



What place for ethics? An overview of ethics teaching in occupational therapy and physiotherapy programs in Canada

Anne Hudon, Maude Laliberté, Matthew Hunt, Vickie Sonier, Bryn Williams-Jones, Barbara Mazer, Valérie Badro & Debbie Ehrmann Feldman

To cite this article: Anne Hudon, Maude Laliberté, Matthew Hunt, Vickie Sonier, Bryn Williams-Jones, Barbara Mazer, Valérie Badro & Debbie Ehrmann Feldman (2014) *What place for ethics?* An overview of ethics teaching in occupational therapy and physiotherapy programs in Canada, *Disability and Rehabilitation*, 36:9, 775-780, DOI: [10.3109/09638288.2013.813082](https://doi.org/10.3109/09638288.2013.813082)

To link to this article: <https://doi.org/10.3109/09638288.2013.813082>



Published online: 18 Jul 2013.



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



Article views: 1832



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 23 View citing articles [↗](#)

EDUCATION AND TRAINING

What place for ethics? An overview of ethics teaching in occupational therapy and physiotherapy programs in Canada

Anne Hudon^{1,2}, Maude Laliberté^{1,2,3}, Matthew Hunt^{2,4}, Vickie Sonier¹, Bryn Williams-Jones³, Barbara Mazer^{2,4}, Valérie Badro⁵, and Debbie Ehrmann Feldman^{1,2}

¹École de réadaptation, Université de Montréal, Montréal, Canada, ²Centre for Interdisciplinary Research in Rehabilitation of Greater Montreal, Montréal, Canada, ³Programmes de bioéthique, Département de médecine sociale et préventive, Université de Montréal, Montréal, Canada, ⁴School of Physical and Occupational Therapy, McGill University, Montréal, Canada, and ⁵Albert Gnaegi Center for Health Care Ethics, Saint Louis University, Saint Louis, USA

Abstract

Purpose: The recent introduction of master's level curricula for Occupational Therapy (OT) and Physiotherapy (PT) training programs in Canada raises both challenges and opportunities to address ethical issues during professional training. This study evaluated the inclusion of ethics content in course descriptions and course calendars in order to develop a preliminary understanding of how rehabilitation ethics is taught in Canadian universities. **Method:** We reviewed the ethics content in the online curricula of 27 Canadian rehabilitation programs (OT & PT). Courses addressing ethical issues were identified through keyword searches, and were then subjected to both quantitative and textual descriptive analyses. **Results:** The mean proportion of credits allotted to courses that included ethics terminology was 5.9% (SD = 1.4) for OT and 6.5% (SD = 4.8) for PT ($p = 0.69$). The most common terms in the course descriptions were "ethics/ethical" followed by "legal", "professionalism", "deontology" and "regulatory". Textual analysis revealed eight course topics, the most frequent being: standards of practice, ethical decision-making, clinical courses and mediation/communication. **Conclusion:** With the growing recognition and status of OT and PT in the healthcare system, and corresponding shifts in how professionals are being trained, it is crucial to assess and reflect upon the place accorded to and manner of teaching ethics.

Keywords

Curriculum, education, ethics, occupational therapy, physiotherapy

History

Received 29 November 2012

Revised 22 April 2013

Accepted 5 June 2013

Published online 18 July 2013

► Implications for Rehabilitation

Ethics training in rehabilitation programs

- With the evolving recognition of OT and PT professions within the healthcare system, and corresponding shifts in how future professionals are trained, it is crucial to assess the place accorded to teaching ethics.
- In Canadian OT and PT programs, ethics content is most commonly included in broad courses related to standards of practice and not in specific ethics courses.
- Careful attention is needed to ensure that OT and PT students receive sufficient ethics training that is well aligned with their future practice context to support them to competently address the ethical issues that they will encounter in clinical practice.
- In addition, OT and PT professionals would benefit from the development of continuing education activities that target ethical issues relevant to their practice.

Introduction

Several countries, including the USA, Australia and Canada have experienced significant shifts in the training required for professional practice for occupational therapists and physiotherapists (Canadian Physiotherapy Association (CPA), American Occupational Therapy Association (AOTA), Australian Physiotherapy Association (APA)). In Canada, 2010 was the final target date for a transformation of Canadian rehabilitation

training programs, from offering Bachelor's to Master's level degrees in Occupational Therapy (OT) and Physiotherapy (PT) as a prerequisite for licensing. This academic transition from undergraduate to graduate programs was the result of a concerted effort between academic and professional OT and PT organizations across the country, and also aimed to align with the United States which had already transitioned to a master's program requirement for professionals (American Physical Therapy Association (APTA), AOTA). This important change in training reflects the shifting expectations and roles of these professions within the healthcare system. In Canada, physiotherapists (PTs) and occupational therapists (OTs) are considered primary care practitioners (i.e. clients can directly access PT and OT services

without a doctor's referral) and are responsible for maintaining a high level of competency and knowledge.

As the scope of practice of OTs and PTs has expanded, these clinicians are experiencing additional ethical challenges and situations of ethical uncertainty [1–8]. Sources of these ethical challenges include decisions related to: access to care, resource limitations, length and quality of treatments, billing, treatment multiplication, amongst others [9–12]. Rehabilitation trainees need to be well prepared to respond to the ethical issues that they will encounter in their future practice. Given the recent transformation of training programs in Canada to a Master's level standard, it is worth questioning the degree to which new curricula provide sufficient support and skills to enable professionals to address these ethical challenges. Such training is of paramount importance for students so that they can provide the best possible management for their future clients. Academic training programs are an important opportunity to learn about different ethical issues and enable the development of practical ethical reasoning skills that can prepare trainees to become responsible care providers.

Several studies have evaluated the inclusion of ethics topics in the academic curricula of OT and PT programs. In a survey conducted by the APTA in 1991, 92 of the 95 responding PT programs included ethical issues in their curricula [13]. A survey conducted by Barnitt in England in 1992 found that 15 of the 22 PT programs included ethics in their curricula, with the following main topics: clinical work, professional issues and research ethics [14]. Brockett replicated Barnitt's questionnaire in Canada in 1996 and received responses from 11 of 12 OT programs [15]. The results indicated that there was support for ethics teaching in Canadian universities, with a particular focus on norms of practice and codes of ethics. However, there was much less evidence that students were given opportunities to learn about and develop ethical decision-making skills, suggesting that the focus was restricted to a form of ethics that highlights standards, rules and regulations [15]. In a special "ethics" issue of the *Journal of Physical Therapy Education* in 2000, numerous authors stressed the need for increased ethical teaching time inside PT program curricula [16–22].

Currently, two documents govern the academic curriculum accreditation of the 14 OT and 14 PT academic programs (spread across 15 universities) in Canada: *The Profile of Occupational Therapy Practice* (CATO), updated in 2007, by the Canadian Association of Occupational Therapists, and the *Entry-to-Practice Physiotherapy Curriculum: Content Guidelines for Canadian Physiotherapy Programs*, updated in 2009, by the Canadian Universities Physiotherapy Academic Council (CUPAC) in collaboration with the CPA [23,24]. The contents of both documents are based on the Canadian Medical Education Directives for Specialists (CanMEDS framework) published by the Royal College of Physicians and Surgeons of Canada [25,26]. Both the OT and PT documents detail how professionalism and ethical issues ought to be addressed in teaching curricula. However, the *Profile of Occupational Therapy Practice* does not specify how these competencies are to be acquired, nor does it indicate whether they should be taught in theoretical courses or during clinical rotations. The *Entry-to-Practice Physiotherapy Curriculum: Content Guidelines for Canadian Physiotherapy Programs* specifies that these domains ought to be taught as part of theoretical courses and that other skills and behaviours related to ethics and professionalism are to be included in training and fieldwork sessions across degree programs. Some knowledge guidance is also provided such as ethical theories and reasoning models commonly used in bioethics, the rationale for codes of ethics, issues related to informed consent, conflict of interests and ethical business practice.

As their titles indicate (i.e. profile/content guidelines), these documents do not articulate specific or detailed requirements for the particular elements of a course curriculum; rather, they provide general guidance for developing the curricular content of Canadian OT and PT programs. Universities have the freedom to decide how their students will develop the relevant competencies within each of their programs. Universities seeking to integrate these guidelines have to interpret the relatively general statements and content, while also managing the time constraints inherent in professional undergraduate/graduate programs and the need to include many other competencies in the curriculum. Although all university-level OT and PT programs include some teaching of concepts related to ethics, it is unclear how this is actually carried out in practice, how much time is devoted to these topics, and whether key issues are addressed in a consistent and systematic fashion.

Given the apparent variability in ethics teaching and a lack of detailed standards for including ethics in the professional curriculum, we sought to develop a preliminary understanding of how rehabilitation ethics is actually taught. We conducted a study to collate and describe the ethics courses in use in Canadian university OT and PT programs, by reviewing all courses taught in these programs and the ethical language and issues included in the course descriptions.

Methods

We began by accessing the online program curricula of the 28 Canadian programs. Between May and November 2012, we examined all Canadian OT and PT university program websites. By "program", we refer to the entire curriculum leading to a degree. The term "course" refers to the series of classes given on a particular subject, usually lasting a semester and for which a specific number of credits is attributed (e.g. a 3-credit course). For each program, the course names, numbers and official descriptions were collected. Other information about the structure of the different programs, if available online, was also collected (e.g. number of credits for each program and for specific courses). If the information was not accessible online, the hardcopy university calendar was consulted. For the OT programs, data collection did not include McMaster University because the course descriptions were not available online nor were we able to access them in hardcopy format. We then collected the official "course descriptions" for each of the courses given in the 27 (of 28) OT and PT programs (i.e. the information available on the institutional website concerning the content taught in a specific course). The format of the course description is standardized by the registrar of each university and is typically presented in the form of a few descriptive sentences. Online course descriptions describe major subjects taught within the course.

In order to identify courses in which ethics issues were most likely to be addressed, the research team agreed on a set of pertinent keywords, in English and in French: ethical, ethics, professionalism, legislation, deontology, regulation, éthique, professionnalisme, lois, déontologie and règlements. One or more of these keywords had to be found in the title of the course or in the official course description. Two researchers (A.H., V.S.) separately read the descriptions of all courses from the 27 available OT and PT programs in order to ensure inclusion of all appropriate courses; 36 OT and 39 PT courses containing the specific keywords were retained for the analysis. Some courses not specifically containing the predetermined keywords, but that included terms or concepts that were judged to be relevant to ethics (e.g. contained words or concepts such as "equity in access to care", "sensitive practice", "current professional issues",

“reflective reasoning”, “current debates in health system”) were retained for further examination (13 courses for OT programs and 7 for PT).

The selected course descriptions were then assessed anew by the same two researchers to identify and remove those courses that only included ethics content related to research ethics. This step was implemented because the focus of our study was on clinical and professional ethics. Four courses in OT and five courses in PT were removed from the final analysis based on this criterion. The course descriptions that referred exclusively to training in clinic or hospital settings (fieldwork) were excluded at the beginning of the search, as it is difficult to standardize and calculate their ethical content using our methodology.

When the number of credits for specific courses or for the whole program was not available online, an e-mail requesting this information was sent to the program secretary. For one university, a phone call was also made to the registrar and to the department or program in order to access this information. Some universities (e.g. McMaster University PT program) do not use the concept of credits referring to teaching hours. In those cases, the number of credits was calculated by the researchers in proportion to the total number of courses of the entire program (e.g. 23 half courses over 6 terms for McMaster University).

Since the university course descriptions are public information accessible online, no research ethics approval was necessary for this study and this was confirmed by the Research Ethics Board – the *Comité d'éthique de la recherche en santé* (CÉRES) – at Université de Montréal.

Analysis

A quantitative analysis was conducted for each of the 13 OT and 14 PT programs to examine the percentages of credits attributed to the course descriptions containing specific ethics keywords. As noted earlier, for the OT programs, the analysis did not include McMaster University because the course descriptions were not available. The mean percentages and standard deviations were calculated with data from all universities. After examining the

results, the mean percentage scores obtained for the University of Toronto in the OT and PT programs were excluded from the final percentage because their credit system differed from the other universities, leading to an overestimation of the percentage attributed to ethics teaching in their program. As a result, 12 OT programs and 13 PT programs are included in the final presentation of the quantitative results.

We conducted a descriptive textual analysis of all the selected course descriptions in order to categorize the primary topic(s) associated with each course. Two team members (A.H., M.L.) read all the course descriptions to identify their primary subject matter in order to better understand where ethical content was situated within the curricula of Canadian rehabilitation programs. Eight topics or categories were identified from this textual analysis, and each course description was classified into one or two of these categories. For example, the following text from a course description led us to classify this course as pertaining to the “standards of practice” category: “[...] students will be introduced to the core principles and concepts underlying the practice of the profession of PT and of clinical decision-making in a health care setting. Standards of practice and legal issues affecting the profession will be explored [...]”. An example of a course description classified in the “ethical decision-making” category included the following text: “Bioethical and methodological benchmarks to identify and analyze the issues, problems and dilemmas arising in various areas of practice of health professionals and solutions”.

Once all of the course descriptions were classified as pertaining to one or more of these categories, one of the researchers (A.H.) calculated the percentages represented by each of the eight categories in order to demonstrate the frequency with which ethics content was included in courses of these different types.

Results

Course descriptions

The courses pertaining to ethics teaching among all the evaluated curricula are presented in Table 1. The names of the universities, the number of courses and their associated number of credits are listed in the first three columns. The fourth column shows the

Table 1. Description of courses that include ethics keywords in their course description across Canadian university OT and PT programs.

Universities	Occupational Therapy Programs				Physiotherapy Programs			
	Courses containing keywords	Credits for courses containing keywords	Total number of credits per program	% of credits related to ethics per program	Courses containing keywords	Credits for courses containing keywords	Total number of credits per program	% of credits related to ethics per program
Master's programs only								
UBC	1	3	69	4.3	2	4	83	4.8
UALBERTA	2	4	68	5.9	4	6.5	88	7.4
USASK	N/A	N/A	N/A	N/A	3	10	141	7.1
UMANITOBA	1	7	107	6.5	3	11	102	10.8
WESTERN	3	9	87	10.3	0	0	N/D	0.0
McMASTER	2	N/D	N/D	N/D	2	12	69	17.4
UTORONTO	2	1	18	5.6	3	6	18.5	32.4
UOTTAWA	2	4.5	75	6.0	3	6	78	7.7
QUEEN'S	2	9	109	8.3	1	4	110	3.6
DALHOUSIE	2	6	78	7.7	1	3	82	3.7
Mean				***6.3				***6.9
Bachelor's–Master's Programs								
McGILL	3	9	148	6.1	5	19	148	12.8
UMONTREAL	4	10	135	7.4	2	4	135	3.0
USHERBROOKE	4	7	144	4.9	2	3	144	2.1
ULVAL	2	6	144	4.2	3	6	144	4.4
UQTR	2	6	135	4.4	N/A	N/A	N/A	N/A
Mean				5.4				5.5
Total Mean				5.9				6.5

***Excluding UTORONTO.

total number of credits by program. The last column indicates the percentage of ethics credits taught compared with the total number of credits for each program. The proportion of credits related to ethics across the two types of programs ranged from 4.3 to 10.3% for OT and from 2.1 to 17.4% for PT. There was no significant difference in the mean percentage of credits related to ethics between OT (mean 5.9%, SD = 1.4) and PT (mean 6.5%, SD = 4.8) programs (t_{14} (two-tailed) = 0.41, $p = 0.69$). There was no significant difference between the master's programs (mean 6.7%, SD = 3.8) and the bachelor's–master's programs (mean 5.5%, SD = 3.2) (t_{19} (two-tailed) = 0.86, $p = 0.4$).

Among the courses selected because they contained one or more of the chosen keywords, the terms “ethics/ethical” were the most common, found in 75% of OT and 71% of PT course descriptions. The term “legal” was the second most common, found in 34% and in 44% of OT and PT course descriptions, respectively. For the OT courses, “professionalism”, “deontology” and “regulatory” came third ex aequo with 16%; similarly, for PT courses, the term “professionalism” came third (21% of the courses), followed by “deontology” (9%) and “regulatory” (9%). It should be noted that the term “deontology”, which is used exclusively in French-language programs (i.e. Université de Montréal, Université de Sherbrooke, Université d'Ottawa), refers to “codes of ethics” and not to the philosophical theory. In most OT (73%) and PT courses (80%), when the term “legal” was present in a course description it co-occurred with the keyword “ethics/ethical”.

Among all the courses containing one or more of the keywords, we also identified courses that seemed to be entirely dedicated to teaching ethics. These were the courses that had “ethics” in their title. For the PT programs, four courses were identified in four different universities: Université de Montréal, Université Laval, University of Alberta and Dalhousie University. Among the OT programs, five courses were found in five different universities: Western University, Université de Montréal, Université Laval, Université de Sherbrooke and Université du Québec à Trois-Rivières. We also identified three courses that did not contain specific “ethics” keywords but included concepts related to access and equity in the distribution of rehabilitation services that are relevant to ethics. This was the case for two courses at Université Laval (one in PT and one in OT) and one OT course at Université d'Ottawa. For example, one course description included the following: “Major themes are discussed, for example, exclusion, social participation, recovery, involvement of cross-sectorial actors, *accessibility and equity of services*” or “[...] social and political mechanisms that influence *equitable provision of health care*”.

We also performed a descriptive textual analysis in order to categorize the primary topics of those courses that included ethics vocabulary in their course descriptions. The eight categories that were developed based on this analysis are presented in Table 2.

In total 73% of OT and 66% of PT courses containing at least one of the specific keywords were classified under the *standards of practice* topic, by far the most prevalent category in the two professions. In OT, only 18% of courses could be classified into the *ethical decision-making* category; in PT the corresponding percentage was 11. Additional topics for OT/PT included *clinical courses* (9% OT, 29% PT) *management* (6% OT, 9% PT) and *mediation/communication* (12% OT, 6% PT).

Finally, we looked at the 13 courses in OT and 7 courses in PT curricula that had been excluded from the final analysis because they did not contain any of the keywords, but nonetheless included material in their course descriptions relevant to ethics. We chose to classify these courses according to the eight previously determined categories. In the OT programs, the category *standards of practice* accounted for 77% of these courses while the others were classified under the topics *sociology*, *knowledge transfer* and *management*. In the PT programs, all seven courses (100%) were classified under the *standards of practice* category with several also attributed to the *management* and *health promotion* categories.

Discussion

Our results are important for the pedagogical leaders and teachers of university rehabilitation programs. First, the number of “ethics” credits per program obtained in the quantitative analysis of the 25 OT and PT schools are quite similar, ranging between 5.9 and 6.5%, which confirms that Canadian programs include ethics teaching in their programs. Though our methodology does not permit us to evaluate the content of what is actually taught, based on the review of the course descriptions, it appears that ethics teaching across the programs corresponds with the recommendations included in the *Profile of Occupational Therapy Practice* and the *Entry-to-Practice Physiotherapy Curriculum: Content Guidelines for Canadian Physiotherapy Programs* [23,24]. Most commonly, ethics content is included in broad courses related to standards of practice and not as specific ethics courses. Only five OT programs and four PT programs in Canada offer an entire course dedicated to teaching professional/clinical ethics. The small number of rehabilitation programs offering a complete ethics course does not correspond with the recommendations of many authors in the bioethics literature [16,17,19]. On the other hand, integrating ethics teaching within multiple courses may help demonstrate the relevance of ethics to a range of topics and reinforce its importance as a cross-cutting theme.

The percentages obtained for each OT and PT program likely overestimate the amount of time and credits devoted to ethics teaching. Since the course descriptions generally consist of between two and eight sentences, it is impossible to know from this analysis the exact proportion of a course that is dedicated

Table 2. Categories identified from the textual analysis of the course descriptions.

Standards of practice	Courses describing the role of the OTs or PTs as health professionals, and teaching notions of interdisciplinary practice, models of practice, evidence-based practice, files completion monitoring, healthcare system.
Ethical decision-making	Courses teaching tools to facilitate ethical decision-making in critical situations, examination of moral problems, ethical and legal aspects that guide the analysis of complex situations, theory and case analysis related to ethical dilemmas/issues.
Clinical courses	Courses focused on teaching a clinical scope of practice for OTs or PTs (e.g. musculoskeletal, neurology, cardio-respiratory, return to work and sports rehabilitation).
Mediation/Communication	Courses dedicated to teaching communication and conflict resolution skills.
Health prevention/promotion	Courses teaching about the roles of OTs and PTs in health prevention and promotion.
Knowledge translation	Courses dedicated to knowledge translation in the rehabilitation profession (strategies to influence and change public attitudes toward disability, to increase knowledge transfer, etc.).
Management	Courses teaching management and business skills with regards to public and private practice for OTs and PTs.
Sociology	Courses pertaining to social dimensions of health care and rehabilitation sociology.

to ethics teaching. Interestingly, the PT program at Western University had no course description containing the keywords selected for our analysis. It is important to note that this does not mean the program does not address ethics topics in its curriculum, only that our keyword search and course description review did not identify them. It is also possible that ethics content is part of the 'hidden curriculum' that includes aspects of learning that are not formally planned or documented. In contrast, Western University's OT program had significant ethics content in its course descriptions, namely three courses contained one of the keywords related to "ethics", with one course exclusively dedicated to ethics.

As shown in Table 1, five OT programs and four PT programs offer a continuum bachelor's–master's degree entry-level practice program (i.e. students enrol in a continuous bachelor's–master's program) and the remainder are master's degree entry-level programs (i.e. students apply after completing a Bachelor's of Science degree). Based on our analysis, OT and PT master's programs had a higher percentage of ethics teaching in their programs than in the bachelor's–master's continuum programs. This is surprising since these master's programs must cover a large number of subjects in roughly 2 years, instead of in the four and a half years that is the case for bachelor's–master's continuum programs. This finding may mean that the actual number of hours or credits spent on ethics is equivalent in the two programs but the percentages are lower in the bachelor's–master's continuum programs since the number of total credits (denominator of the proportion) is larger than in entry-level master's programs.

OT and PT programs in the United States often combine ethics with administration and management courses [29]. By contrast, our results indicate that ethics content is included more frequently in courses pertaining to the professional role and professionalism (included under the "standards of practice" category) as well as in clinical and mediation/communication courses. This difference could be attributed to the socio-political context of practice in Canada as compared to the United States. Since the Canadian healthcare system is largely publicly funded, courses dedicated to standards of practice are more frequent than those focused on administration and management. The inclusion of ethics teaching inside other types of courses could also be explained by the fact that the ethics component of medical and health professional practice is included in many "roles" or "competencies" inside the CanMEDS framework [25,26]. Indeed, ethics content can be found in four of the seven physician roles in the framework, i.e. listed under "medical expert", "communicator", "health advocate" and "professional". Since the Canadian OT and PT programs are modeled on this framework in which the ethics component is not presented as a distinct "role", it is logical to think that universities chose to include ethics teaching within courses corresponding to the major roles presented in the framework (e.g. standards of practice, mediation/communication). This is in line with some authors' recommendations that ethics be related to clinical education, be integrated throughout the curriculum and begin early in the program [12,30–32]. According to Rest and colleagues, formal education is a powerful influence in the development of moral judgment, while Triezenberg argues that "Educators must value the ethical and behavioural components of practice highly enough to provide a structured and visible place for them in our professional curricula" [17,33]. Providing students with tools and training to reason through ethically challenging situations is important and should be integrated into the curriculum, whether in courses focusing on ethics decision-making or in other professional courses.

There are several limitations to our study that are related to our research methodology. We chose to use keywords in order to

identify the courses that contained ethical content in the OT and PT programs. Some courses did not contain those keywords, but upon further reading, they clearly had ethical content. There may be still other courses with ethical content that was not identified through this search of keywords and course descriptions. It is also possible that some courses that had a keyword related to our search in their description do not in reality include much actual exploration of ethical issues. Also, a major difficulty was the discrepancy among the Canadian OT and PT program structures. Only the Québec programs (five OT programs and four PT programs) use a continuum bachelor's and master's degree lasting about four and a half years. In contrast, all the other programs in Canada offer a 2 years entry-level master's program. Adding to the complexity, McGill has two entry points: bachelor's and master's. Disparities between the number of courses, credits and structures of the different programs make them hard to compare and forced us to exclude University of Toronto from the quantitative analysis.

Finally, in order to develop a clearer portrait of the ethics teaching situation among Canadian rehabilitation programs, it would be useful to conduct a detailed course outline analysis. Course outlines contain comprehensive descriptions of the different subjects taught and would help to evaluate the actual weight of ethics teaching within each of the courses. However, complete course outlines are not always public documents nor accessible on the Internet. Future research should aim to collect these course outlines and to survey professors who teach ethics in these university programs in order to determine the place and the importance that ethics takes in teaching [34]. In addition, exploration of the different methods used in teaching ethics along with the specific topics discussed in class could be explored to clarify their relation to ethical dimensions of performance in practical placements.

Conclusion

The increasing discussion in the academic and professional literature about the importance of exploring ethics in OT and PT professions, as well as the contribution of ethics training to ethical decision-making of future professionals, supports our view that it is essential to encourage educators and academics to work together to improve the academic ethics curricula and optimize ethics training for students. This study contributes to such an endeavor, by laying the groundwork for a comprehensive evaluation of and discussion about the state of ethics training and the ethical content of courses provided in Canadian university rehabilitation programs. Many other countries could benefit from such an evaluation, and we hope that our study can provide guidance on how to initiate this important activity. Future studies could examine, for example, the outcomes of various training programs on students' capacities and ethical reasoning skills, and thus facilitate comparison between educational methods [30,35–38]. This could then serve to establish more precise and empirically founded guidelines or requirements for the accreditation of OT and PT programs internationally.

With the evolving recognition of the OT and PT professions in the healthcare system, it is crucial to assess the place dedicated to ethics teaching in university programs to ensure that students receive the training that will provide them with knowledge about ethical dimensions of practice and best prepare them to respond to the wide range of ethical considerations arising in OT and PT.

Acknowledgements

The authors are grateful for helpful feedback received by participants at workshops organized by the Centre for Interdisciplinary

Research in Rehabilitation of Greater Montreal (CRIR) and the School of Public Health of Université de Montréal.

Declaration of interest

Anne Hudon is supported by a fellowship from MENTOR program in collaboration with the Canadian Institutes of Health Research, the Quebec Research Rehabilitation Network (REPAR), and the Fonds de recherche du Québec en santé (FRQ-S). Maude Laliberté is supported by a fellowship from the Arthritis Society/Canadian Arthritis Network and from the Fonds de recherche du Québec en santé (FRQ-S). Vickie Sonier was supported by a summer student grant from the Arthritis Society/Canadian Arthritis Network. Matthew Hunt is supported by a Research Scholar Award from the Fonds de recherche du Québec en santé (FRQ-S). This research was funded by grant # EOG120255 from the Canadian Institutes of Health Research and by the Dominion of Canada General Insurance and administered by the Physiotherapy Foundation of Canada.

References

- Robarts S, Kennedy D, MacLeod AM, et al. A framework for the development and implementation of an advanced practice role for physiotherapists that improves access and quality of care for patients. *Healthcare Quarterly* (Toronto, Ont.) 2008;11:67–75.
- Desmeules F, Roy JS, MacDermid JC, et al. Advanced practice physiotherapy in patients with musculoskeletal disorders: a systematic review. *BMC Musculoskelet Disord* 2012;13:107 (1–21).
- Anaf S, Sheppard LA. Physiotherapy as a clinical service in emergency departments: a narrative review. *Physiotherapy* 2007;93:243–52.
- McClellan C, Cramp F, Powell J, Bengler J. Extended scope physiotherapists in the emergency department: a literature review. *Physical Therapy Rev* 2010;15:106–11.
- Kersten P, McPherson K, Lattimer V, et al. Physiotherapy extended scope of practice – who is doing what and why? *Physiotherapy* 2007;93:235–42.
- Ellis B, Kersten P. The developing role of hand therapists within the hand surgery and medicine services: an exploration of doctors' views. *Hand Therapy* 2002;7:119–23.
- McPherson K, Kersten P, George S, et al. A systematic review of evidence about extended roles for allied health professionals. *J Health Serv Res Policy* 2006;11:240–7.
- Veillette N, Demers L, Dutil E. Description de la pratique des ergothérapeutes du quebec en salle d'urgence. *Can J Occupat Therapy* 2007;74:348–58.
- Davis CM. Patient practitioner interaction: an experiential manual for developing the art of health care, 4th ed. Thorofare (NJ): Slack incorporated; 2006.
- Swisher LL. A retrospective analysis of ethics knowledge in physical therapy (1970–2000). *Physical Therapy* 2002;82:692–706.
- Foster NE, Williams B, Grove S, et al. The evidence for and against 'PhysioDirect' telephone assessment and advice services. *Physiotherapy* 2011;97:78–82.
- Trizeenberg HL. The identification of ethical issues in physical therapy practice. *Physical Therapy* 1996;76:1097–107.
- 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 Therapy Educ* 1991;5:60–4.
- Barnitt R. 'Deeply Troubling Questions': the Teaching of Ethics in Undergraduate Courses. *Br J Occupat Therapy* 1993;56:401–6.
- Brockett M. Ethics, moral reasoning and professional virtue in occupational therapy education. *Can J Occupat Therapy* 1996;63:197–205.
- Barnitt R, Roberts L. Facilitating ethical reasoning in student physical therapists. *J Phys Therapy Educ* 2000;14:35–41.
- Trizeenberg H, Davis C. Beyond the code of ethics: educating physical therapists for their role as moral agents. *J Phys Therapy Educ* 2000;14:48–58.
- Scott R. Supporting professional development: understanding the interplay between health law and professional ethics. *J Phys Therapy Educ* 2000;14:17–19.
- Romanello M, Knight-Abowitz K. The "ethic of care" in physical therapy practice and education: challenges and opportunities. *J Phys Therapy Educ* 2000;14:20–5.
- Sisola SW. Moral reasoning as a predictor of clinical practice: the development of physical therapy students across the professional curriculum. *J Phys Therapy Educ* 2000;14:26–34.
- Jensen G, Paschal K. Habits of mind: student transition toward virtuous practice. *J Phys Therapy Educ* 2000;14:42–7.
- Purtilo R. Moral courage in times of change: visions for the future. *J Phys Therapy Educ* 2000;14:4–6.
- Canadian Association of Occupational Therapy, (CAOT). The Profile of Occupational Therapy Practice in Canada. Ottawa: CAOT Publications ACE; 2007. 31 p.
- 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 p.
- Frank J. The CanMEDS 2005 physician competency framework. Ottawa: The Royal College of Physicians and Surgeons of Canada; 2005.
- Frank JR, Danoff D. The CanMEDS initiative: implementing an outcomes-based framework of physician competencies. *Med Teach* 2007;29:642–7.
- Merritt BK, Blake AI, McIntyre AH, Packer TL. Curriculum evaluation: linking curriculum objectives to essential competencies. *Can J Occupat Ther; Revue canadienne d'ergotherapie* 2012;79:175–80.
- Kentli FD. Comparison of hidden curriculum theories. *Eur J Educ Stud* 2009;1:83–8.
- Purtilo RB. Ethics teaching in allied health fields. *The Hastings Center report* 1978;8:14–16.
- Dieruf K. Ethical decision-making by students in physical and occupational therapy. *J Allied Health* 2004;33:24–30.
- Geddes EL, Wessel J, Williams RM. Ethical issues identified by physical therapy students during clinical placements. *Physiotherapy Theory Practice* 2004;20:17–29.
- Finch E, Geddes EL, Larin H. Ethically-based clinical decision-making in physical therapy: process and issues. *Physiotherapy Theory Practice* 2005;21:147–62.
- Rest J, Thoma SJ, Narvaez D, Bebeau MJ. Alchemy and beyond: indexing the Defining Issues Test. *J Educ Psychol* 1997;89:498–507.
- Davidson G, Garton AF, Joyce M. Survey of ethics education in Australian university schools and departments of psychology. *Austra Psychol* 2003;38:216–22.
- Aveyard H, Edwards S, West S. Core topics of health care ethics. The identification of core topics for interprofessional education. *J Interprofessional Care* 2005;19:63–9.
- 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.
- Haddad AM. Teaching ethical analysis in occupational therapy. *Am J Occupat Therapy* 1988;42:300–4.
- DeMars PA, Fleming JD, Benham PA. Ethics across the occupational therapy curriculum. *The Am J Occupat Therapy* 1991;45:782–7.