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Title: Supporting ethics educators in Canadian occupational therapy and physical therapy programs: A national interprofessional knowledge exchange project

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Abstract

Ethics education is the cornerstone of professional practice, fostering knowledge and respect for core ethical values among healthcare professionals. Ethics is also a subject well-suited for interprofessional education and collaboration. However, there are few initiatives to gather experiences and share resources among ethics educators in rehabilitation. We thus undertook a knowledge exchange project to 1) share knowledge about ethics training across Canadian occupational and physical therapy programs, and 2) build a community of educators dedicated to improving ethics education. The objectives of this paper are to describe this interprofessional knowledge exchange project involving ethics educators (with a diversity of professional and disciplinary backgrounds) from Canadian occupational and physical therapy programs as well as analyze its outcomes based on participants' experiences/perceptions. Two knowledge exchange strategies were employed: an interactive one-day workshop and a wiki platform. An immediate post-workshop questionnaire evaluated the degree to which participants' expectations were met. Structured telephone interviews nine to ten months after the workshop collected participants' perceptions on whether (and if so, how) the project influenced their teaching or led to further interprofessional collaborations. Open-ended questions from the post-workshop questionnaires and individual interviews were analyzed using qualitative methods. Of 40 ethics educators contacted, 23 participated in the workshop and 17 in the follow-up interview. Only 6 participants logged into the wiki from its launch to the end of data collection. Five themes emerged from the qualitative analysis: 1) belonging and networking; 2) sharing and collaborating; 3) changing (or not) ways of teaching ethics; 4) sustaining the network; and 5) envisioning the future of ethics education. The project attained many of its goals, despite encountering some challenges. While the wiki platform proved to be of limited benefit in advancing the project goals, the interactive format and collaborative nature of the one-day workshop were described as rewarding and

effective in bringing together occupational therapy and physical therapy educators to meet, network, and share knowledge.

Key words: knowledge exchange, rehabilitation, interprofessional ethics, interprofessional education, occupational therapy, physical therapy

MANUSCRIPT

Introduction

Ethics education is the cornerstone of professional practice in healthcare, fostering high standards of behavior and respect for core ethical values among healthcare professionals (Frank & Danoff, 2007; Miles, Lane, Bickel, Walker, & Cassel, 1989). In order to promote these values, many authors have discussed the need for improved ethics education in fields such as occupational therapy (OT), physical therapy (PT), dentistry, nursing and medicine (Birden et al., 2013; Delany & Anderson, 2012; Gorkey, Guven, & Sert, 2012; Kinsella, Phelan, Lala, & Mom, 2014; Laliberté et al., 2015; Monteverde, 2014; Ogle, Sullivan, & Yeo, 2013). In the context of rehabilitation, the guidelines of the World Federation of Occupational Therapists (2008) and the World Confederation for Physical Therapy (2011) stress the importance of ethics education in entry-level programs. There are no national or international guidelines detailing what or how to teach ethics to students in rehabilitation. This lack of formal guidance on best practices has led to significant variability in ethics teaching and a lack of detailed standards for the integration of ethics into interprofessional and professional curricula (Brockett, 1996; Finley & Goldstein, 1991; Hudon et al., 2013; Laliberté et al., 2015; Verma, Paterson, & Medves, 2006). There is thus a need for research to document current practices in rehabilitation ethics education, with a view to working towards recommendations for best practices.

Ethics has also been identified as a relevant topic that can serve for the development of competencies in interprofessional contexts of education and collaboration (Aveyard, Edwards, & West, 2005; Kurtz & Starbird, 2016; Langlois, 2016). Hanson (2005) warned that teaching ethics to homogenous professional groups can lead to “conceptual and practical isolationism of thinking about health care ethics” (p. 167-268). Bringing together interprofessional perspectives may help better address the complexity of ethically challenging cases.

In Canadian universities, there are close connections between the OT and PT professions. Ethics teaching is also provided to combined groups of OT and PT students in some programs, and educators value this type of interprofessional teaching (Laliberté et al., 2015). Although recent studies have examined various aspects of teaching ethics to rehabilitation students (Dieruf, 2004; Edwards, Kessel, Jones, Beckstead, & Swisher, 2012; Jensen & Greenfield, 2012; Swisher, van Kessel, Jones, Beckstead, & Edwards, 2012), to our knowledge, there has been only one initiative - conducted in the United States in the early 2000s (Jensen et al. 2011) - to bring together experts and ethics educators to develop a shared understanding of ethics education in OT and PT. In light of the crucial need for a better understanding of ethics education in rehabilitation and in order to contribute to knowledge exchange (KE) efforts in interprofessional contexts, we brought together educators from Canadian OT and PT programs to discuss ethics education (Hudon et al., 2016). A KE approach was selected (Graham et al., 2006) to facilitate the sharing of both explicit and tacit knowledge about content and teaching methods used by OT and PT educators, in order to help develop and support the implementation of innovative and effective approaches to ethics education. Specifically, the project sought to 1) share knowledge about the state of ethics training across Canadian OT and PT programs, and 2) build a community of educators dedicated to

improving interprofessional ethics education. As the use of multiple strategies has been shown to be more effective than using a single strategy (Grimshaw et al., 2001; Robertson & Jochelson, 2006), two main KE strategies were used: a one-day KE workshop, the *Canadian Rehabilitation Ethics Teaching Workshop* and an online exchange using a wiki platform.

CREW day. A full day workshop is an excellent way to create links and facilitate exchange between people (Grimshaw, Eccles, Lavis, Hill, & Squires, 2012) and, when made interactive, is an effective strategy to promote the exchange and use of new practices (NICE, 2007; Rust, 1998). The CREW day was held in Montreal, Canada, on May 26th, 2014, a date chosen to increase the availability of educators, who typically teach from September to April. Particular attention was given to creating space for open discussion and the sharing of knowledge among educators. The day started with an icebreaker and continued with a brainstorming activity with the entire group. Participants were asked, for example, to identify their main challenges to ethics teaching in their respective programs and ideas were illustrated using post-it and flipcharts. This was followed by small group meetings and discussions (mixed OT and PT), as well as large group wrap-up sessions [see Supplementary Online File 1].

Wiki platform. Information technologies have been described as moderate to good means of facilitating KE (NICE, 2007; Prior, Guerin, & Grimmer - Somers, 2008). With the goal of diversifying our methods and promoting the sustainability of our KE project, the team created a wiki, i.e., a website allowing users to easily create online pages of information and frequently change the content. Wikis are recognized as a means of knowledge creation through conversation and co-creation (Bower, Woo, Roberts, & Watters, 2006), and are increasingly used in the health

field to foster collaboration (Barsky & Giustini, 2008; Stephens, Robinson, & McGrath, 2013) and education (Hazari, North, & Moreland, 2009), and to support KE (Wagner, 2004). We presented the platform to the educators during the CREW day, and emailed links to online tutorials to all participants. Before officially launching the wiki, the research team posted some material collected during the CREW day and other elements related to ethics teaching to “seed” the wiki with content. The aim was to stimulate other participants to also contribute to its collective development.

Background

The entire KE project used the Ottawa Model of Research Use (OMRU) (Logan & Graham, 1998) (Figure 1), which emphasizes interactive knowledge sharing amongst participants to promote the development of new knowledge (Weiss, 1979). Its components are well defined and unlike other models, the OMRU explicitly takes into account context and partners as central elements of KE (Graham & Logan, 2004). This conceptual framework also visually presents the core elements of a KE project, making it easy to understand and facilitating the assessment of barriers to and opportunities for KE.

INSERT FIGURE 1 HERE

According to the OMRU, barriers and facilitators to the project must be evaluated in light of evidence-based innovation, participants (or other potential adopters of the evidence), and practice environment (Graham & Logan, 2004). At the beginning of the project, we examined these three aspects to ensure that the project would be responsive to the current teaching context in Canadian

OT and PT programs. In this section, we describe the steps taken to evaluate facilitators and barriers in this project.

Innovation. Before embarking on the KE project, we conducted background research to identify the context in which the project was to be elaborated (Graham & Logan, 2004). We mapped the place of ethics teaching in Canadian rehabilitation programs by analyzing the online curricula of 27 OT and PT programs¹ (Hudon et al., 2013); ethics content was most commonly included in broad courses related to standards of practice and not in specific ethics courses. This study also found great variability in ethics teaching in terms of the types of courses and the number of credits dedicated to the subject (Hudon et al., 2013). Our team then undertook an exploratory study, an online survey completed by 55 ethics educators in entry-level Canadian OT and PT programs, to document current approaches and challenges to teaching ethics (Laliberté et al., 2015). This second study highlighted the need for ethics educators to share practices and knowledge that could help them address the challenges they face in their universities, and thereby improve rehabilitation ethics teaching across the country. Investing time in these “pre-project activities” provided the team with a better sense of current practices and available knowledge regarding ethics education in OT and PT.

Participants. The OMRU suggests that researchers assess characteristics of potential adopters (i.e. participating ethics educators) such as their awareness and attitudes towards the project, their knowledge and skills, and their current practices and concerns, to determine possible barriers and facilitators to the proposed project. These insights were obtained from two sources. First, the online survey (Laliberté et al., 2015) provided information on the characteristics, practices and concerns of educators who teach ethics in rehabilitation in Canada. The survey respondents: 1)

had varying levels of knowledge and degrees of comfort with ethical theory and concepts, so the CREW participants would likely be heterogeneous; 2) were subject to important time constraints (e.g., having many responsibilities and teaching a range of other material alongside ethics content) that created barriers to their participation; and 3) used a variety of teaching methods. The second source of information was a short questionnaire sent by email to all participants three months prior to the CREW day that asked about expectations and concerns regarding the project.

Practice environment. The OMRU encourages users to seek to understand participants' "practice environments", including cultural, structural, social and economic factors, to guide the selection of the most appropriate KE strategies. In our project, these were university teaching environments for OT and PT. Information about the structural aspects of ethics teaching in Canadian OT and PT programs was obtained through our analysis of ethics curricula (Hudon et al., 2013) and via the online survey (Laliberté et al., 2015). These results revealed different structures related to ethics education in the various programs, and barriers to changing the curricula. For example, ethics educators often work in a context of physical and human resource shortages, having to teach large classes with only a small budget for resources or support.

Methods

Study design

A sequential explanatory mixed methods design was used to evaluate our KE project (Creswell & Clark, 2007; Ivankova, Creswell, & Stick, 2006), and included documentation of participation in the workshop and the online wiki platform, the use of a post-workshop questionnaire and follow up interviews with participants nine to ten months following the workshop.

Data collection

Participant recruitment. Participants to the CREW Day were recruited via three strategies: 1) an online survey sent to Canadian ethics educators described in the background section (Laliberté et al., 2015) (a question was included about participants' willingness to be contacted for a future project about ethics in rehabilitation), 2) Canadian OT and PT curricula and course plans available online were reviewed to identify additional individuals involved in teaching or responsible for ethics content in their programs, and 3) if no educator from a particular program was available or interested in participating in the project, an email was sent to the program director with a request to identify another potentially interested individual with knowledge of ethics teaching. All participants signed a consent form.

Choice of outcomes. Based on the OMRU, we selected four specific outcomes to evaluate the KE project. The first outcome chosen was the number of attendees at the CREW day workshop compared with the number of participants who were invited to participate. The second outcome was the participation rate on the wiki from June 2014 to December 2015 and the engagement of participants in the wiki platform (using the number of registrations and log-ins). The third outcome was the degree to which the event met participants' expectations based on responses to a short post-workshop evaluative questionnaire [see Supplementary Online File 2], adapted from two other questionnaires used to evaluate change in practice (Menon et al. 2010; Rust 1998). Each statement concerning the workshop was rated using a four-point Likert-scale ranging from completely agree to completely disagree. The final part of the questionnaire consisted of open-ended questions about the workshop. These questions explored whether (and if so, how) participants would make changes in their teaching after the CREW day, asked about the most important things that the workshop provided, and probed for any other feedback not mentioned in

the questionnaire. Prior to its use in the project, the questionnaire was reviewed by all members of the research team and revised based on their feedback. The fourth outcome was participants' perceptions of whether and, if so, how the project influenced their teaching and/or led to further collaborations among educators after the CREW day. This information was obtained through structured telephone interviews with participants nine to ten months after the CREW day (average of 14 minutes, ranging from 7 to 24 minutes) [see Supplementary Online File 3]. The interview grid was pilot tested with two members of the research team who taught ethics to rehabilitation students at the time of the project. Based on their feedback, the grid was refined for clarity and flow. Interviews were transcribed verbatim by a professional transcriptionist.

Data analysis

Quantitative analysis. Data from the workshop attendance, post-workshop questionnaire and wiki logins were synthesized using descriptive statistical analysis.

Qualitative analysis. Answers to the questionnaire's open-ended questions were analyzed qualitatively in combination with the data obtained through the phone interviews. Two team members listened to all interview recordings to support "memoing" (first-order identification of themes and codes) and identify patterns and linkages within and between the interviews using constant comparative techniques (Thorne, 2000). Two team members independently coded the first three interviews. They subsequently reviewed the codes and established a shared coding structure that was used for analyzing the remainder of the interviews and the open-ended responses to the post-workshop questionnaires by one team member. The other team member then verified the coding. The answers to the post-CREW day evaluative questionnaires and results from the interviews were then compared and analyzed in order to develop a portrait of

participants' experiences in the KE project. We combined both qualitative data sets (interview and open-ended question) for the analysis because the questions were on the same theme and the analysis of these two data sources provided insight on related topics over time. Further, we sought to triangulate results from these sources to enhance the rigor of the analysis and provide a more comprehensive portrait of participants' perceptions. We nevertheless remained attentive to data sources throughout the analysis and sought to contextualize data within the project as a whole. The two team members then developed a provisional thematic structure and presented it to the full research team for their feedback. The thematic analysis was refined through this discussion prior to being finalized.

Ethical considerations

Ethics approval for this study was obtained from the Center for Interdisciplinary Research in Rehabilitation of Greater Montreal (CRIR) research ethics board (#CRIR-906-1213).

Results

Participation in workshop. Forty educators were invited to join the CREW project, of whom 23 (58%) participated in the workshop. The CREW participants were affiliated with 11 of 14 OT and 11 of 14 PT programs from across Canada.

Wiki participation. After the launch of the wiki and the invitation to join the platform, only 6/23 (26%) participants activated their accounts. The delay between the activation and the sending of the access codes was: no delay for 4 participants (same day), 11 days for 1 participant, and 50 days for the sixth participant. A login reminder was sent by email four weeks after the initial invitation. From the time the last participant activated their account until the end of the data

collection (December 2015), no other participants logged onto the wiki. Only 2 of these 6 participants contributed information/material beyond what the research team had initially placed on the wiki.

Participants' perceptions regarding the KE project. The immediate post-workshop questionnaire was completed by 22 of 23 (96%) participants. Seventeen out of our 23 (74%) workshop participants accepted to respond to the structured telephone interviews. Quantitative results from the post-workshop questionnaire are presented in Table 1.

INSERT TABLE 1 HERE

The majority of participants found that the organization and format of the workshop were adapted to their needs and concerns, and that the format facilitated discussion and interaction. Fewer participants reported that the workshop increased their knowledge about ethics education or helped them identify innovative approaches to ethics teaching.

Five themes emerged from the qualitative analysis of open-ended questions of the questionnaire and interviews:

Belonging and networking. In both the questionnaire and the post-CREW interviews, the majority of participants stated that the workshop was enjoyable and stimulating, and all indicated it was well organized. During the interviews, participants stated that the CREW day had been “stimulating”, “interesting”, “engaging”, “inspiring” or that they were “fueled-up” by the day. Several participants also reported that the workshop increased their sense of connection with

other OT and PT educators. One participant stated that the CREW project filled a “need for connectedness”; another asserted that it was “great to connect face-to-face” with colleagues and that he felt more engaged in a community while participating in the project. The CREW day was seen as an opportunity to get to know others who are involved in ethics teaching from across Canada and learn about their work:“

“I’ll always remember the people around that room and think about who to go to when I want to ask certain questions about certain things.” (S10-OT)

These findings are consistent with the results of the questionnaire completed immediately following the CREW day, in which many participants identified “networking” as one of the most important elements of the day:“

“The most helpful for me was just meeting the other people across the country who teach ethics and, you know...what people were teaching and how they were teaching it...” (S8-OT)

Several participants also stated that they were pleased that the CREW day was interprofessional (OT and PT), identifying this feature as an especially valuable characteristic of the event.

Additionally, several participants reported that the CREW day “reassured”, “validated” or “reinforced” their confidence in their own work and accomplishments as educators. For example, one participant reflected on the evaluation of student learning related to ethics: “

“One of the things that seems to be an ongoing challenge is the assessment or evaluation of students when you’re teaching them ethics and that was one of the things I was looking for when I went into that day and I was reassured that what I was doing is what seems to be on track with what everybody else is doing...so that was good.” (S5-PT)

Sharing and collaborating. Through the questionnaires and during the interviews, participants indicated a range of collaborations and forms of sharing that were facilitated by the project. The majority reported having shared information that they had learned during the workshop – or

about the CREW project itself – with OT and PT colleagues at their own universities. The CREW day also helped create new collaborations amongst educators who participated in the event. For example, various educators from OT and PT programs subsequently collaborated in writing articles about ethics, applied for grants and/or were having ongoing discussions about possible future projects. Furthermore, the CREW project helped in the development of a research network focused on ethics education common to OT and PT.

Changing (or not) ways of teaching ethics. Few participants reported making specific changes to what or how they taught as a direct result of the CREW project (one participant added an exam, another made conceptual changes in her class, and one person added additional discussion on ethically challenging situations during a clinical seminar that she organizes). Many participants mentioned that although they did not make significant changes at the curricular level, the CREW day gave them some information, ideas and resources that they were able to incorporate into their teaching. This was observed in both the immediate post-workshop questionnaire and the nine-month follow-up interviews. Several participants indicated that they used material provided by more experienced colleagues (i.e., colleagues who were teaching ethics for a long time and whose material was considered excellent and had proven effective with students) or were experts themselves; thus they felt no need for further changes in their ethics teaching. Conversely, several participants mentioned that barriers at the institutional level were most likely to hinder possible improvements in ethics teaching within their program. General considerations (e.g. employment status, internal conflicts, the space of ethics curriculum in OT and PT programs, lack of time and resources) also played a role in the capacity or willingness of several participants to advocate for curricular changes.

Nevertheless, the CREW day was also said to have had what one participant described as a “percolating effect”; that is, the workshop prompted many participants to reflect about their teaching, specifically regarding their course plans. Other participants stated that they prefer to work towards integrating ethics at the program level (on a larger scale) rather than making specific modifications to their courses (on a small scale): “

“I think it’s just important for us to sort of identify a little bit better in our programs where we’re teaching ethics, how are we teaching it, is it the right way, the best way, are we being consistent.” (S14-PT)

Sustaining the network. While positive outcomes were frequently reported by the participants, challenges and obstacles were also discussed. First, they all felt that it was difficult to build a sustained communication network. Some stated that they did not receive all the material that was to be sent prior to the CREW day or information about the wiki website that was distributed after the event (either their password or the instructions of how to log-in). Additionally, three participants reported difficulties related to logistics and reimbursement for travel.

During the interviews, many participants reported challenges regarding accessing the wiki and feeling guilty about their lack of involvement following the CREW day. Several obstacles contributed to this situation. More than half of respondents interviewed described the wiki login procedure as being labor intensive and that technical issues made it hard to access the password to register. Several also mentioned that the wiki site was “information overload” in their busy schedule. Indeed, most participants reported that “a lack of time” was the main reason why they did not participate on the wiki and why they were not enthusiastic about engaging in longer-term professional development activities, such as the wiki. Additionally, a third of respondents were reluctant to use the wiki as they were unfamiliar or uncomfortable with the technology, while

others mentioned not being convinced that the wiki was the right platform to exchange information with other CREW participants. For example, several participants proposed using a Facebook page, a Google group or a mailing list to keep in touch, rather than the wiki platform. “

“[...] Wiki is a brand new piece of, um, social media platform that I've never used before. Had it been Facebook I would have been on it because I'm already...I am already on Facebook. And...so it's so much easier to get into Facebook” (S5-PT).

Envisioning the future of ethics education. Many participants expressed interest in future interprofessional events on ethics. One participant suggested that holding an annual meeting of CREW participants could be: “

“a consistent way of staying connected face-to-face with other ethics educators” (S6-OT).

Priority topics identified by participants for future events included the creation of online ethics resources for teaching professionalism, a workshop about best practices in ethics and, as many proposed, discussion about ethics and professionalism in the era of social media. Most participants were also interested to know more about ethics and interprofessionalism in healthcare beyond OT and PT. Another suggested that the CREW day should keep its interprofessional stance if it were to be repeated. Having OT and PT discuss these topics together was very relevant for several participants. One participant also proposed eventually creating an interest group of OT and PT educators to “carry forward” ideas coming from the CREW project.

Discussion

We used the OMRU to build our KE project. Advantages of using such a framework are that it helped “map the interventions, support evaluation and attention to sustainability, establish common ground and enhance communication among stakeholders, as well as encourage transparency and clarity about methods” (Hudon, Gervais, & Hunt, 2015, p. 632). The OMRU

proved to be particularly useful for structuring the content of the KE project. Interprofessionalism was also at the heart of the development process, as the project sought to bring together educators from OT and PT programs, knowing that they had various disciplinary and professional backgrounds. One of the underlying aims of the project was to respond to the lack of formal guidance in rehabilitation ethics education by sharing knowledge on the subject with OT and PT educators. Because ethics training (and other subjects) is common to both OT and PT students in some Canadian programs (Laliberté et al., 2015), and ethics is a subject that is well suited for interprofessional work (Aveyard et al., 2005; Hewison & Sim, 1998; Kurtz & Starbird, 2016; Langlois, 2016), it was appropriate to bring together educators in both programs to share knowledge. Interestingly, none of the issues that emerged during the CREW Day discussions were specific to either OT or PT. This finding reinforces the value of interprofessional work between these professions (Richardson & Edwards, 1997). It suggests that further collaboration between educators providing ethics teaching in OT and PT programs within the same university should be encouraged (Cleary & Howell, 2003). The potential for extending interprofessional ethics education to include other health disciplines, such as speech language therapy, nursing, pharmacy or medicine was not discussed during the workshop. However, several studies suggest the potential benefit of such wider interprofessional activities for enhancing student learning (Lennon-Dearing, Lowry, Ross, & Dyer, 2009; Manspeaker, Donoso Brown, Wallace, DiBartola, & Morgan, 2017; Solomon & Geddes, 2010) and for broadening the field of interprofessional ethics (Clark, Cott, & Drinka, 2007).

Evaluating the project using mixed methods allowed us to highlight the strengths and challenges of our project. Certain lessons can be learned regarding the implementation of an interprofessional KE project that may be useful for other domains or in different healthcare

training programs. To start, the KE project attained its first goal of sharing knowledge about the state of ethics training across Canadian OT and PT programs, despite the challenges encountered. The interactive format of the project and the collaborative workshop day allowed OT and PT educators to meet and network (de Goede, Putters, van der Grinten, & van Oers, 2010), which were key outcomes of the project. Indeed, in an article about KE in cancer survivorship, participants found face-to-face meetings to be the “most beneficial” part of their KE project (Kazanjian, Smillie, & Stephen, 2013). This is in line with our results and recent literature showing that face-to-face meetings are appropriate tools to build trust between participants and to facilitate engagement in subsequent one-to-one exchanges on diverse topics (Curran, Heath, Kearney, & Button, 2010; Snyder & Wenger, 2010). Even though participants made few specific changes to their ethics courses following the KE project, the project allowed them to reflect on their teaching practices and about ethics teaching across the curriculum in their institutions. The KE project also sparked the creation of collaborations and networking among OT and PT educators regarding ethics education and research.

In another vein, several of our assumptions at the start of the project proved to be wrong. For example, we anticipated that many new ideas and methods would be shared between participants during the CREW day. This was not the case. The interview results partially explain this finding, as most participants already felt comfortable with what they were doing in their courses and did not necessarily feel that they needed to change their teaching. Also, the one-time nature of the workshop and the fact that most of the participants did not know each other prior to the meeting allowed the development of new links and networking, but this context was not one best adapted for more “in-depth” discussion about the particular methods and materials used by participants, and the content they incorporated in their teaching. The literature in KE stresses the importance

of building long-lasting relationships and promotes the use of multiple meetings in order to create strong bonds between participants, that will later facilitate the sharing of KE (Desouza, 2003; Mitton, Adair, McKenzie, Patten, & Perry, 2007) (Gagnon, 2011; Østerlund & Carlile, 2005). The importance of personal/social relationships to foster interprofessional collaboration has also been demonstrated (Perreault, Dionne, Rossignol, Poitras, & Morin, 2016). These elements are among key aspects or attributes often associated with interprofessional collaboration, although the definition of the concept still varies (D'Amour, Ferrada-Videla, San Martin Rodriguez, & Beaulieu, 2005; Perreault & Careau, 2012; Thannhauser, Russell-Mayhew, & Scott, 2010). Participants in a community of practice must exercise ownership of the KE process and feel they can self-organize for the interaction and community to be successful over time (Demiris, 2006; Ho et al., 2010). We therefore elected to implement the wiki as a longer-term sustainability strategy. Wikis have also been used to facilitate interprofessional projects (Foreman, 2008; Stephens et al., 2013). Our project allowed educators from different programs within the same university to meet, share and plan further collaborations, something that had not always occurred (e.g., due to busy schedules, and lack of opportunities for coordinated KE). Yet, the one-day workshop and the failure of the wiki did not promote this sustained exchange or the structure to support and sustain these complex social interactions. Challenges with the wiki led to its limited use. The majority of participants did not participate in the wiki, probably facing common barriers identified in the KE literature in relation to the use of wikis, including heavy work schedules and a lack of engagement that usually follows infrequent face-to-face interactions (Gannon-Leary & Fontainha, 2007). Giordano (2007) reported marked concerns about knowing when to share and what to share on the wiki. Since the participants in our project did not know each other very well, this may have been another reason for them to refrain from participating more fully after the

CREW day. Also, many participants mentioned not being familiar with the platform and the one who tried to connect had problems connecting and/or navigating the site (Bower et al., 2006).

Moreover, we did not solicit the opinions of the participants prior to the workshop regarding the choice of platform for sustaining the exchanges. Results from the interviews indicate that participants would have preferred other means of sustaining the network, such as a Facebook page or a simple online mailing list, instead of the wiki. Ensuring the buy-in of the participants to the sustainability strategy prior to the workshop may have increased participation. The fact that several participants felt validated in their teaching during the workshop could also explain the low participation rate in the wiki. Indeed, prior to the workshop, we believed the value of the wiki would relate to its capacity to allow participants to retrieve new teaching and evaluation methods online and to continue sharing educational tips and tools with their colleagues across Canada. Results from the interviews demonstrated that participants realized during the workshop that they felt quite comfortable with the teaching methods they were already using and that they did not feel that an ongoing exchange was needed. Indeed, it seems that for the participants, the value of getting to know other ethics educators and sharing their ideas and challenges during the day greatly surpassed the need for ongoing exchange of teaching materials after the workshop. Interestingly, we know that some participants continued contacting each other after the CREW Day but chose to use personal emails instead of the wiki to communicate.

In another vein, it is important to note that since the wiki was created as part of a research project, it was password protected and was thus inaccessible to external viewers. Using an accessible and appealing Internet page that would have been available to the general public might have provided a way for participants to share their knowledge about ethics education with a larger audience and

helped them to increase awareness of the ethics teaching efforts in their respective programs. It is thus possible that an open initiative for supporting ongoing exchange of ethics content would have increased the buy-in of participants in such a sustainability strategy.

Study limitations

This study has several limitations. First, in terms of the choice of outcomes and evaluative measures, some aspects should have been better considered. For example, we hoped that the CREW Day would have prompted ethics educators to make some changes to their teaching when returning back to their respective programs. In that regard, it would have been interesting to measure participants' readiness to make such changes in their practice, prior to participating in the project. Also, we did not foresee that each participant would have such varied needs with regards to their own practice of ethics teaching. The range of interests included: wanting to know more about the precise topics to cover in class, wanting to have better knowledge about how to facilitate interprofessional teaching, having a very practical orientation to teaching compared to others who were interested in the philosophical roots of ethics education, wishing to discuss ethics teaching from a clinical perspective, and seeking opportunities to link ethics teaching more closely with the instructors own research endeavors. Thus, it seems that the heterogeneity of the participants' backgrounds and needs made it harder to respond to the spectrum of expectations for this one-day event. It would have been interesting to identify those participants who benefited most from the KE project and those who benefited less, and to evaluate the characteristics associated with satisfaction.

Regarding the difficulties with the wiki, additional interprofessional activities undertaken during the workshop could also have been specifically geared towards preparing subsequent online

exchanges on ethics in OT and PT programs (e.g., small group sessions in which the participants had the opportunity to use the wiki).

Finally, a valid measurement of the outcomes of a KE project is hard to find and to apply, since such a project involves numerous actors who collectively and individually produce systemic outcomes that cannot be easily specified (Contandriopoulos, Lemire, Denis, & Tremblay, 2010; Langley, Mintzberg, Pitcher, Posada, & Saint-Macary, 1995). In the KE project, our four outcomes were chosen to capture key elements of the KE project, but did not include all the complex interactions and connections that were created after the completion of the whole project. This remains an important challenge for all teams conducting similar KE projects. An additional outcome to consider for future projects of this nature would be to quantify the number of new combined projects, grants, papers and other collaborations that emerged from the exchanges begun at the CREW Day.

Concluding comments

The KE project, built using the OMRU, was a unique initiative to share ethics resources and knowledge among Canadian ethics educators teaching in OT and PT programs. The KE project achieved its goal of facilitating interprofessional networking and sharing ideas about ethics education, although some strategies used to enable the KE were sub-optimal. The wiki platform that was created to support and sustain knowledge sharing over time was accessed by few participants. We hoped that the project would bring together Canadian OT and PT ethics to make concrete changes and improve their ethics courses and curricula. However, only a small number of participants made tangible changes at the educational level as a direct result of the project. Nonetheless, participants were really positive about the value and outcomes of the project. We

chose to publish the steps and results from our project so that actors from different domains can use this example and draw on its strengths and learn from its weaknesses in order to build new and stronger interprofessional KE projects.

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Declaration of interest

The authors report no conflicts of interest. The authors alone are responsible for the writing and content of this article.

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Footnote

¹There are currently 29 OT and PT programs in Canada. However, at the time of the research project, one program was newly launched and had yet to provide ethics teaching to students, and online information was not available for the other.