

Physician-Assisted Suicide and Euthanasia: Emerging Issues From a Global Perspective

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Abstract

Medical professional societies have traditionally opposed physician-assisted suicide and euthanasia (PAS-E), but this opposition may be shifting. We present 5 reasons why physicians shouldn't be involved in PAS-E. 1. **Slippery slopes:** There is evidence that safeguards in the Netherlands and Belgium are ineffective and violated, including administering lethal drugs without patient consent, absence of terminal illness, untreated psychiatric diagnoses, and nonreporting; 2. **Lack of self-determination:** Psychological and social motives characterize requests for PAS-E more than physical symptoms or rational choices; many requests disappear with improved symptom control and psychological support; 3. **Inadequate palliative care:** Better palliative care makes most patients physically comfortable. Many individuals requesting PAS-E don't want to die but to escape their suffering. Adequate treatment for depression and pain decreases the desire for death; 4. **Medical professionalism:** PAS-E transgresses the inviolable rule that physicians heal and palliate suffering but never intentionally inflict death; 5. **Differences between means and ends:** Proeuthanasia advocates look to the ends (the patient's death) and say the ends justify the means; opponents disagree and believe that killing patients to relieve suffering is different from allowing natural death and is not acceptable. **Conclusions:** Physicians have a duty to eliminate pain and suffering, not the person with the pain and suffering. Solutions for suffering lie in improving palliative care and social conditions and addressing the reasons for PAS-E requests. They should not include changing medical practice to allow PAS-E.

Keywords

suicide/assisted suicide, euthanasia, palliative care, autonomy, professional–professional relationship

The physician-patient relationship, like any ethical relationship, is a reciprocal relationship. In the justifiable concern for patient autonomy, we must remember that the physician is a moral agent, as well as the patient. When the two are in conflict, the patient's wish does not automatically trump the physician's.¹

Introduction

Cardiopulmonary resuscitation, mechanical ventilation, and intensive care interrupt the dying process and save lives. Medical interventions, however, are not always appropriate and may add

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Table 1. Definitions for euthanasia, assisted suicide, physician-assisted suicide, limiting life-sustaining treatments and palliative sedation.

Euthanasia	A physician (or other person) intentionally killing a person by the administration of drugs, at that competent person's voluntary request.
Assisted suicide	A person intentionally helping another competent person to terminate his or her life, at that person's voluntary request.
Physician-assisted suicide (PAS)	Term use in lieu of physician-assisted death. A physician intentionally helping a competent person to terminate his or her life by providing drugs for self-administration, at that person's voluntary request.
Limiting life-sustaining treatments	Withholding or withdrawing medical treatment from a person either because of medical futility/nonbeneficial care or at the voluntary request of a competent person's or an incompetent person's surrogate decision maker.
Palliative sedation	The monitored use of medications intended to induce a state of decreased or absent awareness (unconsciousness) in order to relieve the burden of otherwise intractable suffering in a manner that is ethically acceptable to the patient, family, and health-care providers.

The definitions are a modification of the International Association for Hospice & Palliative Care's modification¹¹ of the European Association for Palliative Care white paper definitions on euthanasia and physician assisted suicide.¹⁰

to patient suffering. Foregoing life-sustaining treatments when no longer beneficial for patients is morally sound.²⁻⁵

“Withholding and withdrawing” treatment is ethically distinct from physician-assisted suicide and euthanasia (PAS-E).^{3,4} Professional societies have opposed assisting a patient's suicide or intentionally hastening death. The American Psychiatric Association states that psychiatrists should not prescribe or administer any intervention for the purpose of causing death.⁶ There is, however, a more lenient attitude in an increasing number of countries and organizations. Several jurisdictions legalized PAS-E.^{7,8} A World Medical Association (WMA) 2016 meeting saw a call to approve PAS-E. Recently, the American Medical Association (AMA) considered changing its position against PAS to one of neutrality. Their current statement provides PAS-E is “fundamentally incompatible with the physician's role as a healer, would be difficult or impossible to control, and would pose serious societal risks.”⁹ Wherever one stands on PAS-E, it's clear the upcoming decisions the profession makes about our involvement in actively carrying out explicitly life-ending procedures will either uphold or redefine the very nature of patient-physician relationships and medicine's role in upholding values, especially that of respect for human life. To explore this weighty topic, we gathered an interprofessional and geographically diverse group to explore the most salient issues raised by PAS-E, explaining why physicians should not provide it.

Definitions

The definitions for euthanasia, assisted suicide, PAS, limiting life-sustaining treatments, and palliative sedation are given in Table 1.^{10,11}

The terminology of active and passive euthanasia is not used because it causes confusion as to what is and is not euthanasia. “Passive euthanasia” was used initially when there was uncertainty whether withholding or withdrawing life-sustaining treatment was euthanasia. This uncertainty was resolved when consensus developed that justified limitations of such treatments were not euthanasia but rather the acceptance of the human condition in the face of death.

History

A brief history of PAS-E is presented in the Supplementary file.

Slippery Slopes

Some believe legalization of PAS-E will lead to its extension to people who are not terminally ill or suffering.^{12,13} Once intentional killing is allowed, people with access will expand (the logical slippery slope)¹⁴ and abuse will occur (the practical slippery slope).¹⁵ Maintaining a line between killing which can or cannot be legally justified will be difficult.^{15,16} Voluntary euthanasia can lead to euthanasia that is nonvoluntary (mentally incompetent person unable to give an informed consent) or involuntary (against the person's will) euthanasia—eliminating those deemed as having a life not worth living (newborns with disabilities, people with dementia, or the critically ill with an unpredictable life course).¹⁷⁻²¹ Proeuthanasia advocates argue that well-defined criteria, guidelines, review, and reporting requirements provide the necessary safeguards for legalized PAS-E.¹⁶ They propose that in jurisdictions where PAS-E are legal, abuses remain rare without indications of abuse.⁷ Unfortunately, there are breaches of requirements²¹⁻²³ and expansions beyond guidelines.^{17,24-26}

Despite safeguards for euthanasia in the Netherlands and Belgium, there are data that safeguards are ineffective and violated.^{21,27,28} Allowing voluntary euthanasia has led to nonvoluntary euthanasia.^{7,21-23} Administration of lethal drugs without patient request occurred in 1.7% of all deaths in the Flanders region of Belgium alone²² and 0.2% of all deaths in the Netherlands.²³ In Belgium, such deaths occurred mostly in patients aged 80 years or older and without cancer.²¹ Euthanasia is granted in the Netherlands²⁴ and Belgium²⁵ for people tired of living with unbearable suffering without prospect of improvement. Nurses illegally administered life-ending drugs in euthanasia cases without the presence of doctors.²⁹ Only half of the euthanasia cases in Flanders, Belgium, are reported.³⁰ Finally, euthanasia in Belgium included groups potentially vulnerable to discrimination, including women, elderly individuals, the less educated, and nursing home residents.²⁵ Changes in the medical culture have occurred after years of euthanasia practice and euthanasia is increasingly

considered a valid option at the end of life in Belgium.²⁵ There is evidence that safeguards for the protection of terminally ill patients are being circumvented not only in Europe but also in the United States.³¹ As the elderly population enlarges and health-care/social support costs increase, the elderly and vulnerable are commonly considered a burden to their families and society. They may feel pressured to request PAS-E, which has been suggested as a means to decrease health-care costs; the right to die is leading to a duty to die.^{32,33} In fact, a study found that the legalization of medical assistance in dying could reduce annual health care spending across Canada by up to \$138.8 million exceeding the maximum \$14.8 million in direct costs associated with its implementation.³⁴

Challenges to Self-Determination

The major argument for PAS-E is the right of self-determination, that is, autonomy. Proponents of PAS-E argue that a mentally competent patient with a terminal illness continuing to suffer despite palliative care who requests active means to end his life and suffering should be treated according to his wishes. But is this the patient's autonomous desire or a symptom of depression which would exclude PAS-E? The reasons someone requests assisted dying are complex and multifactorial. Psychological, existential, and social motives are more striking features of requests to die than physical symptoms.³⁵⁻³⁷

Approximately one-quarter of patients with cancer are depressed and about 80% of PAS-E requests historically originate from patients with cancer.^{25,35} Requests for PAS-E among terminally ill cancer patients are 4 to 7 times higher among those diagnosed with depression than among those without clinical depression.^{35,37,38} Up to half of terminally ill patients seriously considering PAS-E changed their minds over time with improved symptom control and psychological support.^{39,40} In clinical practice, it may be difficult differentiating depression that interferes with decision-making capacity from an appropriate depressed feeling in the face of advanced progressive disease. Expert advice is required for many patients. Unfortunately, less than 5% of assisted suicide cases in Oregon since 1997 (859) were referred for psychiatric evaluation.⁴¹ All patients interested in PAS-E should be referred for a psychological/psychiatric evaluation to rule out depression.³⁵ Attention and cognition impairments may affect the capacity of competent individuals distorting their best interest assessment and compromising their decision-making process.^{40,42}

Many requests for PAS-E are not based on pain and suffering but rather from not being able to enjoy life, hopelessness, fear of dying, social/familial isolation, and fear of being a burden or dependent on family, including financial considerations.^{40,43,44} Motivations for requests also include maintaining control of one's life and experiencing loss of function, autonomy, dignity, and meaning.⁴⁴⁻⁴⁶ Legalizing PAS-E can offer an "inexpensive alternative" versus providing quality and compassionate palliative care, which represents

major societal dangers amidst health-care shortfalls.³³ Requests can also represent a cry for help, a "desire to live, but not this way."⁴⁴

After surviving a concentration camp, Viktor Frankl wrote, "Any attempt to restore a man's inner strength . . . has first to succeed in showing him some future goal. Nietzsche's words, 'He who has a why to live, can bear with almost any how,' . . . Whenever there was an opportunity for it, one had to give them a why—an aim—for their lives, in order to strengthen them to bear the terrible how of their existence."⁴⁷ Physicians should help patients at the end of their lives find the "why" they've lost to enable them to endure their abhorrent "how" if they so desire and not resort to PAS-E. Quality of life might also be improved by helping people change their hopes and expectations⁴⁸ and with dignity therapy.⁴⁹ As individual requests for PAS-E are often labile, complex in origin, and subject to the individual's changing priorities, such requests require careful and repetitive attention.

Better Palliative Care

Several medical organizations have emphasized the need for improving care of patients suffering from life-threatening illnesses throughout different disease stages by having physicians master the interprofessional aspects of palliative medicine.^{10,11,50} Patients with severe pain benefit from better palliative care as the majority can be made physically comfortable.⁴⁰ The International Association for Hospice & Palliative Care stated that no country or state should consider the legalization of PAS-E until it ensures universal access to palliative care services and appropriate medications, including opioids for pain and dyspnea.¹¹ This is justified in light of the nascent state of palliative care globally.⁵¹ Severe suffering occurs more frequently in countries with poor provisions of end-of-life care.⁵² Many patients are not receiving pain management at the end of life because of misguided fears of abuse or addiction, which could be overcome by palliative medicine training and greater availability of opioids and other drugs. When relief is offered with adequate treatment for depression, better pain management, and palliative care, the desire for death wanes.^{39,40,53} Oregon patients for whom substantive palliative interventions were made changed their minds about assisted suicide in 46% of cases.⁵⁴ We must focus on improving symptom management of dying patients rather than on PAS-E.⁵⁵ Implementation of PAS-E is complicated by the vagueness of concepts such as "unbearable suffering" and "incurable disease."⁵⁵ With mental suffering, physicians rely on the patient's subjective complaints, leading to greater diagnostic uncertainty and the potential to misdiagnose treatable depression or other disorders.^{17,56,57}

Optimizing palliative care will of course not eliminate all requests for PAS-E. For intolerable and refractory symptoms, specific sedative medications can be prescribed to provide palliative sedation from light sedation to unconsciousness.⁵⁸⁻⁶⁰ Palliative sedation is fundamentally different from euthanasia as there is no intent to end life but rather to relieve suffering,

and the drug treatment protocol is different.⁵⁹⁻⁶¹ Palliative care identifies and targets what can be modified, such as pain relief, place of care, and location of death. Good palliative care helps restore a sense of autonomy and maximizes quality of life for people whatever their function level.⁶² Holistic knowledge of palliative care is the most urgent ethical obligation of jurisdictions worldwide rather than legalizing PAS-E.⁶³

Medical Professionalism

The essence of medicine is healing, managing pain, and alleviating suffering. Doctors assisting in PAS-E jeopardize the moral integrity of the medical profession,⁶⁴⁻⁶⁶ as do doctors refusing to help their patients in their final stage of life. The AMA states, "PAS is fundamentally inconsistent with the physician's professional role."⁹ PAS-E undermines the patient-physician relationship and erode patients' and society's trust in the medical profession.^{40,64} Patients and families depend on physicians for guidance especially when inadequate information, fear, and other considerations limit their decision-making capacity and independence.⁴⁰ By allowing doctors to participate in PAS-E, patients and families may become suspicious about the doctor's intentions at a time when they have the greatest need for help from a trusted medical professional.⁴⁰ In contrast to a recently espoused opinion,⁶⁷ we and others maintain that to uphold the moral integrity of medicine, physicians must be allowed to conscientiously object to participate in PAS-E in regions where it is legalized.^{5,68} The Belgian Society of Intensive Care endorsing doctor's actively shortening the dying process using sedatives "in the *absence* of discomfort" is alarming.⁶⁹ Whether or not they are illegal actions as some claim,⁷⁰ they are very ethically troubling. Patients need physicians not only to cure them but also to care for them and to be with them at the end of their lives. The Hippocratic Oath states, "I will neither give a deadly drug to anybody who asks for it, nor will I make a suggestion to this effect."⁷¹ The oath is no longer used in universities in jurisdictions where PAS-E is legal but is still used in some North and South American and European universities. Physicians should also look to the bereavement experience of families. A Swiss study found that 20% of relatives of patients who died following assisted suicide demonstrated full or partial posttraumatic stress disorders and 16% had symptoms of depression up to 2 years after their loss.⁷²

Differences Between Means and Ends

The euthanasia debate is not about if we die, but about how we die. Proeuthanasia advocates argue that if a person is "going to die anyway," we may hasten the end if the patient so wishes and other options to alleviate suffering are unavailable or unacceptable to the patient. Opponents of euthanasia reject this argument and distinguish "natural death" from intentionally inflicted death. In other words, proeuthanasia advocates say the ends justify the means (relief of suffering through inflicting death); their opponents disagree believing PAS-E is always an unethical means.

That said, there is consensus that suffering, terminally ill patients who do not want to continue living should not have their dying artificially prolonged and can refuse any form of life-prolonging treatment. All agree that suffering must be relieved but disagree on what are acceptable and unacceptable means by which to achieve this goal. Proponents of PAS-E see their actions as similar to other treatments they give patients whereas opponents regard them as different. We believe that killing the patient to relieve suffering is not a proper means to reach the desired goal of relieving suffering. Rather, we must kill the pain and suffering, not the person with the pain and suffering.⁷³

Conclusion

The issue of PAS-E is extremely controversial with strong opinions by intelligent and caring individuals on both sides of the debate. Discussions of PAS-E must consider respecting individual autonomy and compassion toward those experiencing pain or suffering. Concurrently, respect for human life and the value of forging humane communities that dignify and protect vulnerable people are equally compelling issues. Differences of opinion relate to where one draws the line between the conflicting principles of respect for individual autonomy and respect for human life. Opinions on legalizing PAS-E pivot on how one views the seriousness of the risks and harms to medical professionalism, vulnerable people, and societal protections of the common good.

Different cultures and religious values must also be considered.^{3,4} There is substantial variability in the acceptability of withdrawing life-sustaining treatments across world regions.⁷⁴ In Israel, the withdrawal of mechanical ventilation to comply with the request of the suffering, terminally ill patient is illegal.⁷⁵ Changes in PAS-E laws will dramatically alter the physician-patient relationship and society. Different jurisdictions must find their own solutions to the issue of PAS-E without impositions from paternalistic, outside bodies.⁷⁶ Many jurisdictions allowing PAS-E do not force doctors to participate if these actions are against their personal moral or religious beliefs,⁷⁷ but Canada has forced objecting physicians to refer patients to a physician who will help kill the patient.⁷⁸ The WMA and other organizations should not attempt to force societies or countries to approve PAS-E if it violates their ethics and laws. For the reasons articulated, we propose that PAS-E should not be legalized, that PAS-E are not medical treatment, and, as such, they should never be performed by physicians. If jurisdictions legalize PAS-E, technicians⁶⁵ or other nonphysicians⁷⁹ should perform these actions. It is not justifiable to allow PAS-E to grant the wishes of the few with difficult-to-relieve suffering at the expense of the rights and protection of others, especially vulnerable people who have no voice. Indeed, we posit that the true mark of a society is how it protects the lives of its most vulnerable members. We must remember that what is legal is not necessarily moral or ethical. Solutions for suffering lie in improving palliative care and addressing social

causes, and remedying the reasons patients request PAS-E. They should not include radically changing medical practice to allow PAS-E.

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Supplemental Material

Supplementary material for this article is available online.

References

- Pellegrino ED. Patient and physician autonomy: conflicting rights and obligations in the physician-patient relationship. *J Contemp Health Law Policy*. 1994;10:47-68.
- Cook D, Rucker G. Dying with dignity in the intensive care unit. *N Engl J Med*. 2014;370(26):2506-2514. doi:10.1056/NEJMra1208795.
- Sprung CL, Cohen SL, Sjøkvist P, et al. End-of-life practices in European intensive care units: the Ethicus study. *JAMA*. 2003;290(6):790-797. doi:10.1001/jama.290.6.790.
- Sprung CL, Truog RD, Curtis JR, et al. Seeking worldwide professional consensus on the principles of end-of-life care for the critically ill. The Consensus for Worldwide End-of-Life Practice for Patients in Intensive Care Units (WELPICUS) study. *Am J Respir Crit Care Med*. 2014;190(8):855-866. doi:10.1164/rccm.201403-0593CC.
- Goligher EC, Ely EW, Sulmasy DP, et al. Physician-assisted suicide and euthanasia in the ICU: a dialogue on core ethical issues. *Crit Care Med*. 2017;45(2):149-155. doi:10.1097/CCM.0000000000001818.
- American Psychiatric Association. Position Statement on Medical Euthanasia 2016 <https://www.psychiatry.org/home/policy-finder> Accessed May 14, 2018.
- Emanuel EJ, Onwuteaka-Philipsen BD, Urwin JW, et al. Attitudes and practices of euthanasia and physician-assisted suicide in the United States, Canada, and Europe. *JAMA*. 2016;316(1):79-90. doi:10.1001/jama.2016.8499 [published Online First: July 6, 2016].
- Li M, Watt S, Escaf M, et al. Medical assistance in dying—implementing a hospital-based program in Canada. *N Engl J Med*. 2017;376(21):2082-2088. doi:10.1056/NEJMms1700606.
- American Medical Association (AMA). Physician Assisted Suicide AMA Policies. Council on Ethical and Judicial Affairs; 2009. <https://searchpf.ama-assn.org/SearchML/searchDetails.action?uri=%2FAMADoc%2FHOD.xml-0-483.xml>. Accessed June 15, 2017.
- Radbruch L, Leget C, Bahr P, et al. Euthanasia and physician-assisted suicide: a white paper from the European Association for Palliative Care. *Palliat Med*. 2016;30(2):104-116. doi:10.1177/0269216315616524.
- De Lima L, Woodruff R, Pettus K, et al. International Association for Hospice and Palliative Care Position Statement: euthanasia and physician-assisted suicide. *J Palliat Med*. 2017;20(1):8-14. doi:10.1089/jpm.2016.0290.
- Lerner BH, Caplan AL. Euthanasia in Belgium and the Netherlands: on a slippery slope? *JAMA Intern Med*. 2015;175(10):1640-1641. doi:10.1001/jamainternmed.2015.4086.
- Rietjens JA, van Tol DG, Schermer M, et al. Judgement of suffering in the case of a euthanasia request in the Netherlands. *J Med Ethics*. 2009;35(8):502-507. doi:10.1136/jme.2008.028779.
- Dierickx S, Deliens L, Cohen J, et al. Euthanasia in Belgium: trends in reported cases between 2003 and 2013. *CMAJ*. 2016;188(16):E407-E414. doi:10.1503/cmaj.160202 [published Online First: November 2, 2016].
- Cohen-Almagor R. First do no harm: intentionally shortening lives of patients without their explicit request in Belgium. *J Med Ethics*. 2015;41(8):625-629. doi:10.1136/medethics-2014-102387 [published Online First: June 5, 2015].
- Manga P. Euthanasia and medically assisted suicide—the case for legalizing physician assisted suicide. *Med Law*. 2001;20(3):451-462.
- Kim SY, De Vries RG, Peteet JR. Euthanasia and assisted suicide of patients with psychiatric disorders in the Netherlands 2011 to 2014. *JAMA Psychiatry*. 2016;73(4):362-368. doi:10.1001/jamapsychiatry.2015.2887.
- Olie E, Courtet P. The controversial issue of euthanasia in patients with psychiatric illness. *JAMA*. 2016;316(6):656-657. doi:10.1001/jama.2016.9883.
- Cohen-Almagor R. First do no harm: euthanasia of patients with dementia in Belgium. *J Med Philos*. 2016;41(1):74-89. doi:10.1093/jmp/jhv031 [published Online First: December 15, 2015].
- Verhagen E, Sauer PJ. The Groningen protocol—euthanasia in severely ill newborns. *N Engl J Med*. 2005;352(10):959-962. doi:10.1056/NEJMp058026.
- Chambaere K, Bilsen J, Cohen J, Onwuteaka-Philipsen BD, Mortier F, Deliens L. Physician-assisted deaths under the euthanasia law in Belgium: a population-based survey. *CMAJ*. 2010;182(9):895-901. doi:10.1503/cmaj.091876.
- Chambaere K, Vander Stichele R, Mortier F, Cohen J, Deliens L. Recent trends in euthanasia and other end-of-life practices in

- Belgium. *N Engl J Med.* 2015;372(12):1179-1181. doi:10.1056/NEJMc1414527.
23. Onwuteaka-Philipsen BD, Brinkman-Stoppelenburg A, Penning C, de Jong-Krul GJ, van Delden JJ, van der Heide A. Trends in end-of-life practices before and after the enactment of the euthanasia law in the Netherlands from 1990 to 2010: a repeated cross-sectional survey. *Lancet.* 2012;380(9845):908-915. doi:10.1016/S0140-6736(12)61034-4.
 24. Snijdewind MC, Willems DL, Deliens L, Onwuteaka-Philipsen BD, Chambaere K. A study of the first year of the end-of-life clinic for physician-assisted dying in the Netherlands. *JAMA Intern Med.* 2015;175(10):1633-1640. doi:10.1001/jamainternmed.2015.3978.
 25. Dierickx S, Deliens L, Cohen J, Chambaere K. Comparison of the expression and granting of requests for euthanasia in Belgium in 2007 vs 2013. *JAMA Intern Med.* 2015;175(10):1703-1706. doi:10.1001/jamainternmed.2015.3982 [published Online First: August 11, 2015].
 26. Orr RD, Bishop L. Why psychiatrists should not participate in euthanasia and physician-assisted suicide. *Am J Forensic Psychiatry.* 1998;19(1):35-48. [published Online First: February 22, 2005].
 27. Belgium Commission fédérale de contrôle et d'évaluation de l'euthanasie. Septième rapport aux Chambres législatives, années 2014-2015. [News Article]. Belgium: CFCEE Rapport Euthanasie; 2016. <http://organesdeconcertation.sante.belgique.be/fr/documents/cfcee-rapport-euthanasie-2016>. Accessed June 15, 2017.
 28. Rietjens JA, van der Maas PJ, Onwuteaka-Philipsen BD, van Delden JJ, van der Heide A. Two decades of research on euthanasia from the Netherlands. What have we learnt and what questions remain? *J Bioeth Inq.* 2009;6(3):271-283. doi:10.1007/s11673-009-9172-3.
 29. Inghelbrecht E, Bilsen J, Mortier F, Deliens L. The role of nurses in physician-assisted deaths in Belgium. *CMAJ.* 2010;182(9):905-910. doi:10.1503/cmaj.091881.
 30. Smets T, Bilsen J, Cohen J, Rurup ML, Mortier F, Deliens L. Reporting of euthanasia in medical practice in Flanders, Belgium: cross sectional analysis of reported and unreported cases. *BMJ.* 2010;341:c5174. doi:10.1136/bmj.c5174
 31. Hendin H, Foley K. Physician-assisted suicide in Oregon: a medical perspective. *Issues Law Med.* 2008;24(2):121-145.
 32. Schumacher BN. *L'euthanasie de la Personne Vulnérable*. Toulouse, érès: collection Société—Espace éthique; 2017.
 33. Anderson RT. Always care, never kill: how physician-assisted suicide endangers the weak, corrupts medicine, compromises the family, and violates human dignity and equality backgrounder #3004 on Health Care 2015. <http://www.heritage.org/research/reports/2015/03/always-care-never-kill-how-physician-assisted-suicide-endangers-the-weak-corrupts-medicine-compromises-the-family-and-violates-human-dignity-and-equality>. Accessed June 15, 2017.
 34. Trachtenberg AJ, Manns B. Cost analysis of medical assistance in dying in Canada. *CMAJ.* 2017;189(3):E101-E105. doi:10.1503/cmaj.160650.
 35. Emanuel EJ. Depression, euthanasia, and improving end-of-life care. *J Clin Oncol.* 2005;23(27):6456-6458. doi:10.1200/JCO.2005.06.001.
 36. Hudson PL, Kristjanson LJ, Ashby M, et al. Desire for hastened death in patients with advanced disease and the evidence base of clinical guidelines: a systematic review. *Palliat Med.* 2006;20(7):693-701. doi:10.1177/0269216306071799.
 37. van der Lee ML, van der Bom JG, Swarte NB, Heintz AP, de Graeff A, van den Bout J. Euthanasia and depression: a prospective cohort study among terminally ill cancer patients. *J Clin Oncol.* 2005;23(27):6607-6612. doi:10.1200/JCO.2005.14.308.
 38. Chochinov HM, Wilson KG, Enns M, et al. Desire for death in the terminally ill. *Am J Psychiatry.* 1995;152(8):1185-1191. doi:10.1176/ajp.152.8.1185.
 39. Emanuel EJ, Fairclough DL, Emanuel LL. Attitudes and desires related to euthanasia and physician-assisted suicide among terminally ill patients and their caregivers. *JAMA.* 2000;284(19):2460-2468.
 40. Lorenz K, Lynn J. Moral and practical challenges of physician-assisted suicide. *JAMA.* 2003;289(17):2282. doi:10.1001/jama.289.17.2282.
 41. Oregon Public Health Division. Oregon's Death with Dignity Act—2014. 2014. <http://public.health.oregon.gov/ProviderPartnerResources/EvaluationResearch/DeathwithDignityAct/Documents/year17.pdf> Accessed May 14, 2018.
 42. Grassi L, Caraceni A, Mitchell AJ, et al. Management of delirium in palliative care: a review. *Curr Psychiatry Rep.* 2015;17(3):550. doi:10.1007/s11920-015-0550-8.
 43. A New Zealand Resource for Life related issues. Political Key Issues—Euthanasia 2011. <http://www.life.org.nz/euthanasia/euthanasiapoliticalkeyissues/>. Accessed June 1, 2017.
 44. Monforte-Royo C, Villavicencio-Chavez C, Tomas-Sabado J, Mah-tani-Chugani V, Balaguer A. What lies behind the wish to hasten death? A systematic review and meta-ethnography from the perspective of patients. *PLoS One.* 2012;7(5):e37117. doi:10.1371/journal.pone.0037117 [published Online First: May 19, 2012].
 45. Ganzini L, Goy ER, Dobscha SK. Why Oregon patients request assisted death: family members' views. *J Gen Intern Med.* 2008;23(2):154-157. doi:10.1007/s11606-007-0476-x.
 46. Sullivan AD, Hedberg K, Fleming DW. Legalized physician-assisted suicide in Oregon—the second year. *N Engl J Med.* 2000;342(8):598-604. doi:10.1056/NEJM200002243420822.
 47. Frankl V. *Man's Search for Meaning*. New York, NY: Washington Square Press/Pocket Books; 1985:76.
 48. Calman KC. Quality of life in cancer patients—an hypothesis. *J Med Ethics.* 1984;10(3):124-127. [published Online First: September 1, 1984].
 49. Chochinov HM. Dignity and the essence of medicine: the A, B, C, and D of dignity conserving care. *BMJ.* 2007;335(7612):184-187. doi:10.1136/bmj.39244.650926.47.
 50. Snyder Sulmasy L, Mueller PS, et al. Ethics and the legalization of physician-assisted suicide: an American College of Physicians position paper. *Ann Intern Med.* 2017;167(8):576-578. doi:10.7326/M17-0938.
 51. Connor SR, Sepulveda-Bermedo MC. *Global Atlas of Palliative Care at the End of Life*. London: Worldwide Palliative Care Alliance, World Health Organization; 2014. <http://www.who.int/nmh/GlobalAtlasofPalliativeCare.pdf> Accessed May 14, 2018.

52. Steedman MR, Hughes-Hallett T, Knaul FM, et al. Innovation can improve and expand aspects of end-of-life care in low- and middle-income countries. *Health Affairs (Project Hope)*. 2014; 33(9):1612-1619. doi:10.1377/hlthaff.2014.0379.
53. Kheriaty A. Apostolate of Death New York. 2015. <https://www.firstthings.com/article/2015/04/apostolate-of-death> Accessed May 14, 2018.
54. Ganzini L, Nelson HD, Schmidt TA, Kraemer DF, Delorit MA, Lee MA. Physicians' experiences with the Oregon Death with Dignity Act. *N Engl J Med*. 2000;342(8):557-563. doi:10.1056/NEJM200002243420806.
55. Appelbaum PS. Should mental disorders be a basis for physician-assisted death? *Psychiatric Serv (Washington, DC)*. 2017;68(4): 315-317. doi:10.1176/appi.ps.201700013.
56. Kim SY, Lemmens T. Should assisted dying for psychiatric disorders be legalized in Canada? *CMAJ*. 2016;188(14):E337-E339. doi:10.1503/cmaj.160365 [published Online First: June 23, 2016].
57. Appelbaum PS. Physician-assisted death for patients with mental disorders—reasons for concern. *JAMA Psychiatry*. 2016;73(4): 325-326. doi:10.1001/jamapsychiatry.2015.2890.
58. Cherny NI, Radbruch L. European Association for Palliative Care (EAPC) recommended framework for the use of sedation in palliative care. *Palliat Med*. 2009;23:581-593.
59. Hahn MP. Review of palliative sedation and its distinction from euthanasia and lethal injection. *J Pain Palliat Care Pharmacother*. 2012;26(1):30-39. doi:10.3109/15360288.2011.650353.
60. Beller EM, van Driel ML, McGregor L, Truong S, Mitchell G. Palliative pharmacological sedation for terminally ill adults. *Cochrane Database Syst Rev*. 2015;(1):CD010206. doi:10.1002/14651858.CD010206.pub2.
61. Materstvedt LJ. Intention, procedure, outcome and personhood in palliative sedation and euthanasia. *BMJ Support Palliat Care*. 2012;2(1):9-11. doi:10.1136/bmjspcare-2011-000040.
62. Hain RD. Euthanasia: 10 myths. *Arch Dis Child*. 2014;99(9): 798-799. doi:10.1136/archdischild-2014-306218.
63. Chin JJ, Ho CW, Arima H, et al. Integration of palliative and supportive cancer care in Asia. *Lancet Oncol*. 2012;13(5): 445-446. doi:10.1016/S1470-2045(12)70141-9.
64. Oehmichen M, Meissner C. Life shortening and physician assistance in dying: euthanasia from the viewpoint of German legal medicine. *Gerontology*. 2000;46(4):212-218. doi:10.1159/000022162.
65. Randall F, Downie R. Assisted suicide and voluntary euthanasia: role contradictions for physicians. *Clin Med (Lond)*. 2010;10(4): 323-325.
66. Boudreau JD, Somerville MA. Euthanasia is not medical treatment. *Br Med Bull*. 2013;106:45-66. doi: 10.1093/bmb/ldt010 [published Online First: March 28, 2013].
67. Stahl RY, Emanuel EJ. Physicians, not conscripts—conscientious objection in health care. *N Engl J Med*. 2017;376(14):1380-1385. doi:10.1056/NEJMs1612472.
68. Goligher EC, Del Sorbo L, Cheung AM, et al. Why conscientious objection merits respect. *CMAJ*. 2016;188(11):822-823. doi:10.1503/cmaj.1150113 [published Online First: August 10, 2016].
69. Vincent JL, Schetz M, De Waele JJ, et al. "Piece" of mind: end of life in the intensive care unit statement of the Belgian Society of Intensive Care Medicine. *J Crit Care*. 2014;29(1):174-175. doi: 10.1016/j.jcrc.2013.08.025.
70. Kompanje EJ, Epker JL, Bakker J. Hastening death due to administration of sedatives and opioids after withdrawal of life-sustaining measures: even in the absence of discomfort? *J Crit Care*. 2014;29(3):455-456. doi:10.1016/j.jcrc.2014.02.007.
71. Edelstein L. *The Hippocratic Oath: Text, Translation and Interpretation*. Baltimore, MD: Johns Hopkins University Press; 1943. <http://guides.library.jhu.edu/c.php?g=202502&p=1335752>. Accessed June 15, 2017.
72. Wagner B, Muller J, Maercker A. Death by request in Switzerland: posttraumatic stress disorder and complicated grief after witnessing assisted suicide. *Eur Psychiatry*. 2012;27(7): 542-546. doi:10.1016/j.eurpsy.2010.12.003.
73. Somerville MA. *Death Talk: The Case Against Euthanasia and Physician-Assisted Suicide*. 2nd ed. Montreal: McGill-Queen's University Press; 2014.
74. Mark NM, Rayner SG, Lee NJ, Curtis JR. Global variability in withholding and withdrawal of life-sustaining treatment in the intensive care unit: a systematic review. *Intensive Care Med*. 2015;41(9):1572-1585. doi:10.1007/s00134-015-3810-5.
75. Steinberg A, Sprung CL. The dying patient: new Israeli legislation. *Intensive Care Med*. 2006;32(8):1234-1237. doi:10.1007/s00134-006-0186-6.
76. Bamgbose O. Euthanasia: another face of murder. *Int J Offender Ther Comp Criminol*. 2004;48(1):111-121. doi:10.1177/0306624X03256662.
77. Koninklijke Nederlandsche Maatschappij tot bevordering der Geneeskunst (KNMG). *The Role of the Physician in the Voluntary Termination of Life*. Utrecht, The Netherlands: KNMG; 2011. <http://www.worldcat.org/title/role-of-the-physician-in-the-voluntary-termination-of-life/oclc/769185498>. Accessed June 15, 2017.
78. The College of Physicians and Surgeons of Ontario. Medical Assistant in Dying. June 2016: <http://www.cpso.on.ca/Policies-Publications/Policy/Physician-Assisted-Death> Accessed May 14, 2018.
79. Hurst SA, Mauron A. Assisted suicide and euthanasia in Switzerland: allowing a role for non-physicians. *BMJ*. 2003;326(7383): 271-273.