ethics to mental health practica students at the master's level: a comparative study. *Coll Stud J* 1995;29: 333–46.
29. Fisher CB, Kuther TL. Integrating research ethics into the introductory psychology course curriculum. *Teach Psychol* 1997; 24:172–5.
30. Diekema DS, Shugerman RP. An ethics curriculum for the pediatric residency program: confronting barriers to implementation. *Arch Pediatr Adolesc Med* 1997;151:609–14.
31. Strong C, Connelly J, Forrow L. Teachers' perceptions of difficulties in teaching ethics in residencies. *Acad Med* 1992;67: 398–402.
32. Pauls MA. Teaching and evaluation of ethics and professionalism In Canadian family medicine residency programs. *Can Fam Phys* 2012; 58:e751–6.
33. Hafferty FW, Franks R. The hidden curriculum, ethics teaching, and the structure of medical education. *Acad Med* 1994;69:861–71.
34. Bryden P, Ginsburg S, Kurabi B, Ahmed N. Professing professionalism: are we our own worst enemy? Faculty members' experiences of teaching and evaluating professionalism in medical education at one school. *Acad Med* 2010;85:1025–34.
35. Lehmann LS, Kasoff WS, Koch P, Federman DD. A survey of medical ethics education at US and Canadian medical schools. *Acad Med* 2004;79:682–9.
36. Hill IV G, Zinsmeister D. Becoming an ethical teacher. In: Buskist W, Benassi VA, editors. *Effective college and university teaching: Strategies and tactics for the new professoriate*. USA: SAGE; 2012.
37. World Confederation for Physical Therapy. WCPT Policy Statement on Education. London: WCPT; 2011.
38. Drolet M-J, Hudon A. Theoretical frameworks used to discuss ethical issues in private physiotherapy practice and proposal of a new ethical tool. *Med Health Care Philos* 2015;18:51–62.
39. Hunt MR, Ells C. A patient-centered care ethics analysis model for rehabilitation. *Am J Phys Med Rehabil* 2013;92:818–27.
40. Drolet M-J. De l'éthique à l'ergothérapie. La philosophie au service de la pratique ergothérapique. Québec: Presses de l'Université du Québec; 2013.
41. Kornblau BL, Burkhardt A. *Ethics in rehabilitation: a clinical perspective*. Thorofane (NJ): Slack Incorporated; 2012.
42. Purtilo RB, Doherty EF. *Ethical dimensions in the health professions*. St. Louis (MO): WB Saunders Company; 2011:448.
43. Shepard KF, Hack LM, Gwyer J, Jensen GM. Describing expert practice in physical therapy. *Qual Health Res* 1999;9: 746–58.
44. Jensen GM, Gwyer J, Shepard KF, Hack LM. Expert practice in physical therapy. *Phys Ther* 2000;80:28–43.
45. Bennett S, Bennett JW. The process of evidence-based practice in occupational therapy: informing clinical decisions. *Aust Occup Ther J* 2000;47:171–80.
46. National Physiotherapy Advisory Group/ Groupe consultatif national en physiothérapie. *Essential Competency Profile for Physiotherapists in Canada*; 2009.
47. Association of Canadian Occupational Therapy Regulatory Organizations. *Essential Competencies of Practice for Occupation Therapist in Canada*; 2011.
48. Grantcharov TP, Reznick RK. Training tomorrow's surgeons: what are we looking for and how can we achieve it? *ANZ J Surg* 2009;79: 104–7.
49. Logan J, Graham I. Toward a comprehensive interdisciplinary model of health care research use. *Sci Commun* 1998;20:227–46.
50. Weiss CH. The many meanings of research utilization. *Public Adm Rev* 1979;39:426–31.
51. Aguilar A, Stupans L, Scutter S. Assessing students' professionalism: considering professionalism's diverging definitions. *Educ Health Change Learn Pract* 2011;24:599.
52. Handelsman MM. Problems with ethics training by "osmosis". *Prof Psychol Res Pr* 1986;17:371–2.