

Review Article

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Professional experiences of formal healthcare providers in the provision of medical assistance in dying (MAiD): A scoping review

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Abstract

Objective. This scoping review describes the existing literature which examines the breadth of healthcare providers' (HCP's) experiences with the provision of medical assistance in dying (MAiD).

Method. This study employed a scoping review methodology: (1) identify research articles, (2) identify relevant studies, (3) select studies based on inclusion/exclusion criteria, (4) chart the data, and (5) summarize the results.

Results. In total, 30 papers were identified pertaining to HCP's experiences of providing MAiD. Fifty-three percent of the papers were from Europe ($n = 16$) and 40% of studies were from the USA or Canada ($n = 12$). The most common participant populations were physicians ($n = 17$) and nurses ($n = 12$). This scoping review found that HCPs experienced a variety of emotional responses to providing or providing support to MAiD. Some HCPs experienced positive emotions through helping patients at the end of the patient's life. Still other HCPs experienced very intense and negative emotions such as immense internal moral conflict. HCPs from various professions were involved in various aspects of MAiD provision such as responding to initial requests for MAiD, supporting patients and families, nursing support during MAiD, and the administration of medications to end of life.

Significance of results. This review consolidates many of the experiences of HCPs in relation to the provision of MAiD. Specifically, this review elucidates many of the emotions that HCPs experience through participation in MAiD. In addition to describing the emotional experiences, this review highlights some of the roles that HCPs participate in with relation to MAiD. Finally, this review accentuates the importance of team supports and self-care for all team members in the provision of MAiD regardless of their degree of involvement.

Introduction

In June 2016, Canada passed legislation about assisted death, also known as medical assistance in dying (MAiD; Government of Canada, 2017). Bill C-14 established a legislative framework for both euthanasia and assisted suicide in all Canadian provinces and territories (Minister of Justice, 2016). Medical assistance in dying can be provided in two ways: voluntary active euthanasia or assisted suicide. Voluntary active euthanasia is the practice of administering medication(s), most commonly by a physician, to hasten a person's death at the explicit request to alleviate suffering (Dierckx de Casterlé et al., 2010). Assisted suicide, or physician-assisted suicide, is the practice in which a person receives a prescription for life-ending medications that are self-administered by the person (Gielen et al., 2009). In Canada, nurse practitioners and physicians are legally authorized to both prescribe and administer medications that hasten death (Minister of Justice, 2016). Nurse practitioners are licensed advanced practice nurses whose scope is similar to a physician, with the authority to diagnose and manage disease/illness, prescribe medications, order/interpret laboratory/diagnostic tests, and initiate referrals to specialists (British Columbia College of Nurse Professionals, 2020). A small body of research demonstrates that nurses are often involved at various stages, and in various roles in the provision of MAiD in countries where MAiD is legal, and in some cases where it is not. Therefore, it is of utmost importance to understand the role of all caregivers (such as nurses, pharmacists, and social workers) who may be involved in the provision of MAiD including understanding the experiences of interprofessional teams and how experiences may vary between professions.

Understanding the professional experiences of healthcare providers (HCPs), especially of nurses and physicians providing end-of-life care, is of utmost importance as they are regularly faced with making sense of and coping with serious illness and death. Nurses who provide end-of-life care have described this work as demanding, and report being exposed to

emotional pain, overload, and work-related stress (Ablett and Jones, 2007; Boroujeni et al., 2009). Similarly, studies of palliative care practitioners have identified the emotional toll from being constantly exposed to death (Vachon and Sherwood, 2007; Kearney et al., 2009). The emotional and spiritual experiences associated with end-of-life care can include anxiety, powerlessness, uncertainty, distress, grief, and frustration (Browall et al., 2014; Luxardo et al., 2014; Wilson, 2014). Alternatively, some HCPs viewed the experience of end-of-life care as a privilege, giving them insight and bringing meaning to their own lives (Kearney et al., 2009; Johansson and Lindahl, 2012; Browall et al., 2014; Fosse et al., 2017).

The provision of MAiD can elicit a similar spectrum of emotions among HCPs (Fujioka et al., 2018) as experienced during the provision of end-of-life care. However, in addition to emotional responses, several moral conflicts about MAiD have been noted. It has been argued that MAiD stands in direct conflict of the goals of Western medicine, which is committed to promoting health and to doing no harm (Hulkower, 2010; Siden, 2016). As such, some physicians felt that MAiD should not be considered a medical treatment, and that it is beyond the scope of acceptable practices (Boudreau and Somerville, 2013). However, others maintain that the goals of medicine are to uphold the patients' personal wishes and values, wellbeing, and medical needs (Kaba and Sooriakumaran, 2007), in which MAiD may be a legally and ethically acceptable medical treatment. What remains unclear is how HCPs manage this new scope of practice and navigate the ethical landscape surrounding MAiD. Fujioka et al. (2018) emphasize the paucity of research exploring the breadth of experiences of formal caregivers in the provision of MAiD across professions and around the world and recommended further research specifically focus on the experience of professional HCPs with MAiD. Therefore, it is timely to conduct this scoping review to examine and synthesize existing evidence about the professional experiences of formal caregivers in the provision of MAiD. This scoping review asks: what are the professional experiences of formal caregivers in the provision of MAiD?

Methods

Scoping review is a knowledge synthesis method, which can be used to bring meaning and significance to a diverse body of research. This is done through extraction of key information and description of key concepts, main sources and types of evidence available (Davis et al., 2009). This scoping review is based on the framework proposed by Colquhoun et al. (2014), which has five steps: (1) identify the research question, (2) identify relevant studies, (3) study selection, (4) chart the data, and (5) collate, summarize, and report the results.

The research question examined "professional experience" referring to the experiences of HCPs within their workplace, while partaking in duties within their scope of practice and experience in relation to MAiD. Formal HCPs included doctors, nurses, social workers, or other HCPs engaged in the care of patients within the healthcare system. The provision of MAiD referred to HCPs who were involved in the care of a patient from the time that a request for MAiD was made to the time that the procedure was undertaken (if the request was granted), and any aftercare following the procedure. Studies of opinions, attitudes, and views were excluded.

Seven electronic databases were searched in January 2019, including PubMed, Web of Science (ISI), CINAHL (Ebsco),

PsychInfo (Ebsco), Social Work Abstracts (Ebsco), Academic Search Premier (Ebsco), and Embase (OVID). Search strategies included various combinations of the following key words and subject headings (when available) were used to capture literature relevant to this topic:

- 1) Formal Caregivers: physician, doctor, nurse, nurse practitioner, palliative care worker, clinician, care team, care aide, support worker, counselor, circle of care, management, hospice staff, care provider.
- 2) Experience: provision, engagement, attitude of health personnel, professional practice, experience.
- 3) Medical Assistance in Dying: euthanasia, physician-assisted death, medical dying, mercy killing, assisted suicide, continuous sedation until death, wish to die, euthanasia, active, euthanasia, active, voluntary, suicide, assisted, right to die, death with dignity.

A detailed article search chart outlining inclusion and exclusion data can be found in Figure 1.

Results

Study details

Fifty three percent of the 30 studies were from Europe (Belgium: $n = 11/30$; Netherlands: $n = 5/30$). Twenty seven percent of the studies were from the United States (Oregon: $n = 6/30$; Connecticut: $n = 1/30$; Seattle & San Francisco: $n = 1/30$), and 13% were from Canada ($n = 4/30$). Two studies were multi-country studies, comparing the Netherlands to New Zealand (Mitchell, 2004) or the USA (Voorhees et al., 2014). Sixty-three percent of studies stated that MAiD was legal ($n = 19/30$), whereas 17% of studies ($n = 5/30$) stated that MAiD was not legal at the time of data collection (Kohlwes et al., 2001; Bilsen et al., 2004; De Bal et al., 2006; Braverman et al., 2017). One study did not state if MAiD was legal (Georges et al., 2008) and five included countries with varying legal status (Miller et al., 2002; De Beer et al., 2004; De Bal et al., 2008; Voorhees et al., 2013; Elmore et al., 2016). Thirty-three percent of studies ($n = 10/30$) were completed between 2000 and 2005, 30% between 2005 and 2010 ($n = 9/30$), and 37% of studies between 2010 and 2018 ($n = 11/30$). Sixty-three percent of the studies were done by academic institutions in one or more countries ($n = 19/30$). The remaining 33% ($n = 10/30$) of studies involved both academic and non-academic institutions with only one study being conducted by a non-academic center only (Georges et al., 2008). Fifty-seven percent of studies were qualitative ($n = 17/30$) and 37% were non-experimental cross-sectional design ($n = 11/30$). The most commonly used term was euthanasia ($n = 12/30$) and physician-assisted suicide ($n = 7/30$). Seven studies used multiple terms, all of which used euthanasia plus additional terms (assisted suicide, physician-assisted suicide, voluntary active euthanasia, MAiD). When looking more in depth about terms used, 83% of studies defined their terms ($n = 25/30$) (see Table 1).

Study participants

Fifty percent of studies involved physicians ($n = 15/30$), and 33% involved nurses ($n = 10/30$). One study examined social workers' experiences (Miller et al., 2002). Additionally, four studies compared more than one population: two studied both nurses and

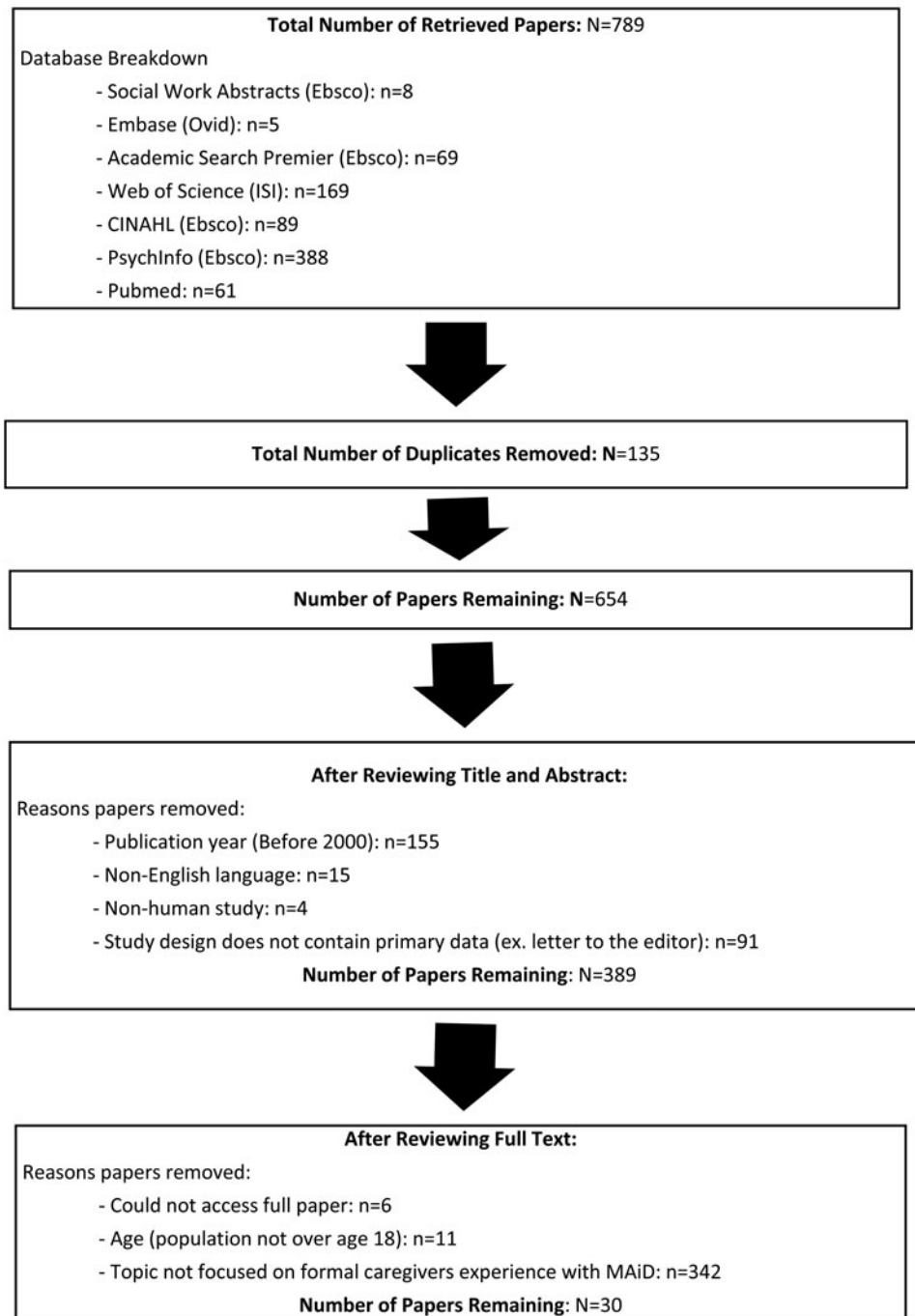


Fig. 1. Flowchart detailing search strategy undertaken for scoping review.

social workers (Ganzini *et al.*, 2002; Miller *et al.*, 2004), one included physicians and other clinicians (Fujioka *et al.*, 2018), and one examined researchers, physician and non-physician clinicians, and other non-clinical staff (Braverman *et al.*, 2017). Papers included a range of physician types: 30% included general practitioners ($n = 9$) and 20% involved family practitioners ($n = 6$). Other physician populations included AIDS specialists, hospice physicians, oncologists, internists, anesthesiologists, gynecologists, neurologists, pulmonologists, neuropsychiatrists, psychiatrists, cardiologists, radiotherapists, surgeons, elderly care physicians, nursing home physicians, pain specialists, hematologists, and palliative care specialists. Nurse populations included registered

nurses, licensed nurses, certified nursing assistant, assistant nurse, master of nursing, undergraduate nurses, and nurse practitioners. Nurses were working in various units including palliative care, intensive care, oncology, and hospice. Social workers worked in hospices. The characteristics of patients requesting MAiD in addition to the professional experiences of professional caregivers with MAiD were reported in four studies (see Table 2).

Receiving requests for MAiD

Physicians and nurses in Belgium, the Netherlands, USA, and Canada received requests for MAiD after legalization. Prior to

Table 1. Summary of the research articles included in this study (N = 30)

Author (year)	Term used + Definition	Question/Purpose/ Objectives	HCP population included in study	Study design	Outcomes/Findings of the paper
Beuthin et al. (2018)	<ul style="list-style-type: none"> • “Medical assistance in dying: includes both assisted suicide and euthanasia” (p. 512) • not defined further 	<ul style="list-style-type: none"> • “To provide insight into how MAiD is being enacted and understood from nurses’ perspectives.” (p. 512) 	<ul style="list-style-type: none"> • Nurses (n = 17) 	Qualitative	<ul style="list-style-type: none"> • “Most nurses perceived MAiD as an extension of the profession and their nursing practice. • A small number expressed moral distress as they grappled with assisted dying. • Narratives illustrated an ongoing sense making process and spectrum of emotions.” (p. 511)
Bilsen et al. (2004)	<ul style="list-style-type: none"> • “Euthanasia: administration of drugs with the explicit intention of ending the patient’s life, at the patient’s explicit request. • Physician-assisted suicide: prescription or supplying of drugs with the explicit intention of enabling the patient to end their own life. • Life-ending acts without request: administration of drugs with the explicit intention of ending the patient’s life, without their explicit request. • Alleviation of pain and symptoms: intensifying the use of drugs to alleviate pain and symptoms in a potentially life-shortening way. • Non-treatment decisions: withholding or withdrawing (potentially life-prolonging) treatment, with or without the explicit intention of hastening the patient’s death.” (p. 585) 	<ul style="list-style-type: none"> • “To report the actual involvement of nurses in medical end-of-life decisions (ELDs).” (p. 584) 	<ul style="list-style-type: none"> • Physicians reporting on the involvement of nurses in physician-assisted dying 	Cross-sectional	<ul style="list-style-type: none"> • “Nurses in Belgium are largely involved in administering lethal drugs in end-of-life decisions, while their participation in the decision-making process is rather limited.” (p. 583)
Braverman et al. (2017)	<ul style="list-style-type: none"> • “Physician assisted suicide: physician provides a patient with the means, typically lethal drugs, to take their own life. • Voluntary active euthanasia – competent: physician intentionally ends a competent patient’s life by some medical means according to the patient’s explicit request. • Voluntary active euthanasia – incompetent: physician intentionally ends an incompetent patient’s life by some medical means according to the patient’s prior explicit request made while competent and typically preserved through an advanced directive.” (p. 539) 	<ul style="list-style-type: none"> • “To quantitatively assess the favorability of justifications for or against physician assisted death legalization among healthcare providers, the effect of the terms “suicide” and “euthanasia” on their views and their support for three forms of PAD.” (p. 538) 	<ul style="list-style-type: none"> • Physician clinician (n = 105) • Non-clinical staff (n = 29) • Researcher (n = 22) • Non-physician clinician (n = 16) • Did not answer (n = 49) 	Questionnaire	<ul style="list-style-type: none"> • “In order of decreasing favorability, justifications supporting physician assisted death legalization were relief of suffering, right to die, mercy, acceptance of death, non-abandonment, and saving money for the healthcare system. • Opposing justifications were the slippery slope argument, unnecessary due to palliative care, killing patients is wrong, religious views, and suicide is wrong. • Participants preferred physician-assisted suicide to euthanasia for a competent patient (p < 0.0001) and euthanasia for an incompetent patient to euthanasia for a competent patient (p < 0.005).” (p. 538)

(Continued)

Table 1. (Continued.)

Author (year)	Term used + Definition	Question/Purpose/ Objectives	HCP population included in study	Study design	Outcomes/Findings of the paper
Buiting et al. (2008)	<ul style="list-style-type: none"> Euthanasia, Assisted suicide: not defined 	<ul style="list-style-type: none"> “Investigate to what extent physicians from different specialties experience problems with the criteria of due care in clinical practice.” (p. 2) 	Physicians ($n = 2,100$) <ul style="list-style-type: none"> Clinical specialists ($n = 1,300$) General practitioners ($n = 500$) Nursing home physicians ($n = 300$) 	Cross-sectional	<ul style="list-style-type: none"> “Physicians in the Netherlands primarily report problems with the criteria that are related to the patient’s subjective perspectives.” (p. 5)
Cohen et al. (2012)	<ul style="list-style-type: none"> Euthanasia: not defined 	<ul style="list-style-type: none"> “Presents empirical evidence of differences between both regions [Flanders and Wallonia] in attitudes towards, and practice of euthanasia.” (p. 845) 	Flemish Physicians ($n = 480$) <ul style="list-style-type: none"> Family medicine (67%) Hospital medical specialist (33%) Wallonian Physicians ($n = 305$) <ul style="list-style-type: none"> Family medicine (57%) Hospital medical specialist (43%) 	Cross-sectional	<ul style="list-style-type: none"> “Cultural factors seem to play an important role in the practice of (legal) euthanasia and the extent to which legal safeguards are followed.” (p. 845)
De Bal et al. (2006)	<ul style="list-style-type: none"> Euthanasia: “administration of lethal drugs with the explicit intention of ending a patient’s life at the patient’s explicit request.” (p. 590) 	<ul style="list-style-type: none"> “To explore nurses’ involvement in the care for patients requesting euthanasia.” (p. 589) 	Nurses ($n = 15$) <ul style="list-style-type: none"> Head nurse ($n = 2$) Nurse ($n = 13$) 	Qualitative grounded theory	<ul style="list-style-type: none"> “Hospital nurses are confronted with patients’ euthanasia requests. Each stage of this process requires that the nurses possess specific competencies.” (p. 589)
De Bal et al. (2008)	<ul style="list-style-type: none"> Euthanasia: “the intentional termination of life by someone other than the person concerned, at the latter’s request. ‘Someone other’ is understood to be a doctor, and ‘termination of life’ is understood to be the administration of a lethal dose of medication.” (p. 627) 	<ul style="list-style-type: none"> “To thoroughly examine the involvement and experiences of nurses in the care of mentally competent, adult patients requesting euthanasia...by means of a literature review.” (p. 626) 	<ul style="list-style-type: none"> Nurses 	Review	<ul style="list-style-type: none"> “Nurses can make a significant contribution to the quality of care by assisting and counseling patients and their families, physicians, and their nursing colleagues in a professional manner, even in countries where euthanasia is not legal.” (p. 626)
De Beer et al. (2004)	<ul style="list-style-type: none"> Euthanasia: “the administration of lethal drugs with the explicit intention of shortening the patient’s life at the patient’s explicit request.” (p. 494) 	<ul style="list-style-type: none"> “To sketch a general picture of how nurses, internationally, are involved in euthanasia.” (p. 494) 	<ul style="list-style-type: none"> Palliative care nurses, intensive care nurses, and oncology nurses 	Review	<ul style="list-style-type: none"> “... nurses are involved in various phases of the euthanasia process: observing the request for euthanasia, decision making, carrying out of euthanasia, and the aftercare for the patient’s family members.” (p. 494)
Dees et al. (2013)	<ul style="list-style-type: none"> Euthanasia: “the intentional termination of life by someone other than the person concerned at his or her request.” (p. 28) Physician-assisted suicide: “intentionally assisting in a suicide of another person or procuring for that other person the means.” (p. 28) 	<ul style="list-style-type: none"> “To explore the decision-making process in cases where patients ask their physician for euthanasia and assisted suicide and to understand the different themes relevant to optimize this decision-making process.” (p. 28) 	Physicians ($n = 28$) <ul style="list-style-type: none"> General practitioners ($n = 22$) Elderly care physicians ($n = 3$) Psychiatrist ($n = 1$) General practitioner trainees ($n = 2$) 	Qualitative thematic analysis	<ul style="list-style-type: none"> “A patient’s request for euthanasia entails a complex process that demands emotional work by all participants. It is characterized by an intensive period of sharing information, relationship building and negotiation in order to reach agreement.” (p. 27)
Denier et al. (2009)	<ul style="list-style-type: none"> Euthanasia: “undertaken by a third party (the physician), which intentionally ends a person’s life (by administration of lethal drugs) at his or her request.” (p. 264) 	<ul style="list-style-type: none"> “To explore nurses’ involvement in euthanasia care in Flanders (Belgium) in the legal context.” (p. 264) 	Nurses ($n = 18$) <ul style="list-style-type: none"> Registered nurses ($n = 13$) Master of science in nursing ($n = 1$) Undergraduate nurse ($n = 3$) Assistant nurse ($n = 1$) 	Qualitative grounded theory	<ul style="list-style-type: none"> “The two perspectives [procedural, action-focused perspective ... and the existential-interpretative perspective] are not mutually exclusive, but rather complementary dimensions of the euthanasia care process.” (p. 264)

Denier et al. (2010)	<ul style="list-style-type: none"> Euthanasia: “as an act, undertaken by a third party (the physician), which intentionally ends a person’s life (by administration of lethal drugs) at his or her request.” (p. 41) 	<ul style="list-style-type: none"> “Aimed to explore nurses’ experiences in caring for patients requesting euthanasia.” (p. 42) 	<p>Nurses (n = 18)</p> <ul style="list-style-type: none"> Most had registered nurse degree 	Qualitative	<ul style="list-style-type: none"> “The care process for patients requesting euthanasia is a complex and dynamic process ... Nurses feel a discrepancy, because although it is a nice death, which happens in dignity and with respect, it is also an unnatural death.” (p. 41)
De Casterlé et al. (2006)	<ul style="list-style-type: none"> Euthanasia: “administration of lethal drugs with the explicit intention of ending a patient’s life at the explicit request of the patient.” (p. 187) 	<ul style="list-style-type: none"> “In depth exploration of the views of palliative care nurses on their involvement in the entire care process surrounding euthanasia.” (p. 187) 	<p>Palliative care nurses (n = 12)</p> <ul style="list-style-type: none"> Licensed nurse (n = 1) Undergraduate nurses (n = 8) Nurse with a Master’s degree (n = 3) 	Qualitative grounded theory	<ul style="list-style-type: none"> “Based on their professional nursing expertise and unique relationship with the patient, nurses participating as full members of the interdisciplinary expert team are in a key position to provide valuable care to patients requesting euthanasia.” (p. 187)
Dobscha et al. (2004)	<ul style="list-style-type: none"> Assisted suicide: “to prescribe lethal dosages of medication to competent, terminally ill patients who request them.” (p. 451) 	<ul style="list-style-type: none"> “To describe the impact of requests for assisted suicide on physicians, focusing on physicians’ emotional reactions, factors influencing their decisions, and sources of support.” (p. 452) 	<p>Physicians (n = 35)</p> <ul style="list-style-type: none"> Internal medicine (29%) Medicine subspecialty (11%) Family practice (37%) Surgery or subspecialty (17%) Therapeutic radiology (3%) Neurology (1%) 	Qualitative	<ul style="list-style-type: none"> “Requests for assisted suicide had a powerful impact on physicians and their practices ... Participation in assisted suicide required a large investment of time and was emotionally intense. Regardless of whether they prescribed or not, physicians did not express major regrets about their decisions. Physicians rarely sought support from colleagues; instead, they tended to discuss emotional aspects of their experiences with their spouses.” (p. 451)
Elmore et al. (2016)	<ul style="list-style-type: none"> Voluntary active euthanasia: “a physician administers medications that deliberately hasten a person’s death at their explicit request for reasons of alleviating suffering.” (p. 2) Assisted suicide: “a person receives a prescription for life-ending medications that are self-administered.” (p. 2) 	<ul style="list-style-type: none"> “To synthesize what has been learned about nurses’ experiences of caring for patients who request assisted death and to highlight what is morally at stake for nurses who undertake this type of care.” (p. 1) 	<ul style="list-style-type: none"> Nurses 	Qualitative meta-synthesis	<ul style="list-style-type: none"> “... nurses are moral agents who are deeply invested in the moral integrity of end-of-life care involving assisted death. The findings further demonstrate that to fully appreciate the ethics of assisted death from a nursing standpoint, it is necessary to understand the broader constraints on nurses’ moral agency that operate in everyday end-of-life care.” (p. 1)
Francke et al. (2016)	<ul style="list-style-type: none"> Euthanasia: “the administering of lethal drugs by a physician with the explicit intention to end a patient’s life at the patient’s explicit request.” (p. 783) 	<ul style="list-style-type: none"> “To give insight into Dutch nursing staff’s attitudes and involvement regarding euthanasia.” (p. 783) 	<p>Nurses (n = 587)</p> <ul style="list-style-type: none"> Certified nursing assistant (53%) Registered nurse (associate degree level) (31%) Registered nurse (bachelor level) (16%) 	Cross-sectional	<ul style="list-style-type: none"> “The majority want to be involved in decision-making processes about euthanasia. Not all are aware that they are not legally allowed to administer the lethal drugs.” (p. 783)

(Continued)

Table 1. (Continued.)

Author (year)	Term used + Definition	Question/Purpose/ Objectives	HCP population included in study	Study design	Outcomes/Findings of the paper
Fujioka et al. (2018)	<ul style="list-style-type: none"> • “Medical assistance in dying, by way of assisted suicide (in which the patient self-administers the lethal dosage with the help of a clinician) or euthanasia (in which a provider administers the lethal dosage).” (p. 1564) 	<ul style="list-style-type: none"> • “To map the existing literature on health care providers’ perspectives of their involvement in MAiD.” (p. 1564) 	<ul style="list-style-type: none"> • Physicians, nurses, pharmacists, mental health professional, social worker, medical examiner. 	Scoping review	<ul style="list-style-type: none"> • “A need for clear guidelines and protocols that define each profession’s role, scope of practice, and legal boundaries for MAiD. • Comprehensive models of care that incorporate multidisciplinary teams alongside improved clinician education may be effective to support MAiD implementation.” (p. 1564)
Ganzini et al. (2002)	<ul style="list-style-type: none"> • Physician-assisted suicide: not defined 	<ul style="list-style-type: none"> • “To determine their experiences with, and views on, patients who received prescriptions for lethal medications under the Oregon law.” (p. 582) 	<ul style="list-style-type: none"> • Nurses ($n = 122$) • Social Workers ($n = 50$) 	Cross-sectional	<ul style="list-style-type: none"> • “Since assisted suicide was legalized in Oregon, many hospice nurses and social workers have provided care for a patient who requested assistance with suicide. They rated desire for control as a very important reason for these requests.” (p. 582)
Ganzini et al. (2001)	<ul style="list-style-type: none"> • Physician-assisted suicide: “prescrib[ing] a lethal dose of medication for a mentally competent, terminally ill patient for the purpose of self-administration.” (p. 2363) 	<ul style="list-style-type: none"> • “To examine Oregon physicians’ attitudes toward and practices regarding care of dying patients since the passage of the Death with Dignity Act.” (p. 2363) 	Physicians ($n = 2,641$) <ul style="list-style-type: none"> • Internal medicine (36%) • Family Practice (25%) • General surgery or surgical subspecialty (21%) • Gynecology (9%) • General practice (3%) • Neurology (3%) • Radiation oncology (1%) • Other (1%) 	Cross-sectional	<ul style="list-style-type: none"> • “Nine hundred forty-nine responding physicians (36%) had been asked by a patient if they were potentially willing to prescribe a lethal medication. • [20/73 (27%) of] physicians who were willing to write a lethal prescription and who had received a request from a patient were not confident they could determine when a patient had less than 6 months to live.” (p. 2363)
Ganzini et al. (2000)	<ul style="list-style-type: none"> • Physician-assisted suicide: “allows the physician who has primary responsibility for managing a patient’s terminal illness to prescribe a dose of lethal medication, which the patient may administer.” (p. 557) 	<ul style="list-style-type: none"> • “To describe the characteristics of physicians who have received requests for assistance with suicide, the characteristics and outcomes of the patients who requested prescriptions, the reasons for the requests, and any interventions that were carried out or recommended other than the prescription of lethal medications.” (p. 557) 	Total Physicians in study: ($n = 2,649$). Physicians who had received requests for prescriptions for lethal medications ($n = 144$) <ul style="list-style-type: none"> • Internist ($n = 48\%$) • Family or general practice ($n = 36\%$) • General surgery or surgical subspecialty (8%) 	Cross-sectional	<ul style="list-style-type: none"> • “Our data indicate that in Oregon, physicians grant about 1 in 6 requests for a prescription for a lethal medication and that 1 in 10 requests actually results in suicide. Substantive palliative interventions lead some — but not all — patients to change their minds about assisted suicide.” (p. 557)
Georges et al. (2008)	<ul style="list-style-type: none"> • Euthanasia: not defined 	<ul style="list-style-type: none"> • “To describe the experiences of general practitioners (GPs) in the Netherlands in dealing with a request for euthanasia from a terminally ill patient.” (p. 150) 	Physicians ($n = 30$) <ul style="list-style-type: none"> • General practitioners ($n = 30$) 	Qualitative — constant comparison method	<ul style="list-style-type: none"> • “Dealing with requests for euthanasia is very challenging for GPs, although they feel committed to alleviate a patient’s suffering and to promote a peaceful death.” (p. 150)

Khoshnood et al. (2018)	<ul style="list-style-type: none"> • “Medical assistance in dying (MAiD) includes circumstances in which a physician or nurse practitioner (“practitioner”), at an individual’s request, administers medication to cause death (also known as euthanasia) or when a person self-administers medication prescribed with the intent of causing their own death (also known as physician-assisted suicide).” (p. 222) 	<ul style="list-style-type: none"> • “To explore the professional challenges faced by Canadian physicians who provide MAiD.” (p. 222) 	<p>Physicians (<i>n</i> = 1) Palliative care specialists (<i>n</i> = 8)</p> <ul style="list-style-type: none"> • Family doctor (<i>n</i> = 4) • Anesthesiologist (<i>n</i> = 2) • Hematologist (<i>n</i> = 1) • Obstetrician/Gynecologist (<i>n</i> = 1) 	Qualitative — Inductive thematic analysis	<ul style="list-style-type: none"> • Physicians described relationship, financial, and workload challenges to providing MAiD. We provide several recommendations to address these challenges and help ensure the sustainability of MAiD in countries that provide this service.
Kohlwes et al. (2001)	<ul style="list-style-type: none"> • Physician-assisted suicide: “the prescription of medication by a physician to a patient that he or she can use with the primary intent of ending one’s life. This definition does not include euthanasia, which occurs when a physician directly administers (or injects) a medicine with the primary intention of ending a patient’s life.” (p. 657) 	<ul style="list-style-type: none"> • “To describe how experienced physicians assess and respond to requests for assisted suicide.” (p. 657) 	<p>Physicians (<i>n</i> = 20)</p> <ul style="list-style-type: none"> • AIDS specialists (<i>n</i> = 11) • Oncologist (<i>n</i> = 8) • Hospice physician (<i>n</i> = 1) 	Qualitative — ethnography	<ul style="list-style-type: none"> • “Informants had a similar approach to evaluating patients who requested assisted suicide ... Physicians thought they competently addressed patients’ physical symptoms, and this obviated most requests. They treated depression empirically and believed they did not assist depressed patients with assisted suicide. Physicians had difficulty addressing patients’ existential suffering, which led to most facilitated requests. Informants rarely talked to colleagues about requests for assisted suicide, suggesting a ‘professional code of silence.’” (p. 657)
Miller et al. (2004)	<ul style="list-style-type: none"> • Physician-assisted suicide: did not define 	<ul style="list-style-type: none"> • “Reports on all nurse and social worker respondents to the survey, their attitudes about assisted suicide and the [Oregon Death with Dignity Act], their views on the role of hospice for assisted suicide patients, and their interactions with patients about this issue.” (p. 685) 	<ul style="list-style-type: none"> • Hospice Nurses (<i>n</i> = 306) • Hospice Social Workers (<i>n</i> = 85) 	Cross-sectional	<ul style="list-style-type: none"> • “Nurses and social workers in hospices and other settings can expect to encounter patient questions about physician-assisted suicide, whether legalized or not, and must be prepared to have these discussions. Most hospice professionals in Oregon do not believe that assisted suicide and hospice enrolment are mutually exclusive alternatives.” (p. 685)
Miller et al. (2002)	<ul style="list-style-type: none"> • Physician-assisted suicide: not defined 	<ul style="list-style-type: none"> • “Presents a subset of data from a larger study that explored the impact of the legal choice of physician assisted suicide (PAS) on hospice providers.” (p. 53) 	<ul style="list-style-type: none"> • Hospice social workers (<i>n</i> = 8) 	Qualitative — ethnography	<ul style="list-style-type: none"> • “Three overarching themes emerged from the data: (1) the dilemmas that arise from the hospice philosophy; (2) the conflicts that emerge between the choice of PAS and social works’ cardinal values and practice principles; and (3) the struggles with personal values and PAS.” (p. 53)

(Continued)

Table 1. (Continued.)

Author (year)	Term used + Definition	Question/Purpose/ Objectives	HCP population included in study	Study design	Outcomes/Findings of the paper
Mitchell (2004)	<ul style="list-style-type: none"> Euthanasia: not defined Physician-assisted death: “actions taken by the physician explicitly to end the life of the patient, or by the physician supplying drugs to the patient for that purpose.” (p. 777) 	<ul style="list-style-type: none"> “To compare the approaches to end of life care of physicians who had provided euthanasia with those from doctors who had not (but had cared for similar dying patient populations).” (p. 777) 	Dutch Physicians who had performed euthanasia (<i>n</i> = 5) <ul style="list-style-type: none"> Nursing home physician (<i>n</i> = 4) General practitioner (<i>n</i> = 1) Dutch Physicians who had not performed euthanasia (<i>n</i> = 5) <ul style="list-style-type: none"> Nursing Home physician (<i>n</i> = 1) Oncology specialist (<i>n</i> = 3) Hospice doctor (<i>n</i> = 1) New Zealand doctors who had not performed euthanasia (<i>n</i> = 6) <ul style="list-style-type: none"> Pain specialist (<i>n</i> = 1) General Practitioner (<i>n</i> = 3) Hospice Doctor (<i>n</i> = 2) 	Qualitative	<ul style="list-style-type: none"> “A core theme of ‘commitment’ to the patient crossed all interviews and when a request for assisted death was received this theme altered and evolved differently between the groups.” (p. 775)
Sercu et al. (2012)	<ul style="list-style-type: none"> Euthanasia: “the intentional termination of a patient’s life by a physician at the patient’s request.” (p. 274) 	<ul style="list-style-type: none"> “To explore how general practitioners in Flanders (Belgium) deal with euthanasia. This was performed via qualitative analysis of semi-structured interviews with 52 general practitioners (GPs).” (p. 274) 	Physicians (<i>n</i> = 52) <ul style="list-style-type: none"> General Practitioners (100%) 	Qualitative	<ul style="list-style-type: none"> “The situation where GPs have to consider the request and if they grant it to perform the act may result in arbitrary access to euthanasia for the patient.” (p. 274)
Smets et al. (2011)	<ul style="list-style-type: none"> Euthanasia: “physicians may, under legally well-defined circumstances, administer life-ending drugs at the explicit request of a patient.” (p. 581) 	<ul style="list-style-type: none"> “What are Belgian physicians’ attitudes to the use of life-ending drugs and the euthanasia law, and which factors predict these attitudes? What are Belgian physicians’ experiences with euthanasia, and which factors predict ever having performed euthanasia?” (p. 581) 	Physicians (<i>n</i> = 914): <ul style="list-style-type: none"> General Practitioners: (62%) Medical specialist (anesthesiology, gynecology, internal medicine, neurology, oncology, pulmonology, neuropsychiatry, psychiatry, cardiology, radio-therapy, and surgery): (38%) Involved in palliative team/service (47%) 	Cross-sectional	<ul style="list-style-type: none"> “Most physicians studied support euthanasia for terminal patients with extreme uncontrollable pain/symptoms and agree that euthanasia can be part of good end-of-life care. Although physicians had little involvement in the process of legalizing euthanasia, they now generally endorse the euthanasia.” (p. 580)
van Bruchem-van de Scheur et al. (2007)	<ul style="list-style-type: none"> Euthanasia: “the administration of drugs by a person other than the patient with the explicit intention of ending the patient’s life at their explicit request.” (p. 45) Physician-assisted suicide: “the prescribing or supplying of drugs with the explicit intention of enabling the patient to end their own life. The difference between these concepts lies in the way they are carried out: in euthanasia, a person other than the patient administers the lethal drugs.” (p. 45) 	<ul style="list-style-type: none"> “To investigate the role of district nurses in euthanasia and physician-assisted suicide in home-care organizations, conducted as part of a larger study into the role of nurses in medical end-of-life decisions.” (p. 46) 	<ul style="list-style-type: none"> Registered Nurses (<i>n</i> = 351) 	Cross-sectional	<ul style="list-style-type: none"> “In 22.3% of 278 cases, the district nurse was the first with whom patients discussed their request for euthanasia or physician-assisted suicide. In about half (49.8%) of 267 cases nurses were not involved in the general practitioner’s decision-making process, and in only 13.3% of 264 cases, did they attend the administration of the lethal drugs. District nurses had provided some degree of aftercare to the surviving relatives in 80.3% of 264 cases.” (p. 44)

<p>Voorhees et al. (2013)</p>	<ul style="list-style-type: none"> Physician-assisted dying: “encompasses both voluntary active euthanasia and physician-assisted suicide.” (p. 808) 	<ul style="list-style-type: none"> “To further our understanding of the experiences of physicians when discussing physician-assisted dying (PAD) within the context of doctor–patient relationships in various socio-legal settings.” (p. 808) 	<p>United States Physicians (<i>n</i> = 18)</p> <ul style="list-style-type: none"> Primary Care (family medicine, general internal medicine, general practitioner, nursing home physician) (<i>n</i> = 8) Oncology/Hematology (<i>n</i> = 3) Other specialties (<i>n</i> = 7) <p>Netherlands Physicians (<i>n</i> = 18)</p> <ul style="list-style-type: none"> Primary Care (<i>n</i> = 7) Oncology/Hematology (<i>n</i> = 4) Other specialties (<i>n</i> = 7) 	<p>Qualitative</p>	<ul style="list-style-type: none"> “Physicians found discussions to be emotionally intense, but often rewarding. Where PAD was legal, physicians utilized existing criteria to guide communication, and discussions were open and honest with patients and colleagues. Where PAD was illegal, conversations were less explicit, and physicians dealt with requests in relative isolation.” (p. 808)
<p>Van Wesemael et al. (2009)</p>	<ul style="list-style-type: none"> Euthanasia: “the deliberate ending of a patient’s life by a physician at the patient’s request.” (p. 2180) 	<ul style="list-style-type: none"> “To describe characteristics of LEIF (life ending information forum) physicians and their activities concerning consultation, information, and advice in end-of-life decisions during a 1-year period, and provide insight into their involvement in euthanasia cases.” (p. 2182) 	<p>Physicians (<i>n</i> = 96)</p> <ul style="list-style-type: none"> General Practitioners (73%) 	<p>Cross-sectional</p>	<ul style="list-style-type: none"> “LEIF physicians provide a forum for information and advice for physicians and patients.” (p. 2180)

Table 2. Reported patient characteristics ($n = 4$)

Title	Age of patient requesting MAiD	Sex of patient	Disease of patients requesting MAiD	Location of patients requesting MAiD
Bilsen et al. (2004)	N/A	• 50% Male	<ul style="list-style-type: none"> • Cancer (27.5%) • Cardiovascular disease (28.7%) • Disease of nervous system (11.4%) • Other (32.4%) 	<ul style="list-style-type: none"> • At home ($n = 12$) • In an institution ($n = 10$)
Dees et al. (2013)	<ul style="list-style-type: none"> • Male: age 32–96 years • Female: age 49–94 years 	<ul style="list-style-type: none"> • Male: $n = 15$ • Female: $n = 17$ 	<ul style="list-style-type: none"> • Cancer ($n = 14$) • Degenerative neurological disease ($n = 6$) • Psychiatric disease ($n = 4$) • Chronic pain syndrome ($n = 3$) • Heart failure ($n = 1$) • “Tired of life” ($n = 4$) 	<ul style="list-style-type: none"> • At home ($n = 24$) • Hospice ($n = 5$) • Nursing home ($n = 2$) • Hospital ($n = 1$)
Ganzini et al. (2000)	• Mean age: 68 years	• 52% Male	<ul style="list-style-type: none"> • Cancer (67%) • End-stage cardiopulmonary disease (18%) • Neurologic disease (9%) • AIDS (3%) • Other (diabetes mellitus, end-stage renal disease, severe anemia, and coagulation disorder) (8%) 	<ul style="list-style-type: none"> • Rural (population < 25,000 persons): ($n = 54$, 34%) • Medium (population 25,000–250,000): ($n = 53$, 34%) • Large city (>250,000): ($n = 51$, 32%)
Ganzini et al. (2002)	• Mean age: 63.6 years, SD 11.5	<ul style="list-style-type: none"> • Male: $n = 41$ • Female: $n = 41$ 	<ul style="list-style-type: none"> • Cancer (83%) • Cardiopulmonary disease (12%) • Neurologic disease (9%) <p>Note: some patients had more than one terminal disease</p>	<p>Community size:</p> <ul style="list-style-type: none"> • Rural (population <25,000 persons): ($n = 35$, 43%) • Medium (population 25,000–250,000 persons): ($n = 28$, 34%) • Large (population $\geq 250,000$ persons): ($n = 19$, 23%)

Note: some patients had more than one terminal disease.

legalization, physicians in New Zealand (Mitchell, 2004) and the USA (Kohlwes et al., 2001; Voorhees et al., 2013), and some Belgian nurses received requests for MAiD (De Bal et al., 2006). Oregon social workers received requests for MAiD from their patients (Ganzini et al., 2002; Miller et al., 2002, 2004).

Physicians receiving requests for MAiD

The experiences of physicians receiving requests for MAiD varied considerably. Physicians, in countries where MAiD was and was not legal at the time of study, spoke about how patient–physician relationships influenced their experience (Kohlwes et al., 2001; Sercu et al., 2012; Dees et al., 2013). In a study of 28 Dutch physicians, some physicians felt that the request for MAiD put a strain on this relationship, by cutting across the “usual curative role” (Dees et al., 2013, p. 34). In a study of 35 physicians in Oregon, some physicians perceived requests for MAiD as a refusal of treatment (Dobscha et al., 2004), while in another study of 52 Belgian physicians, having a long-standing relationship with a patient made some physicians feel unable to comply, whereas other physicians felt obliged to perform MAiD despite being ethically and emotionally unprepared (Sercu et al., 2012). Some physicians in Oregon felt surprised or unprepared, powerless to intervene, and frustrated (Dobscha et al., 2004).

Patient requests for MAiD may provide opportunities for HCPs to discuss patient concerns and fears about death and dying, clarify information about symptom control, and reassure patients that they would not be abandoned (Dobscha et al., 2004; Voorhees et al., 2013). For example, Kohlwes et al. (2001) reported that 25% of U.S. physicians in their study ($n = 5/20$) felt that discussing MAiD and existential suffering created an

opportunity to strengthen patient and physician relationships. In Mitchell’s (2004) study, the five physicians who had provided euthanasia at a time where it was an illegal but accepted practice, had expected patients exhaust all other options until euthanasia was the only alternative.

Nurses and social workers receiving requests for MAiD

Of the 13 studies discussing the experiences of nurses and social workers, 67% of these explored the experiences of nurses in receiving requests for MAiD. The percentage of nurses in the Netherlands that received a patients’ first request for MAiD ranged from 22% ($n = 62/278$) (van Bruchem-van de Scheur et al., 2007) to 37% ($n = 219/587$) (Francke et al., 2016). Francke et al. (2016) noted that 35% of nurses ($n = 204/587$) had informed a physician about a request for MAiD on at least one occasion. Ganzini et al. (2002) found that 98% of Belgian nurses had discussed the request for a MAiD prescription with coworkers, in the context of MAiD being legal.

When faced with a request for MAiD, regardless of its legal status, nurses in several countries (Belgium, the Netherlands, and Canada) emphasized the importance of taking the request seriously, determining the reasons behind the request for euthanasia, actively listening, and continuing to care for the patient compassionately (De Bal et al., 2006). Two studies from Canada and the Netherlands reported that some nurses informed patients about palliative care alternatives as part of understanding the request for MAiD (De Casterlé et al., 2006; Elmore et al., 2016). Miller et al. (2004) found that Oregonian hospice social workers were more comfortable than nurses in their study when it came to discussions of assisted suicide with patients. Of the

Oregonian nurses and social workers who had cared for at least one patient who expressed an interest in pursuing MAiD in the last year (217/391), 81 (37.3%) attempted to facilitate a patient's access to a legal lethal prescription. Only two social workers (2%) would transfer care of a patient who received a lethal prescription to another hospice clinician [compared to 12% of nurses ($n = 36$) in this study] (Miller et al., 2004). Further, Miller et al. (2004) found there was no difference between nurses and social workers in their comfort in discussing assisted suicide with coworkers and supervisors or in seeking their consultation.

Decisions to grant requests for MAiD

Nurses and physicians can play an important role in the decision-making process with regards to MAiD. In Oregon, USA, and Belgium where legal guidelines exist, physicians reported challenges in assessing a patient's eligibility for MAiD such as having little confidence in determining when a patient has less than 6 months to live, assessing whether patient suffering is eligible for euthanasia, and knowing the patient well at time of assessment (Dobscha et al., 2004). This was the case 3 years (Dobscha et al., 2004), 4 years (Ganzini et al., 2001) and 5 years (Serco et al., 2012) after legalization in their respective countries. In a study by Dees et al. (2013), all Dutch physicians ($n = 28$) mentioned careful assessment of whether the patient's request was voluntary, well considered and durable, and whether the patient was competent to make this request. Despite the potential for challenges in the legal assessment process, most of the 28 physicians in this study decided on their course of action before the independent consultation, and consequently, the consultant's positive or negative assessment did not alter the physician's course of action (Dees et al., 2013). Interestingly, one study highlighted that 62% of HCPs were ethically more comfortable with MAiD for incompetent patients with advanced directives compared with 51.6% for competent patients (Braverman et al., 2017). As well, 68.1% of HCPs were more legally comfortable with MAiD for incompetent patients with advanced directives compared with 58.1% (Braverman et al., 2017). In the discussion, Braverman et al. (2017) posit that this may have resulted from HCPs perceiving the presence of an advanced directive as a safeguard and emphasized that further research is warranted to better understand how the competency of the patient may affect the HCPs perspective on MAiD.

Of the 10 studies discussing the experiences of nurse involvement in decision making, 70% of studies reported that other healthcare professionals were frequently consulted. In countries where MAiD was legal and where it was not, physicians frequently consulted other physicians (Van Wesemael et al., 2009; Cohen et al., 2012), nurses (Bilsen et al., 2004; De Bal et al., 2006; Francke et al., 2016), or other HCPs such as a psychologist, psychiatrist, and mental health nurse practitioner (Ganzini et al., 2002). At a time when MAiD was illegal, Bilsen et al. (2004) found that Belgian nurses were consulted more often in institutional euthanasia cases (83.3%) than at home (20%). In a study by Francke et al. (2016) of 587 nurses, 69% reported they felt that the physician should discuss the request for MAiD with the nurse, while 83% agreed that the physician should discuss a decision for MAiD with the nurse. However, several studies found that nurses were not always included (De Beer et al., 2004; De Bal et al., 2008; Elmore et al., 2016; Francke et al., 2016). Many nurses felt that their knowledge of the patient through their continuous and daily follow-up gave them insight into a patient's experiences, making it important that they have

a voice in the interdisciplinary decision-making process (De Bal et al., 2008) across countries where MAiD was and was not legal.

Other factors that influenced decision making included interpersonal factors, balancing the necessity to perform euthanasia and respect for their own values, alternate options to alleviate the patient's suffering, and respecting patient autonomy (Dobscha et al., 2004; Georges et al., 2008). For 53% of Dutch physicians ($n = 16/30$), the decision-making process also gave them time to emotionally prepare to perform euthanasia (Georges et al., 2008). Other Dutch physicians described the process of planning a date and time of the procedure as an "unfamiliar emotional task," which involved negotiation between patients and physicians and substantial preparatory work (Dees et al., 2013). Dobscha et al. (2004) found that 37% of Oregonian physicians ($n = 13/35$) who chose not to prescribe referred patients to other physicians who were more likely to prescribe, yet 20% of physicians ($n = 7/35$) felt pressure to not disappoint or abandon their patient, and that referring may be abandoning patients.

In the context of provision of MAiD where it was not legal, Kohlwes et al. (2001) found 90% of physicians who had provided a prescription for physician-assisted suicide ($n = 9/10$) reported that they would only assist a patient they knew well. These physicians involved the family intensely and documented prescribing medication for sleep to protect themselves legally. Twenty-five percent of physicians ($n = 5/20$) arranged meetings with the patient's support network to ensure that everybody knew the plan and could be educated about what to expect (Kohlwes et al., 2001). These physicians felt that involving the family prior to administering MAiD could reduce the risk for "survivor guilt" among family members (Kohlwes et al., 2001). Survivor guilt has been defined as "a highly individualized, interpersonal process involving the status of being spared from harm that others incurred, which is adversely experienced as distressing, manifested by diverse responses, and is driven by the context(s) from which it emerges" (Hutson et al., 2015). This type of self-guilt can occur following a traumatic event. In the context of MAiD, this could include feelings of guilt among family members for reasons such as not providing enough support to the family member, symptoms not being managed well enough, or not being a good enough reason to live.

Being present at time of MAiD

In one study of Belgian physicians who were specifically trained in end-of-life care support including MAiD, 33% of physicians ($n = 132$) had been present at least once at the time of euthanasia, 38.5% had helped with preparing the required drugs, and 27% had administered the drugs (Van Wesemael et al., 2009). Some Oregonian physicians wanted to be present at patient deaths: they felt obliged to see things through, and being present was considered an extension of medical treatment, while others felt that it would be inappropriate to be present at a patient's death and that the medical part of things was over (Dobscha et al., 2004). Factors associated with a higher likelihood of having performed euthanasia included specialists, older age, having had training in palliative care, and having cared for terminal patients in the last 12 months (Smets et al., 2011). After MAiD was performed, some Dutch physicians in this study debriefed with the surviving relatives (Dees et al., 2013).

Five studies reported that a small percentage (less than 25%) of Belgian and Dutch nurses were present when MAiD was administered (De Casterlé et al., 2006; van Bruchem-van de Scheur et al., 2007; De Bal et al., 2008; Denier et al., 2010; Francke et al., 2016),

at times when MAiD was legal and when it was not. When present, nurses were involved in a range of activities including: supporting the patient or the patient's relatives, involvement in the administration of MAiD including helping to prepare the lethal drugs, insertion of the IV used to deliver the lethal drug, and administration of the lethal medication (Bilsen et al., 2004; De Beer et al., 2004; van Bruchem-van de Scheur et al., 2007; De Bal et al., 2008; Francke et al., 2016; Beuthin et al., 2018). This was seen in both countries where MAiD was and was not legal.

Emotional response to MAiD

Physicians and nurses may experience a wide array of emotional responses, to the process of providing MAiD. In a qualitative exploration of 35 Oregon physicians, Dobscha et al. (2004) describe a breadth of positive and negative emotions associated with MAiD. Positive emotions included the rewarding feeling of being there for someone, the relief of being able to talk openly with them, believing that their actions were the right thing to do, a feeling of becoming a better doctor, increased confidence in discussing end-of-life options, being emotionally moved, or growing on some personal level (Dobscha et al., 2004). Negative emotions included fear, discomfort with the topic of physician-assisted death, the emotional exhaustion such an intense experience can bring, feeling that giving a lethal injection is "a harsh and harrowing way to end life," feeling that MAiD is a rejection of treatment, struggling with the morality of MAiD, disrupting the sacred nature of dying, or a sense of obligation to carry out a request for MAiD (Dobscha et al., 2004; Mitchell, 2004; Sercu et al., 2012). In the six months following legalization of MAiD in Canada, some physicians felt that being involved in the provision of MAiD resulted in stronger collegial relationships, while other physicians felt that providing MAiD harmed collegial relationships (Khoshnood et al., 2018).

Beuthin et al. (2018) found that some nurses felt bullied to participate despite moral or conscientious objection to the provision of MAiD. Some of the 15 Belgian nurses studied by De Bal et al. (2006) used the word "intense" to describe their experiences sometimes pointing to MAiD as causing an "intense moral conflict". There may also be feelings of discomfort with this "unnatural death" (De Beer et al., 2004; Denier et al., 2010). In their literature reviews, several authors described nurses experiences of carrying out euthanasia as demanding (De Beer et al., 2004; De Bal et al., 2008).

Self-care in the provision of MAiD

Self-care was noted as important for both nurses and physicians involved in the provision of MAiD. Voorhees et al. (2014) described extensive discussions with other practitioners including physicians, nurses, rehabilitation therapists, and chaplains were inherent to the process in the Netherlands, which most physicians found helpful, within a context of MAiD being legal. Meanwhile, in their study of 20 U.S. physicians operating where MAiD was illegal, Kohlwes et al. (2001) found that 14 physicians did not talk to colleagues about MAiD, and 6 did so in an abstract way, contributing to a "professional code of silence" around MAiD. Several physicians stressed the importance of being supported by colleagues to empower the physician to decline participation in physician-assisted death (Voorhees et al., 2014), especially when MAiD was not legal. Having the support of colleagues

was helpful for some Belgian physicians when a request for MAiD was being processed and when engaging in provision of MAiD (Sercu et al., 2012). One fifth of Dutch physicians ($n = 81$) in a study by Georges et al. (2008) were concerned with their ability to cope with MAiD, and felt that having to face a request for euthanasia or physician-assisted suicide and to perform euthanasia might have an important emotional impact on the physician (Georges et al., 2008).

Three studies discussed the nurses' experience of self-care and caring for colleagues in the provision of MAiD (De Bal et al., 2006; De Casterlé et al., 2006; Beuthin et al., 2018). Twelve Belgian nurses working in the context of MAiD being illegal, emphasized that emotional support was indispensable and stressed the importance of debriefing with team members after administering MAiD (De Casterlé et al., 2006). Strategies included maintaining emotional distance, psychologically releasing the patient's request, being aware of their limits, admitting their limits, making the most of the short time with their patient, expressing their feelings to their colleagues, and professional debriefing (De Beer et al., 2004).

Discussion

Formal HCP experiences with MAiD are highly individualized; yet, there are commonalities both within and across professions. This review highlights the breadth of emotional experiences, both positive and negative, that can be experienced by physicians, nurses, and social workers involved in caring for a patient requesting and/or undergoing MAiD. This review highlights a need to develop and implement formal supports as well as to promote self-care activities for all health professionals involved in MAiD regardless of the degree of involvement.

This review explores the roles and process taken by physicians in the provision of MAiD. This is not surprising given their primary role of being legally able to prescribe and administer the lethal drugs. However, it is important to note the various roles and extent of involvement that some nurses play in the provision of MAiD. Some nursing organizations have developed guidelines for nurses outlining roles and responsibilities in the provision of MAiD, and in response to legalization of MAiD. There is a paucity of research examining the role of social workers in the provision of MAiD; notably only one study in this review focussed on social workers' experiences. This highlights a gap, to better understand the experiences of social workers in the provision of MAiD and also how MAiD might impact other care providers such as mental health providers or pharmacists. No studies in this review focussed upon detailing the experiences of an interdisciplinary team providing care for a patient requesting MAiD. Research is needed to examine the influences of interdisciplinary team membership on HCP experiences in the provision of MAiD.

As well, it is interesting to note differences in the experiences of MAiD before and after legalization of MAiD. One observation seems to be that when MAiD was illegal, physicians were able to cite the legality of the procedure as cause for not pursuing MAiD if they did not feel comfortable with this procedure. Since legalization, some physicians have been faced with requests and have varying degrees of comfort with providing MAiD, however, it is now considered a patient right to have access to this form of treatment. As well, nurses report less support and more of a code of silence around the topic in contexts where it is not legal. Similarly, physicians report caution when documenting MAiD prior to legalization for legal protection of themselves. Generally speaking, in some countries, legalization has provided more

opportunity to discuss and seek support from colleagues with regards to providing MAiD. However, this is not without its limitations, as sometimes this can create sources of tension between colleagues who may hold different views on MAiD. Worthy of note is that most physicians in countries before and after legalization took requests for MAiD seriously and were diligent in thoroughly assessing requests and pursuing all options prior to accepting a request. This study highlights that experiences in the provision of MAiD can change over time for both physicians and nurses. However, to our knowledge, there have been no longitudinal studies which follow a cohort of care providers over time and document their experiences in providing MAiD over time. This would be a meaningful area for further research.

Diversity in emotions experienced by HCPs when engaging with patients about MAiD ranged from positive feelings of personal or spiritual growth and reflection to negative emotions, such as powerlessness or anxiety. Emotional responses of stress and burden are common, with one in three U.S. physicians having reported emotional exhaustion from caring for dying patients (Yoon et al., 2017). In the context of MAiD, some HCPs may experience emotional distress over feeling obligated to participate in MAiD, despite their personal objections (Beuthin et al., 2018). Further research may consider examining if and how the level of emotional burden experienced in situations involving MAiD is similar to, or different from, the level experienced when caring for those facing end of life, who do not request MAiD.

Self-care is an issue of great importance recognized by health professionals as an integral component in job retention and job satisfaction (Vahey et al., 2004; Corley et al., 2005; Kearney et al., 2009; Shanafelt et al., 2014); it is also important when working in a supportive team environment (Sanchez-Reilly et al., 2013). Studies involving physicians, nurses, and social workers all stressed the importance of being supported by colleagues when processing a request for MAiD, and especially when performing the act (Sercu et al., 2012). Granek et al. (2013) found that some physicians use strategies of compartmentalization, and withdrawing from families at end of life in order to avoid dealing with the emotional strain of patient death (Granek et al., 2013). Research examining strategies for self-care are limited, which highlights the opportunity for further research to examine which intrapersonal efforts such as maintaining emotional distance, being aware of their limits, and expressing their feelings to their colleagues, may be most beneficial to provide enhanced support for HCPs involved in MAiD. Formal training and education, such as the one described in Houck (2014), have also been shown to be effective for HCPs involved in end-of-life care. This educational program focused on cumulative grief and compassion, fatigue, holistic self-care, and spiritual self-care to help grieving nurses develop strategies to remain physically and emotionally healthy (Houck, 2014).

Research involving persons nearing end of life and those who care for them can be a sensitive area. For many, discussion and study of MAiD evokes a range of emotions. Therefore, there is currently limited research available focussed on clinician's experiences of MAiD. No studies in this review focussed directly on interventions to support HCPs engaged in provision of MAiD and very few focussed on the influences of multidisciplinary teams. The provision of MAiD is expanding both in the nations where it is legally provided and by the professions which are tasked to provide it. As the locations and number of HCPs engaged in provision of MAiD increase, so will opportunities to explore this topic in further depth.

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