# Medical assistance in dying: Examining Canadian pharmacy perspectives using a mixed-methods approach

Lee Verweel, BSc, MSc; Zahava R. S. Rosenberg-Yunger, HonBSc, MA, PhD; Taranom Movahedi ; Allan H. Malek, BSc, BScPhm, RPh

## **ABSTRACT**



**Background:** Canada legalized assisted dying with the passing of Bill C-14, Medical Assistance in Dying (MAiD), in June 2016. This legislation has implications for health care professionals participating in MAiD. This research aims to understand the effect that MAiD has on pharmacists and pharmacy technicians in Canada.

**Methods:** We conducted a thematic document analysis of pharmacy guidelines, position statements and standards of practice from pharmacy regulatory authorities across Canada. In addition, the Ontario Pharmacists Association surveyed its members (including pharmacists, pharmacy

technicians and pharmacy students) about their perceptions of MAiD.

**Results:** Our thematic analysis of the reviewed documents resulted in 3 major themes: pharmacists' role in quality assurance, practice considerations when implementing MAiD and resources for pharmacy staff involved in MAiD. Survey responses illustrated that most (68%) pharmacy staff would dispense MAiD medications. Nonetheless, many respondents perceived that they lacked knowledge or comfort with different aspects of the MAiD process. Overall, 80% of participants reported a desire for professional development about MAiD.

**Conclusion:** Despite the rapidly changing landscape surrounding medical assistance in dying within the past year, most pharmacy regulatory authorities have provided direction and resources to their pharmacists. Ontario pharmacists and pharmacy technicians are willing to dispense MAiD medications; however, additional support in the form of professional development may be necessary based on participants' desire for education coupled with their perceived lack of knowledge. Future research may focus on the efficacy of provincial guidelines in supporting pharmacists' participation in MAiD. *Can Pharm J (Ott)* 2018;151:121-132.

## **Background**

The Canadian Criminal Code prohibited suicide, including assistance in death by health care practitioners, until 1972. Since then, there have been 2 hallmark Canadian cases surrounding access to assistance in death. In the first case, *Rodriguez v. Canada* (1973), the Supreme Court

ruled that the infringement on the rights of the patient to die was discordant with the fundamental principles of justice in Canada. Despite this case, medically assisted death remained a criminal offense. In the second case, *Carter v. Canada* (2009), Carter argued that the prohibition of assistance in dying contradicted the

The Ontario Pharmacists Association is committed to evolving the pharmacy profession and advocating for excellence in practice and patient care. This study aimed to increase our understanding of pharmacy practice surrounding medical assistance in dying and identify any supports pharmacists may need to deliver high-quality patient-focused care.

L'Association des pharmaciens de l'Ontario s'est engagée à faire évoluer la profession pharmaceutique et à faire la promotion de l'excellence dans la pratique et les soins aux patients. Cette étude avait pour but d'accroître notre compréhension de *la pratique de la phar*macie en ce qui a trait à l'aide médicale à mourir et à mettre en évidence toute aide dont pourraient avoir besoin les pharmaciens pour offrir des soins de qualité axés sur le patient.

© The Author(s) 2018



DOI:10.1177/1715163518754917

## KNOWLEDGE INTO PRACTICE



- Medical assistance in dying (MAiD) is relevant to Canadian pharmacists, as it is linked to community pharmacy settings through the dispensing of MAiD-related medications.
- Many Canadian pharmacy regulatory authorities have provided direction and resources to pharmacists; however, these documents differ between jurisdictions.
- The results from this study provide preliminary observations about the strengths and limitations of these regulatory documents and highlight Ontario pharmacists' perceptions of MAiD.
- This study highlights supports that pharmacists may require beyond the scope of regulatory bodies, which may include psychosocial support and professional development to facilitate pharmacists' participation in MAiD.

Canadian Charter of Rights and Freedoms; this led to the Supreme Court of Canada repealing the law that prosecuted health practitioners for aiding patients to die. On June 17, 2016, Bill C-14, Medical Assistance in Dying (MAiD), received Royal Assent.<sup>2</sup> The federal legislation for MAiD applies to all provinces and territories across Canada; however, provincial legislation and regulatory frameworks may differ between jurisdictions provided that they do not contradict the federal legislation.

Advocates promote MAiD as increasing patient autonomy and encouraging human dignity.3 However, MAiD has resulted in ethical and professional challenges for health care professionals attempting to reconcile professional standards of practice with moral and religious beliefs.4 These challenges are becoming increasingly salient in Canada, as recent reports have identified as many as 800 assisted deaths in Canada as of January 1, 2017.5,6 In Canada, MAiD is facilitated by a variety of health care professionals, including physicians, nurse practitioners, pharmacists, social workers and others. Therefore, it is critical given the multiple health care professionals involved in MAiD that the roles and responsibilities of each be clearly defined and understood by all providers.

Pharmacists often act as the gatekeepers for scheduled drugs under Canada's Controlled Drugs and Substances Act.<sup>7</sup> Pharmacy is a self-regulated profession that is subject to federal and provincial legislation.<sup>8-10</sup> It is the responsibility of the pharmacy regulatory authority within each province and territory to enforce federal and

provincial legislation as well as create resources and supports for their profession's members. Pharmacy regulatory authorities in Canada have created documents to provide direction and support to pharmacists and pharmacy technicians participating in MAiD within their jurisdiction.

Prior to Bill C-14, the Canadian Pharmacists Association (CPhA) surveyed the Canadian pharmacy community and identified that the majority of respondents strongly agreed that pharmacists should not be obligated to participate in medical assistance in dying. 11 Moreover, respondents in the CPhA survey highlighted the need for safeguards for MAiD, as well as full access to care plans for MAiD patients.11 However, no research has examined the proportion of Canadian pharmacy staff that would be willing to participate in MAiD. As illustrated by research outside of Canada, pharmacists' perceptions of medically assisted death are shaped by sociodemographic characteristics, such as age, gender or religious affiliation, which influences their participation. 12-14 As pharmacy staff in Canada are confronted with the decision to participate in MAiD, previous research indicates that some may object to being involved, and those who do participate may be affected psychologically by the process. 15 Understanding the intersection of legislation, jurisdictional regulations and pharmacy staff attitudes is important in ensuring pharmacists are participating in MAiD. Our study aims to fill this gap by examining the intersection between MAiD federal legislation, pharmacy regulatory authority documents and the attitudes of Ontario pharmacy staff pertaining to MAiD.

#### Methods

#### **Procedure**

We conducted a thematic analysis of documents from pharmacy regulatory authorities (i.e., provincial pharmacy colleges and territorial regulatory bodies) in Canada in response to Bill C-14 legislation. Each regulatory authority varied in the terminology used to describe these documents, which included guidelines, position statements and/or standards of practice. When these documents were not publicly available, we contacted the pharmacy colleges or territorial regulatory bodies to request access. The most recent versions of these documents were reviewed. In certain jurisdictions, more than 1 document was

included in the analysis since some jurisdictions included Frequently Asked Questions (FAQ) documents and others included joint guidelines with other health care professions.

We used secondary data derived from an Ontario Pharmacists Association's (OPA's) survey of members. The survey was developed to investigate pharmacy staff (i.e., pharmacists, pharmacy students and pharmacy technicians) perspectives on MAiD and their perceived professional development needs. The survey questions were informed by a literature scan and through review by pharmacists and policy experts at OPA. The OPA distributed the survey to members between June 22 and June 29, 2016. The original survey data collected by the OPA included directly identifiable information. For the purposes of this article, all identifiable information was deleted from OPA's server, and the anonymized data were used for the secondary analysis.

#### Analysis

We conducted a thematic analysis of the documents. Thematic analysis is a qualitative analytic method that is used across different methods, a process performed within major qualitative traditions (e.g., grounded theory), or a method in and of itself.16 It is defined as "a method for identifying, analyzing and reporting patterns (themes) within data." 17 We used thematic analysis as its own method because it offers flexibility that is not present in the tradition of grounded theory. 18 Thus, we coded documents according to the most salient themes emerging across the documents reviewed, which was inductive and involved lineby-line coding. Constant comparison was used to examine relationships; focused and theoretical coding was used to develop core themes.<sup>18</sup>

Data analysis for 5 documents was performed by 2 authors (L.V. and Z.R.S.R.-Y.) independently and compared for consistency. Discrepancies were discussed until a consensus was reached. All subsequent transcripts were coded by L.V. We used NVivo 10<sup>19</sup> to organize and facilitate coding of the data.

The secondary data analyses included descriptive statistics to observe trends in pharmacy staff's perceptions of participating in the dispensing of MAiD medications. All statistical analyses were completed using the R Statistical Program v.3.2.0,<sup>20</sup> and the threshold for statistical significance was set at  $p \le 0.05$ .

## MISE EN PRATIQUE DES CONNAISSANCES



- L'aide médicale à mourir (AMM) est un thème qui concerne les pharmaciens canadiens puisqu'il est lié aux pharmacies communautaires dans la délivrance des médicaments liés à l'AMM.
- De nombreux organismes canadiens de réglementation de la pharmacie ont préparé des directives et des ressources destinées aux pharmaciens, toutefois, ces documents diffèrent d'une administration à l'autre.
- Les résultats de cette étude offrent des observations préliminaires sur les forces et les faiblesses de ces documents réglementaires et mettent en évidence la perception des pharmaciens ontariens relativement à l'AMM.
- Cette étude souligne l'aide dont pourraient avoir besoin les pharmaciens au-delà de la portée des organismes de réglementation, comme le soutien psychosocial et le perfectionnement professionnel pour faciliter la participation du pharmacien à l'AMM.

#### Ethical considerations

Provincial and territorial regulatory documents were either publicly available or released to the authors with permission to be included in this analysis. As outlined by Ryerson University's Research Ethics Board (Toronto, Ontario), per Article 2.4 of the Tri-Council Policy Statement (TCPS 2), secondary analysis of anonymized data does not require ethical approval.

#### Results

Pharmacy regulatory authorities' documents We reviewed pharmacy regulatory authority documents pertaining to MAiD across 9 jurisdictions (Table 1). Documents from Alberta (AB), Quebec (QC) and Nunavut (NU) were not publicly available and so our team contacted their respective authorities to request access to their documents. QC provided an electronic English version of their joint guideline (for nurses, physicians and pharmacists), AB declined to participate as their guideline was under review (as of February 2017) and the document for NU was unavailable at the time of our analysis.

Three major themes emerged from the documents reviewed: pharmacists' role in quality assurance, practice considerations when implementing MAiD and resources for pharmacy staff involved in MAiD.

1. Pharmacists' role in quality assurance. Four subthemes emerged related to pharmacists'

TABLE 1 Pharmacy college and regulatory body MAiD guidelines or notices

Province/territory (abbreviation)	Regulatory authority	Document title	Publication date (month, year)
British Columbia (BC)	College of Pharmacists of British Columbia	Medical assistance in dying (MAiD) <sup>21</sup> Health Professions Act Bylaws Schedule F, Part 5—Dispensing drugs for the purposes of medical assistance in dying <sup>22</sup>	December 2016 July 2016
		Medical assistance in dying: British Columbia pharmacy protocols <sup>23</sup>	December 2016
Manitoba (MB)	College of Pharmacists of Manitoba	Notice to pharmacists and pharmacy managers <sup>24</sup>	June 2016
New Brunswick (NB)	New Brunswick College of Pharmacists	Frequently asked questions: MAiD <sup>25</sup>	January 2017
		Position statement: Medical assistance in dying (MAiD) <sup>26</sup>	December 2016
Newfoundland and Labrador (NL)	Newfoundland and Labrador Pharmacy Board	Medical assistance in dying <sup>27</sup>	September 2016
Nova Scotia (NS)	Nova Scotia College of Pharmacists	Standards of practice: Medical assistance in dying <sup>28</sup>	November 2016
Ontario (ON)	Ontario College of Pharmacists	Medical assistance in dying: Guidance to pharmacists and pharmacy technicians <sup>29</sup>	June 2016
Quebec (QC)	Ordre des pharmaciens du Québec*	Medical aid in dying practice guidelines <sup>30</sup>	November 2015*
Prince Edward Island (PEI)	Prince Edward Island College of Pharmacists	Medical assistance in dying: Guidance for pharmacists and pharmacy technicians <sup>31</sup>	December 2016
Saskatchewan (SK)	Saskatchewan College of Pharmacists	Medical assistance in dying (practitioner administered) practice guideline for pharmacists and pharmacy technicians <sup>32</sup>	September 2016
Northwest Territories (NT)	Northwest Territories Regulatory Authority	Medical assistance in dying: Interim guidelines for the Northwest Territories <sup>33</sup>	June 2016
Yukon Territory (YT)	Yukon Regulatory Authority	Professional memorandum—Update on medical assistance in dying in Yukon <sup>34</sup>	June 2016
		Professional Memorandum (Updated)— Update on medical assistance in dying in Yukon <sup>35</sup>	June 2016

\*Note that the guideline from QC is from 2015 because QC legalized assisted death in June 2015 under Bill 52. Each regulatory authority is listed in column 2 and is either a pharmacy college or governmental body.

responsibility for quality assurance in the MAiD process. For this article, we defined quality assurance as the maintenance of quality in the MAiD process in accordance with federal and provincial legislation and in compliance with regulation set forth by respective pharmacy regulatory authorities.

Preparation and adaptation of MAiD medications. Of the documents reviewed, only British Columbia (BC), QC and New Brunswick (NB) provide instructions on preparing MAiD medications in a sealed, tamper-proof container. With regards to preparation, no information is provided by Newfoundland and Labrador (NL), Manitoba

(MB), Saskatchewan (SK), Northwest Territories (NT) or Yukon Territory (YT) when discussing the adaptation of MAiD medications (i.e., altering or initiating drug therapy). Of the jurisdictions that provide guidance on preparation, Ontario (ON), NB and Prince Edward Island (PEI) discuss identifying "patient-specific factors" and adapting medications in collaboration with prescribers, while all other documents (QC, BC, Nova Scotia [NS]) instruct that pharmacists adhere to the provided protocol. Lastly, NB, NS, SK, QB and BC jurisdictions discuss the preparation of additional dosage for MAiD medications as a contingency for spoilage and additional dosing.

Storage of medications. Documents from SK, PEI, NS and QC discuss how to store MAiD medications. Specifically, SK, PEI and NS discuss storing medications in a locked safe, secure area or locked cabinet to ensure security of medications within the pharmacy, whereas QC describes storage of the MAiD medications for the purposes of drug stability. All documents, except for MB and YT, advise discussing the timing of releasing stored medications in collaboration with prescribers. Both ON and NB state pharmacists should follow up with the prescriber after a "considerable time" has passed after receiving the request for MAiD, which is unspecified in the documents.

Destruction of medications. All documents, apart from NT, YT and MB, discuss the destruction of unused medications. Both NB and BC require the pharmacist to retain paperwork about the medications dispensed and the expected return date for unused medications. The documents from BC, NS, ON, QC and SK state that the process for the collection of unused medications should be established in collaboration with the prescriber. Only BC documents indicate a specific timeframe for return of unused medications (i.e., 48 hours) following MAiD.

Documenting MAiD. Pharmacists are responsible for managing the documentation that they receive from the prescriber, as well as paperwork related to any aspects of the MAiD process for which they are involved. Other than YT and MB, which do not address documentation, all jurisdictions discuss pharmacists' documentation requirements in varying depth. Pharmacists in NB must document the extent of their relationship with the

patient; in QC, the patient's death must be documented in the pharmacy record; and pharmacists in NS and SK are required to collect written documentation from the prescriber to confirm that the patient meets eligibility criteria and that the medication is intended for a specific patient and that it is for the purpose of MAiD. PEI, NS, BC, QC and NT all provide resources to the pharmacists for documentation by including, or referring to the location of, fillable forms for prescriptions or documentation. Pharmacists in ON are required to follow documentation standards set out by the Ontario College of Pharmacists.

2. Practice considerations when implementing MAiD. Three subthemes emerged related to the role of pharmacists when implementing MAiD.

Dispensing medications. In all documents, the pharmacist's responsibility for dispensing MAiD medications varied. For example, in YT and NT, the only authorized venue for dispensing MAiD is within a hospital; in MB, only pharmacists who are part of the "MAiD Expert Medical Team" can dispense medications. Most jurisdictions highlight that no prescriptions should be dispensed to a prescriber "for office use," while NB, SK and NS allow MAiD medications to be released to the prescriber or a person designated by the prescriber. In ON, no restriction is made as to whether patients or their representatives can collect MAiD medications. In other provinces/territories (QC, BC, PEI, NT, YT), it is advised that the prescriber collect the medications directly from the pharmacist and distribute them to the patient.

In all documents that mention MAiD medication education and counselling, the individual picking up the MAiD medications, whether a patient, prescriber or patient representative, is to be given counselling. All provinces apart from MB, NT and YT refer to counselling about issues such as storage, stability and efficacy of medications, although in NS and SK, counselling is not necessary if the pharmacist confirms with the prescriber that counselling has been provided. In NB, the pharmacist must provide counselling using written instructions along with the MAiD medications.

Interacting with patients. When interacting with patients, pharmacy staff are guided to observe the process of MAiD in accordance with the law, while upholding their professional standards as outlined by their pharmacy regulatory

authority. Except for NT, QC and BC, all documents indicate that pharmacists should refer initial MAiD questions to physicians, nurse practitioners or expert committees (MB). All documents apart from QC, YT and NT emphasize that when interacting with patients, pharmacists cannot assume a leadership role. This includes restricted responsibilities in assessing patient eligibility, consent for MAiD or prescribing/adapting MAiD medications, all of which are often outlined as the responsibilities of the prescriber.

Other than YT, MB and NT, all documents emphasize the importance of collaborating with physicians and nurse practitioners. The documents outline the importance of collaborating with prescribers early in the MAiD process to ensure timeliness of medications; however, guidance on facilitating this collaboration is not specified. Like quality assurance, pharmacists are required to collaborate with prescribers to ensure that the prescription is accurate, eligibility criteria are met, and a plan for the return and disposal of unused medications is in place.

Responsibilities of pharmacy technicians. There are several differences related to the roles and responsibilities of pharmacy technicians. In NS and SK, pharmacy technicians cannot participate in any aspect of MAiD; in PEI, ON, NB and BC, pharmacy technicians can participate in the preparation of medications related to MAiD. In ON, pharmacy technicians can also provide information about the initiation of MAiD. The remaining documents (NT, YT, QC, NL, MB) do not discuss pharmacy technicians' role in MAiD.

3. Resources for pharmacy staff involved in MAiD. Resources for pharmacists who are either directly or indirectly involved in MAiD can be categorized into 2 subthemes: information to understand the broader landscape and ethical guidance.

Information to understand the broader landscape of MAiD. All jurisdictions except for NT discuss the background of Bill C-14. Although some documents are more fulsome than others, most discuss the timeline for and provide an explanation of Bill C-14. To orient pharmacists to MAiD, terminologies and definitions are provided by all jurisdictions apart from YT. With the exception of QC and ON, all documents provide links to other resources,

including other health care provider regulatory bodies, such as the college of physicians and/or college of nurses and links to the federal legislation.

Ethical guidance for MAiD. Although not mentioned in the federal legislation, most documents from jurisdictions (with the exception of MB, YT and BC) explicitly discuss a pharmacist's ability to conscientiously object to MAiD. Conscientious objection is a provider's right to refuse provision of a service due to moral or religious beliefs.36 Other than in NL and NS, pharmacists are responsible for finding and providing a nonobjecting referral to MAiD if they decide not to participate; NT has a central coordinating service for referrals. In the case of NL, the pharmacist must inform his or her management at the pharmacy, who then "reasonably accommodates" the pharmacist's objection and facilitates an effective referral. For NS, a pharmacist informs management if he or she is unwilling or unable to participate in MAiD, but the objecting pharmacist must refer the prescriber to a pharmacist who is willing to participate and who is accessible to the patients; alternatively, the pharmacist can refer the prescriber to the Nova Scotia College of Pharmacists. In QC, SK and NS, if a pharmacist has a conscientious objection, he or she is also required to inform the prescriber of the decision to conscientiously object to MAiD.

The documents from BC, NB, NL, ON, NS and SK all provide ethical guidance on managing relationships pertaining to MAiD. The documents from BC and SK guide pharmacists to object to MAiD if their patient has the following characteristics: the patient is a family member or a close personal relationship or the pharmacist would be a beneficiary of a patient's will or benefit financially or in any way because of the patient's death. NB, NL, NS and ON each highlight the responsibility that pharmacists have in maintaining a professional relationship with patients to facilitate their autonomy and respect for decision making. SK is the only province with a document that advises pharmacists to ensure they have a close relationship with their patient if they embark on MAiD and, if a relationship does not exist, to form a therapeutic relationship with the patient.

## Ontario Pharmacists Association survey

A survey link was emailed to 8640 OPA members; 608 individuals (7%) completed the survey.

**TABLE 2** Survey respondent characteristics

Characteristics	Number of participants (%)	
Gender		
Male	230 (38.1)	
Female	372 (61.7)	
Other	1 (0.2)	
Age range		
18-29	275 (44.9)	
30-49	162 (26.4)	
50-64	155 (25.3)	
65+	21 (3.4)	
Primary role		
Pharmacist	344 (56.6)	
Student	203 (33.3)	
Technician	38 (6.3)	
Other	23 (3.8)	
Primary place of practice		
Community pharmacy	297 (49.2)	
Hospital	72 (11.9)	
Family health team/long-term care facility	29 (4.8)	
Student/intern	185 (30.6)	
Other	21 (3.5)	
Years of practice (excludes students)		
5 years or less	99 (25.0)	
6-15 years	71 (17.9)	
16+ years	226 (57.1)	

Table 2 summarizes survey respondent characteristics. Most participants were female and varied in age range, with many falling between the ages of 18 and 29. Many survey participants were pharmacists with a primary place of practice in the community. Many of the participants had more than 16 years of experience.

Table 3 summarizes pharmacists' concerns about dispensing and answering inquiries about MAiD. Participants were only directed to these questions if they reported being concerned about dispensing MAiD medications or about answering inquiries about MAiD. While approximately

68% (312/460) of respondents reported that they would participate in the dispensing of MAiD medications, close to 86% (474/552) of respondents reported at least 1 concern about dispensing MAiD medications (Table 3). Approximately 60% (281/469) indicated that they had concerns about answering general inquiries about MAiD. Of the respondents who had concerns about dispensing, 48.3% were troubled about the emotional impact of dispensing MAiD medications. This was coupled with findings suggesting that participants were concerned about their lack of knowledge about the MAiD process (75.9%) and

**TABLE 3** A summary of the concerns regarding dispensing of medical assistance in dying (MAiD) medications

Concerns	Proportion with affirmative response (%)			
Dispensing MAiD medications				
Not knowing what to do if the medication(s) fail to cause death	367/552 (66.4%)			
Unexpected side effects for the patient (e.g., coma, discomfort)	333/552 (60.3%)			
The emotional impact on the dispensing pharmacist in MAiD	267/552 (48.3%)			
Conflict with religious beliefs	184/552 (33.3%)			
Answering inquiries about MAiD				
Lack of knowledge about the MAiD process	278/366 (75.9%)			
Lack of knowledge about the information to give patients about MAiD	257/366 (70.2%)			
Lack of knowledge about the pharmacology of the medications used in MAiD	211/366 (57.7%)			
Personal values (e.g., moral/religious grounds, fear of liability)	187/366 (51.1%)			

their lack of knowledge about the information to give patients about MAiD (70.2%).

Overall, 80% (434/543) of participants reported that they would be interested in additional professional development about MAiD. Online programs for professional development format were most desired (77%), followed by live programs (49%) and webinars (46%).

#### Discussion

Most pharmacy regulatory authorities across Canada have provided direction and resources to pharmacists about MAiD; however, differences exist across jurisdictions. For example, the terminology used to identify the resources differed, as is evident when comparing the titles of these documents. Specifically, the NS MAiD document was titled as a "Standards of Practice," while others, such as ON, titled their document as a "Guidance," and yet others such as NB titled their document as a "Position Statement" and included FAQ documents. Certain jurisdictions provided detailed clinical information and instruction on implementing MAiD, while others restricted pharmacists from participating in MAiD unless they are part of an established MAiD committee or hospital. These nuances reflect the idiosyncrasies of pharmacy across Canada, which contribute to MAiD implementation challenges.

Pharmacists' roles in MAiD, as outlined by the documents analyzed, are complex. Pharmacists

are required to reconcile their professional standards of practice as well as moral and religious convictions while providing and maintaining collaborative relationships with their patients. These documents are important, as the OPA survey findings suggest that while most respondents were willing to participate in dispensing MAiD medications, many had concerns about aspects of MAiD, which may have implications for some pharmacists' participation in the dispensing process. These findings mirror the CPhA survey, which indicated that most pharmacists wanted legislation to include "safeguards" for pharmacists.<sup>11</sup> Nonetheless, in many of the documents analyzed, the execution of the directions provided to pharmacists is unclear. For example, in NB, pharmacists can assess drug-related issues but cannot "lead the process," which is somewhat ambiguous. In PEI, pharmacists must be "assured" that the prescriber has assessed eligibility and received consent, but the criteria for a pharmacist to become "assured" are unclear. In these examples, among others, pharmacists may experience moral and professional distress when they are liable for ensuring aspects of MAiD have been met but are simultaneously dependent on the prescriber to "lead the process."

The process for MAiD is like other aspects of care for pharmacists, who are often dependent on physicians and nurse practitioners to make an accurate diagnosis for a patient. However, due to the controversial nature of MAiD, a

standardized and refined approach may be necessary to ensure that pharmacists can confidently dispense MAiD and safeguard all MAiD requirements. It is important to note that drug adaptation responsibility and prescribing authority for controlled drugs and narcotics differ for pharmacists depending on their jurisdiction within Canada.<sup>37</sup> Prescribing authority and adaptation for MAiD medications may depend on established standards for prescribing within each jurisdiction, since pharmacists who do not typically have any prescribing authority would not be likely to participate in drug therapy adaptation for MAiD. Nonetheless, in jurisdictions such as NS, pharmacists' ability to adapt and prescribe drugs under the Pharmacists Drug Prescribing Regulations did not apply to their prescribing authority for MAiD, which restricted pharmacists' ability to make any changes to the provided MAiD protocol. Prescribing authority provides an example of the complexity of implementing MAiD within differing jurisdictional environments.

Despite most of the OPA survey respondents reporting their willingness to participate in dispensing MAiD, nearly half were concerned about the emotional impact of dispensing MAiD medications. This is an important finding, as a recent article outlined Canadian physicians' hesitancy to continue to participate in MAiD due to the emotional duress,<sup>38</sup> which has been echoed in previous literature outside of Canada. 15 Furthermore, previous research has also shown that the emotional impact of medical errors leads to increased anxiety, decreased job satisfaction and reduced confidence in care.<sup>39</sup> This is particularly important in the context of MAiD, which can include adverse events causing patient harm (rather than death). 40 None of the regulatory documents analyzed discuss the emotional effect pharmacists may experience as a result of their participation in MAiD. However, these documents are limited in their ability to educate pharmacy staff. Provincial and national pharmacy associations may be better positioned to create and implement professional development. For example, survey respondents had a desire to receive education to improve communication or cope with negative emotions associated with MAiD, which would not be within the scope of regulatory direction. Professional development initiatives should aim to ensure that pharmacists have adequate coping strategies postvention or in the case of adverse drug events.

In addition to the psychological challenges, many OPA survey respondents expressed concern about their knowledge of the MAiD process, specifically a lack of knowledge regarding the type of information to provide patients and prescribers, as well as their ability to answer questions about MAiD pharmacology. These findings were also coupled with participants' desire for professional development in the area of dosing, which is highlighted as a barrier to practice in previous studies, which have shown that physicians lack knowledge about the therapeutics and use of recommended lethal drugs in euthanasia.40-43 Considering participants' lack of perceived knowledge and comfort surrounding MAiD, professional development can facilitate the education of pharmacy staff on the process of MAiD and ensure they adequately meet the legal and regulatory standards set forth for their participation in MAiD. Interestingly, participants requested professional development in topic areas that were included in the regulatory authority documents of some provinces, such as the procurement, preparation and storage of MAiD medications.

While pharmacists' expanded scope of practice in Canada allows them to be more involved in patient care and reduce the burden on physicians, 44 pharmacists are increasingly involved in care that may intersect their professional duty and personal mores or religious obligations. It is important to note that some pharmacy staff may choose not to participate in MAiD. Pharmacists are not explicitly mentioned in the federal MAiD legislation with regards to conscientious objection. The legislation provides guidance to the group of providers who assist prescribers of MAiD, which would include pharmacists, but this does not specifically outline pharmacists' ability to conscientiously object. Conscientious objection for pharmacists is not novel to MAiD and has striking similarities to the abortion pill Mifegymiso, which recently became available to all Canadians free of charge with a prescription. These controversial medications have illustrated the inherent limitations of conscientious objection in Canada. Some scholars argue that legislation for conscientious objection is somewhat ambiguous in Canada,<sup>45</sup> and thus, pharmacyrelated guidelines, standards of practice and regulatory position statements play an important role in outlining pharmacists' ability to object to MAiD when necessary.

Our document analysis identified pharmacists' ability to conscientiously object, but the direction provided is somewhat incomplete. For example, in many of the documents, pharmacists who object to MAiD are responsible for finding a nonobjecting pharmacist, which may not always be feasible. In certain cases, the pharmacist defaults to his or her management to find a pharmacist willing to participate, which shifts the burden to other staff members who may also conscientiously object to MAiD. Some documents specified a process to relieve a pharmacist (and his or her management) of this responsibility to find a referral, which was accomplished by either contacting the regulatory authority or by contacting a centralized care service. Of interest, provinces such as Ontario have recently created a coordinated care service to refer MAiD to willing community pharmacists. Nonetheless, ensuring adequate resources for those who choose to opt out of MAiD is important for the sustainability of this service to Canadians.

#### Limitations

The OPA survey was distributed to participants shortly after Bill C-14 was introduced, and thus their exposure to these documents was limited at the time of the survey. Furthermore, participants were not asked whether they had participated in MAiD, and it is unclear whether their desires for professional development needs were driven by their lack of experience or perceived

lack of knowledge. In addition, our thematic analysis of documents did not account for additional forms of direction provided by regulatory authorities that may be available beyond the formal direction provided in the documents (i.e., email correspondence or press releases). Thus, our document analysis may not holistically capture the resources provided to pharmacy staff by regulatory authorities in Canada.

#### Conclusion

Medical assistance in dying is relevant to Canadian pharmacists as it is linked to community pharmacy settings through the dispensing of MAiD-related medications. Many pharmacy regulatory authorities in Canada have provided direction and resources to pharmacists; however, there are nuances to these documents. The results from this study provide preliminary observations about the strengths and limitations of these documents. Moreover, this study highlights Ontario pharmacists' perceptions of MAiD and provides insight into the support that pharmacists may require beyond the scope of regulatory bodies, which may include psychosocial support and professional development, to fully facilitate their participation in MAiD. Future research should focus on the needs of pharmacy staff who have participated in MAiD to ensure the professional development needs of pharmacists across the practice continuum are being met. ■

From the Ontario Pharmacists Association (Verweel, Rosenberg-Yunger, Malek); School of Health Services Management (Rosenberg-Yunger), Ryerson University; and the Leslie Dan Faculty of Pharmacy (Movahedi), University of Toronto, Ontario. Contact leeverweel@gmail.com.

Acknowledgments: The authors thank the pharmacists who participated in this study.

**Author Contributions:** All authors contributed to the development of the survey content. L. Verweel conducted the analysis for the survey. L. Verweel, Z. R. S. Rosenberg-Yunger and T. Movahedi contributed to the document review. L. Verweel and Z. R. S. Rosenberg-Yunger conducted the thematic analysis for the document review. All authors contributed to the manuscript and approved the final version.

**Declaration of Conflicting Interests:** The authors have no conflicts of interest to declare.

**ORCID iD:** T. Movahedi https://orcid.org/0000-0003-3184-9931

#### References

- 1. Carter v. Canada: The Supreme Court of Canada's decision on assisted dying. Available: www.lop.parl.gc.ca/content/lop/ResearchPublications/2015-47-e.html (accessed Aug. 10, 2017).
- 2. House Government Bill—Bill C-14—Royal Assent (42-
- 1). Available: http://www.parl.gc.ca/HousePublications/Publication.aspx?Language=E&Mode=1&DocId=8384014 (accessed Mar. 20, 2017).
- 3. Boudreau JD. Physician-assisted suicide and euthanasia: can you even imagine teaching medical students how to end their patients' lives? *Perm J* 2011;15(4):79-84.
- 4. Brindley P, Kerrie J. Conscientious objection and medical assistance in dying (MAiD) in Canada: difficult questions—insufficient answers. *Can J Gen Intern Med* 2017;11(4):7-10.

- 5. Slaughter G. At least 744 assisted-deaths in Canada since law passed: CTV News analysis. CTV News 2016 Dec. 28. Available: www.ctvnews.ca/health/at-least-744-assisted-deaths-in-canada-since-law-passed-ctv-news-analysis -1.3220382 (accessed Feb. 27, 2017).
- 6. Government of Canada. Interim update on medical assistance in dying in Canada June 17 to December 31, 2016. 2017. Available: https://www.canada.ca/en/health-canada/services/publications/health-system-services/medical-assistance-dying-interim-report-dec-2016.html (accessed Jan. 29, 2018). 7. Controlled Drugs and Substances Act. Statutes of Canada, c. 19. Vol. 2017, Revision. 1996. pp. 4-7. Available: http://laws-lois.justice.gc.ca/PDF/C-38.8.pdf%5Cnhttp://laws-lois.justice.gc.ca/eng/acts/C-38.8/page-1.html (accessed Mar. 20, 2017).
- 8. Ontario College of Pharmacists. Federal acts & regulations. 2015. Available: www.ocpinfo.com/regulations-stand ards/federal/ (accessed Aug. 18, 2017).
- 9. National Association of Pharmacy Regulatory Authorities (NAPRA). Model standards of practice for Canadian phar macy technicians. 2011. Available: http://napra.ca/Content\_Files/Files/Model\_Standards\_of\_Prac\_for\_Cdn\_Pharm Techs\_Nov11.pdf (accessed Aug. 10, 2017).
- 10. The National Association of Pharmacy Regulatory Authorities (NAPRA). Model standards of practice for Canadian pharmacists. Ottawa; 2009. Available: http://napra.ca/Content\_Files/Files/Model\_Standards\_of\_Prac\_for\_Cdn\_Pharm\_March09\_layout2017\_Final.pdf (accessed Aug. 18, 2017).
- 11. Canadian Pharmacists Association. Submission to the external panel on options for a legislative response to *Carter v. Canada*. 2015. Available: https://www.pharmacists.ca/cpha-ca/assets/File/cpha-on-the-issues/CPhA%20Submission%20to%20 the%20External%20Panel%20on%20Legislative%20Options%20for%20Assisted%20Dying.pdf (accessed Aug. 1, 2017).
- 12. Bilsen J, Bauwens M, Bernheim J, et al. Physician-assisted death: attitudes and practices of community pharmacists in East Flanders, Belgium. *Palliat Med* 2005;19(2):151-7.
- 13. Hackett EA, Francis S-A. "Death was a blessing"—should it ever be pharmaceutically hastened? British pharmacists' views. *Pharm World Sci* 2003;25(6):288-93.
- 14. Rupp MT, Isenhower HL. Pharmacists' attitudes toward physician-assisted suicide. *Am J Hosp Pharm* 1994;51(1):69-74.
- 15. Stevens KR. Emotional and psychological effects of physician-assisted suicide and euthanasia on participating physicians. *Linacre Q* 2006;73(3):203-16.
- 16. Denzin N, Lincoln Y. *The Sage handbook of qualitative research*. Thousand Oaks (CA): Sage; 2005.
- 17. Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol.* 2006;3(2):77-101.
- 18. Mack N, Woodsong C, McQueen KM, Guest G, Namey E. Qualitative research methods: a data collector's field guide. 2011. Available: https://www.fhi360.org/sites/default/files/media/documents/Qualitative Research Methods—A Data Collector's Field Guide.pdf (accessed Mar. 10, 2017). 19. QSR. NVivo 10 research software for analysis and insight.
- 19. QSR. NVivo 10 research software for analysis and insight. Available: http://www.qsrinternational.com (accessed Jan. 29, 2018).

- 20. R Core Team. R version 3.2.0. 2016. Available: https://www.r-project.org/ (accessed Mar. 14, 2017).
- 21. College of Pharmacists of British Columbia. Medical assistance in dying (MAID). 2016. Available: http://www.bcpharmacists.org/medical-assistance-dying (accessed Mar. 14, 2017).
- 22. College of Pharmacists of BC. HPA bylaws schedule f part 5—dispensing drugs for the purposes of medical assistance in dying standards, limits and conditions. 2016. Available: http://library.bcpharmacists.org/6\_Resources/6-1\_Provinc ial\_Legislation/5195-HPA\_Bylaws\_MAID.pdf (accessed Mar. 20, 2017).
- 23. Provincial Medical Assistance in Dying Working Group. BC pharmacy protocols for medical assistance in dying. 2016. Available: http://medicalstaff.vch.ca/wp-content/uploads/sites/13/2016/04/BC-Pharmacy-Protocols-for-MAID\_2016-12-05-FINAL.pdf (accessed Mar. 20, 2017).
- 24. Lessard-Friesen S. *Update on medical assistance in dying* (MAID) (formerly physician assisted dying). Winnipeg (MB): College of Pharmacists of Manitoba; 2016.
- 25. New Brunswick College of Pharmacists. *Frequently asked questions (FAQs): MAiD.* Moncton (NB): New Brunswick College of Pharmacists; 2016;6.
- 26. New Brunswick College of Pharmacists. *Position statement: medical assistance in dying (MAiD)*. Moncton (NB): New Brunswick College of Pharmacists; 2016.
- 27. The Newfoundland & Labrador Pharmacy Board. Newfoundland and Labrador pharmacy board guidelines for pharmacy practice: medical assistance in dying. St. John's (NL): Newfoundland & Labrador Pharmacy Board; 2016.
- 28. Nova Scotia College of Pharmacists. *Standards of practice: medical assistance in dying*. Halifax: Nova Scotia College of Pharmacists; 2016.
- 29. Ontario College of Pharmacists. *Medical assistance in dying: guidance to pharmacists and pharmacy technicians.*Toronto: Ontario College of Pharmacists; 2016.
- 30. College Des Medicins Du Quebec. *Medical aid in dying:* 11/2015 practice guidelines. 2015.
- 31. PEI College of Pharmacists. *Medical assistance in dying:* guidance for pharmacists and pharmacy technicians. Cornwall (PEI): PEI College of Pharmacists; 2016.
- 32. Saskatchewan College of Pharmacy Professionals. Medical assistance in dying (practitioner administered) practice guideline for pharmacists and pharmacy technicians. Regina: Saskatchewan College of Pharmacy Professionals; 2016.
- 33. Government of Northwest Territories. Medical assistance in dying: interim guidelines for the Northwest Territories, effective June 17, 2016. Available: www.hss.gov.nt.ca (accessed Mar. 7, 2017).
- 34. Noseworthy M. *Professional memorandum: update on medical assistance in dying in Yukon*. Whitehorse: Professional Licensing & Regulatory Affairs; 2016.
- 35. Noseworthy M. *Professional memorandum (update): update on medical assistance in dying in Yukon.* Whitehorse: Professional Licensing & Regulatory Affairs; 2016.
- 36. Sulmasy DP. What is conscience and why is respect for it so important? *Theor Med Bioeth* 2008;29(3):135-49.

### ORIGINAL RESEARCH

- 37. Canadian Pharmacists Association. Pharmacists' Scope of Practice Canada—English. Available: https://www.pharmacists.ca/pharmacy-in-canada/scope-of-practice-canada/(accessed Aug. 8, 2017).
- 38. Kirkey S. "Take my name off the list, I can't do any more": some doctors backing out of assisted death. *National Post* 2017 Feb. 26. Available: http://news.national post.com/news/0227-na-euthanasia (accessed Mar. 10, 2017).
- 39. Waterman AD, Garbutt J, Hazel E, et al. The emotional impact of medical errors on practicing physicians in the United States and Canada. *Jt Comm J Qual Patient Saf* 2007;33(8):467-76.
- 40. Groenewoud JH, van der Heide A, Onwuteaka-Philipsen BD, et al. Clinical problems with the performance of euthanasia and physician-assisted suicide in the Netherlands. N Engl J Med 2000;342(8):551-6.

- 41. Meier DE, Emmons C-A, Wallenstein S, et al. A national survey of physician-assisted suicide and euthanasia in the United States. *N Engl J Med* 1998;338(17):1193-201.
- 42. Emanuel EJ, Daniels ER, Fairclough DL, Clarridge BR. The practice of euthanasia and physician-assisted suicide in the United States: adherence to proposed safeguards and effects on physicians. *JAMA* 1998;280(6):507-13.
- 43. Drickamer MA, Lee MA, Ganzini L. Practical issues in physician-assisted suicide. *Ann Intern Med* 1997; 126(2):146-51.
- 44. Tannenbaum C, Tsuyuki RT. The expanding scope of pharmacists' practice: implications for physicians. *CMAJ* 2013;185:1228-32.
- 45. Shaw J, Downie J. Welcome to the wild, wild North: conscientious objection policies governing Canada's medical, nursing, pharmacy and dental professions. *Bioethics* 2014;28(1):33-46.