

Chapter 12

Medical Futility and Physician Assisted Death



Nancy S. Jecker

Abstract This chapter addresses the close association between withholding and withdrawing futile life-sustaining medical treatments and assisting patients with hastening ending their lives. Section 12.2 sets forth a definition of medical futility and places this concept in the broader context of bioethical principles of autonomy, beneficence, nonmaleficence and justice. Section 12.3 draws out futility's ethical implications and considers the view that physicians are ethically permitted to refrain from medically futile treatments, should be encouraged to refrain, or have a duty to refrain. Section 12.4 examines ethical arguments that physicians also have a positive duty to assist patients with terminal conditions who are imminently dying to end their lives. It explores ethical arguments for assisted dying that appeal to the physicians' significant responsibility and relationship with patients, the claimed moral equivalence of actions and omissions, and the medical goal of helping patients have a peaceful and dignified death.

Keywords Assisted death · Medical futility · Dignity · Euthanasia · Physician-patient relationships

12.1 Introduction

This chapter addresses assisted dying in the context of patients with terminal conditions who are imminently dying. It considers in particular, the setting of economically developed Western societies where a wide range of medical technologies are available to extend patients' lives and asks, what special responsibilities do physicians have in such settings. Section 12.2 describes a concept of medical futility that I have defended (with co-authors Schneiderman and Jonsen) at length elsewhere. Section 12.3 considers the ethical responsibilities of physicians when an intervention qualifies as medically futile. Section 12.4 explores the ethics of physician assisted

N. S. Jecker (✉)

Department of Bioethics and Humanities, University of Washington School of Medicine, Seattle, WA, USA

e-mail: nsjecker@uw.edu

dying for patients with terminal conditions who are imminently dying after futile interventions are withheld or withdrawn, after palliative and comfort care options have been exhausted, and when the patient prefers to hasten death. For the purposes of this chapter, I do not draw a bright line between self-administering a lethal dose of medication and having a physician administer this. Instead, my purpose is to make a more general case in support of physician assisted death that is relevant to both forms of assisted dying. The point is not to present a final argument, but a *prima facie* defense of the practice. I bracket the question of whether the arguments given extend beyond terminally ill and imminently dying patients and apply to other groups, such as individuals with chronic conditions, preclinical diagnoses, or older adults who are healthy, but consider their lives ‘complete.’

12.2 Deciding to Forego Futile Medical Interventions

Decisions to forego medical treatment find ethical support in bioethical principles of autonomy, beneficence, nonmaleficence and justice (Beauchamp and Childress 2019). The *principle of autonomy* requires respecting a patient’s autonomous choices. Autonomous choices may be expressed in a variety of ways. First, at the time treatment is offered, a patient with decisional capacity may make an informed decision to refuse it. Second, at some prior time a now incapacitated patient may have made an informed decision that certain interventions should not be provided. Often, such a preference is expressed through a directive to physicians. Finally, a decision may be made by a surrogate who represents the prior preferences of a now incompetent patient to withhold or withdraw a particular intervention. A second and third ethical basis for foregoing medical treatment are the ethical requirements to promote the patient’s good (the *principle of beneficence*) and avoid harming the patient (the *principle of nonmaleficence*). There are at least two ways in which principles of beneficence and/or nonmaleficence may be invoked to justify foregoing treatment. First, a surrogate decision maker may decide to forego treatment because it is considered to be in the patient’s best interest. Second, benefitting the patient is at stake when treatment is foregone because it confers no significant benefit to the patient. A fourth basis for choosing to forego medical treatment appeals to a *principle of justice*. In health care, justice is typically understood in terms of the distribution of scarce resources under conditions where beneficial treatments are denied because the raw materials required to make them available are scarce or the dollars to pay for resources are limited. In both instances, there is not enough of a particular resource to provide it to everyone who stands to benefit, and the principle of justice requires that morally similar cases be treated similarly.

The concept of futility is implicit within each of the four principles, but especially the principles of beneficence and nonmaleficence. To show this, it will be helpful to start with a general definition of futility and then draw out its implications for bioethics principles. The concept of futility comes from the Latin *futilis*. A *futilis* was a religious vessel that had a wide top and a narrow bottom. Its shape caused it

to tip over easily when filled, rendering it useless for anything other than ceremonial purposes. The origin of the word reminds us of the symbolic power of rituals. In medicine, procedures that provide no significant benefit to patients are sometimes sought because of the symbolic importance of “doing everything possible,” which might be interpreted as an expression of caring for the patient (Schneiderman et al. 1994). Veatch and Spicer describe a patient who pleads, ‘Don’t let them give up on me,’ suggesting that irrespective of whether interventions serve any practical purpose in realizing the goals of treatment, they nonetheless carry meaning for patients, signifying that a patient is not being abandoned (Veatch and Spicer 1992). According to the *Oxford English Dictionary*, a futile action is “leaky, hence untrustworthy, vain, failing of the desired end through intrinsic defect,” which aptly conveys its objective uselessness, but not the purpose such an action might serve in religious, medical, or other contexts. In some instances, the positive symbolic meaning a futile intervention carries for a patient may overshadow the clinician’s judgment that it is futile; in such instances, patients may dig in their heels when medical futility is communicated and continue to equate the use of futile interventions with being cared for. In other instances, patient may question the physician’s judgment that an interventions offers no significant benefit.

It is controversial whether futile interventions are justified in a narrow range of cases where they yield psychological benefits for dying patients. One way of framing this question is to liken futile interventions to placebos used in research settings, which may have an ameliorative effect on a symptom or disease but are ineffective for the condition being treated. Shapiro and Shapiro argue that for most of the history of medicine, the history of medical treatment was “essentially the history of the placebo effect,” because pre-scientific medicine had little else to offer (Shapiro and Shapiro 2000, 2). Lichtenberg et al. (2004) argue that placebo-type interventions continue to have a legitimate place in clinical practice in cases where no standard proven therapy exists and the placebo is reasonable expected to produce positive psychological benefits for the patient. Others maintain placebos can produce a “meaning response” in patients (Moerman and Jonas 2002). However, in many instances, using futile interventions only prolongs patient’s suffering and feeds false hope. Futile interventions often express disregard for professional standards, being seduced by technology, neglecting to focus on palliative care, being co-opted by a patient’s family, refusing to acknowledge medicine’s limits, or denying a patient’s impending death (Jecker 2013). Over time, futile intervention can create moral distress and burnout. There are other, better ways to show care and support for patients.

In medicine, the concept of medical futility refers specifically to interventions that hold no reasonable prospect of helping the patient. Some use the term ‘futility’ more narrowly, to refer to an intervention that cannot bring about its physiological objective (Ardagh 2000). For example, the use of cardiopulmonary resuscitation (CPR) in the field hours after a patient stops breathing might be called, ‘physiologically futile’ in this sense. Part of what lies behind a physiologic definition of futility is the desire to practice medicine in a manner that is ‘value free.’ As White and Pope (2016, 72), argue,

with physiological futility, the clinician does not make any evaluative assessment that the treatment's effect is too unlikely, too small, or not worthwhile. There is no normative disagreement. Instead, clinicians can readily ascertain physiological futility based solely on their clinical knowledge. The basis for refusing treatment is a scientific and empirical one: the treatment simply will not work.

A problem with defining futility this narrowly, however, is that an intervention may produce effects on a patient's body but still qualify as futile because it does not help the patient. Reasoning along these lines, Schneiderman et al. (1990) distinguish between *effects* and *benefits*, noting that during the early nineteenth century, many medications physicians used were effective—emetics could cause vomiting, purgatives could cause laxation, sudorific, sweating, and so on. In this sense, these interventions were not *physiologically* futile. Nonetheless, we regard them as medically futile because they did not benefit patients. Another way to say this would be that medicine's goal is broadly speaking, to help the sick. Miller and Brody (2001) elucidate a plurality of more specific goals of medicine, including preventing disease and injury, relieving the pain and suffering caused by disease, caring for and curing those who are ill, preventing premature death, and helping a patient die peacefully. When medical interventions do not achieve these goals, which relate to helping patients and preventing disease and injury, they qualify as medically futile.

The futility of an intervention can be evident in medicine in two distinct ways (Schneiderman et al. 1990). *Quantitative futility* refers to interventions where the *likelihood* of benefit falls well below a threshold considered minimal. The concept has ancient roots. The Hippocratic text, *The Art*, instructs physicians, "Whenever therefore a man suffers from an ill which is too strong for the means at the disposal of medicine, he surely must not even expect that it can be overcome by medicine" (Reiser et al. 1977, 6–7). The idea that when a patient is overmastered by their disease, medicine is powerless is expressed in modern parlance by the notion of quantitative futility. Quantitative futility indicates a situation where the probability that a medical intervention will achieve a desired outcome is extremely low. An example of quantitative futility might be offering cardiopulmonary resuscitation (CPR) to patients when the chances of survival after CPR are no better than 1 in 100. The quantitative dimension of futility draws on a standard of reasonableness that is the same as the standard used in the statistical evaluation of clinical trials (Schneiderman et al. 1996). In a clinical trial, an intervention is considered to have no significant benefit (and to be better than no intervention) when it produces its desired effect no more than 1 in 100 instances. The quantitative dimension of futility draws on a standard of reasonableness that is the same as the standard used in the statistical evaluation of clinical trials.¹

Like quantitative futility, *qualitative futility* sets standards for medical interventions and appeal to the goal of helping the patient, rather than producing effects on

¹ In the clinical trial, the question is not, does an intervention ever succeed, but rather, how often must a treatment fail before it is considered to provide no significant benefit. The answer is that it must succeed more than 1 in 100 times. See Schneiderman et al. (1996).

a patient's body. A qualitative conception of futility traces to ancient Greek philosophers, such as Plato, who deplored the kind of medicine that "pampers the disease" and praises the Asclepian physicians, who he (1981, 76–77) says,

taught medicine for those who were suffering from a specific disease; he rid them of it...then ordered them to live as usual...For those, however, whose bodies were always in a state of inner sickness he did not attempt to prescribe a regimen...to make their life a prolonged misery...Medicine was not intended for them, and they should not be treated even if they were richer than Midas.

In the language of contemporary bioethics, an intervention is qualitatively futile whenever the *quality* of benefit associated with the intervention falls well below a threshold considered minimum. Whereas quantitative futility draws an analogy with the evaluation of statistical trials and appeals to the notion of reasonableness, qualitative futility draws on paradigm cases to illustrate. One paradigmatic example of qualitative futility is continuing to provide mechanical ventilation or nutrition and hydration for a patient in a permanent vegetative state. In this instance, a patient will never appreciate any benefit from the intervention. Another paradigm example of qualitative futility is an intervention associated with an overwhelming amount of suffering for a predictably brief period of time. A final paradigm is a patient who will never leave the intensive care unit and requires constant monitoring, ventilatory support, and intensive nursing care to the extent that they cannot participate in any other activities or goals.

Various combinations of quantitatively and qualitatively futile interventions are possible. In some instances, an intervention is both quantitatively and qualitatively futile; for example, performing CPR in the field on a patient who is cold and blue. In other instances, an intervention achieves its physiologic goal, but is qualitatively futile. For example, administering artificial nutrition and hydration on a patient in a persistent vegetative state is a case of 'hitting the target but missing the point.'

Quantitative and qualitative futility judgments reflect the values of beneficence and nonmaleficence (discussed in Sect. 12.3). When applied to a particular intervention for a particular patient, they should reflect a consensus of clinical judgment and conform to evidence-standards for best practice. They should not be based on individual standalone judgments rendered at the bedside. When substantial controversy exists about whether an intervention for a particular patient is futile, this should be transparent and the patient and family should be offered options, including being transferred to a different facility to receive interventions that a particular provider or institution is unwilling to offer or continue (Jecker 2015). Fair procedures can be particularly critical during such moments, because they serve to protect patients who are ill or injured and their families in situations where they have relatively less knowledge, power, and authority than the physician and healthcare institution. They also protect health professionals against the moral distress associated with providing a treatment that they object to on grounds of deeply held personal or professional beliefs (Wicclair 2016).

Quantitatively and qualitatively futile interventions encompass a range of evaluations and interventions along a continuum of healthcare services. They include,

for example, doing electroencephalography (EEG) for an uncomplicated headache, ordering a computer tomography (CT) or magnetic resonance imaging (MRI) scan for low-back pain in patients without any signs of a neurological problem, or placing a coronary-artery stent in patients with stable cardiac disease. Other common examples include the use of antibiotics for probable viral respiratory tract infections; and preoperative testing in low-risk patients, such as chest radiography (Hurley 2014). Nor is the use of futile interventions confined to high technology procedures in wealthy parts of the world. Instead, overuse is a problem around the world. According to Brownlee et al., “overuse,” defined as “the provision of medical services that are more likely to cause harm than good,” occurs in low- and middle-income countries, often in tandem with unmet healthcare needs (Brownlee et al. 2017). Brownlee cites accumulating evidence of widespread overuse of medical interventions in Australia, Spain, Israel, Brazil and Iran.

12.3 Ethical Implications of Medical Futility

If a treatment is clearly futile in either the quantitative or qualitative sense, what should a responsible healthcare professional do? We focus here on the responsibilities of *physicians* because they are most typically in the role of issuing medical orders to initiate or remove treatments that might be deemed futile. In response to this question, there are at least three distinct positions one might hold (Schneiderman and Jecker 2011). First, it might be held that physicians are ethically *allowed* to withhold or withdraw a medically futile intervention, but not ethically required to do so. In other words physicians are ethically free either to provide or to refrain from providing futile treatments. This relatively weak ethical stance was apparently held by physicians in ancient Greece and Rome. Until the twelfth century, they did not belong to any professional body or practice in accordance with professional standards: “Bound by no duty to a licensing authority or professional organizations, the physician exercised his art at his own pleasure...completely free to treat or to refuse to treat” (Amundsen 1978, 24). Today, a difficulty this stance encounters is that medicine has become a profession and physicians are held to professional standards and expected to provide professionally competent care. This implies that certain interventions should and should not be used.

A relatively stronger view holds that physicians should be *encouraged* to withhold or withdraw medically futile treatment. While physicians may present patient with options that are medically futile, they should recommend beneficial interventions and should be discouraged from offering futile ones. A still stronger stance holds that physicians *should not* use medically futile treatments and have a duty to withhold or withdraw them. According to the stronger view, offering or using interventions that do not benefit patients goes against widely recognized normative ends of the medical profession and should be avoided. This way of thinking presupposes professional

standards that medical intervention must meet. Rather than empowering unilateral decision-making by physicians, this stance circumscribes the range of treatment options available to physicians to those that are professionally competent; it forbids physicians from offering or using interventions that fall outside this range.

Since these are general stances, they admit of compassionate exceptions. For example, a duty to refrain from using futile interventions might take the form of a time delimited contract with a family aimed at achieving the goal of withdrawing a futile intervention after a series of steps that prepare the patient and/or family, reassess the patient, consult with outside experts, and so forth. Some clinicians may prefer not to use the term ‘futility’ explicitly in conversations with some patients or families, because doing so might be misunderstood or breed distrust. Other proposed language that conveys the futility of a particular intervention would be to say that the intervention in question is inappropriate, not medically indicated, nonbeneficial, or will only prolong the dying process.

The account of quantitative and qualitative medical futility combined with the analysis of its ethical implications lends insight into the ethical principles discussed at the start of this section. First, respect for an autonomous person’s choices translates in the medical setting into a right of autonomous patients to choose from among a range of medically appropriate interventions, or to reject all interventions. Autonomy does not authorize ‘treatment on demand’, nor does it entitle patients to choose treatment options that are at odds with professional standards of competent medical care. Second, benefitting can be understood in the medical setting as requiring health professionals to act only in ways that help patients (or promote the health of society in the case of public health measures, like quarantine). It does not require them to use interventions the profession considers not to be of benefit for patients. Third, avoiding harming implies that physicians should forgo using interventions that are burdensome or impose harms on patients unless such burdens and harms can be justified by being offset by benefits. Finally, distributing benefits and burdens fairly among patients requires that health professionals allocate the resources they command to patients who stand to benefit in ways that help patients and avoid wasting resources by using them for patients who do not stand to benefit. Table 12.1 summarizes the arguments of Sects. 12.2 and 12.3.

Elsewhere, I discuss and reply to objections to these arguments at length (with co-authors, Schneiderman and Jonsen), and will not rehearse our arguments here (Jecker 2017; Schneiderman et al. 1996, 2017; Schneiderman and Jecker 2011).

12.4 Physician Assisted Dying

In this section, the focus shifts to the aftermath of withholding and withdrawing medically futile treatment, focusing in particular, on life sustaining treatment (LST). It asks, if withdrawing or withholding medically futile LST is ethically permissible, does it follow that acting to end life is as well? If so, should a physician assist a patient who asks for help hastening their death? This concern is as old as medicine.

Table 12.1 The 4 principles of bioethics and medical futility

Principles	Definitions	Implications
Autonomy	Respect autonomous persons' choices	Autonomous patients choose from among a range of non-futile interventions, or reject all interventions
Beneficence	Benefit persons	Physicians act in ways that help patients, and have no duty to use interventions that do not help
Nonmaleficence	Avoid harming persons	Physicians avoid harming patients, and do not use interventions that do not help patients because they carry risk and can harm patients
Justice	Distribute burdens and benefits fairly	Physicians distribute scarce resources among patients who stand to benefit, which implies not wasting resources by offering them to people who do not stand to benefit

The writings of Plutarch express a reportedly popular sentiment of the fifth century BCE, that “the best physician was the man who did not cause his patients to linger on but buried them quickly” (Amundsen 1978). Yet the reference here is foregoing treating patients “overmastered” by their disease and reportedly did not extend to hastening death. The Hippocratic Oath (1923) in fact explicitly forbids assisting dying: “I will do no harm or injustice...Neither will I administer a poison to anybody when asked to do so, nor will I suggest such a course.” For the ancients, the question of whether or not to hasten death may have seemed less urgent than it does today. While professional honesty demanded the physician to withdraw, the physician’s departure from a case was not tantamount to abandoning the patient; according to Gourevitch, “Far from feeling any liability for abandoning his patient, he would feel guilty if he undertook a cure he could not successfully carry out;” he explains that for the ancients, “the hope of a miracle never being extinguished, there is strictly speaking no question of abandonment or condemnation” (Gourevitch 1969, 503). From this standpoint, when the physician withdrew, control over death’s timing was left to the gods and fate; the physician’s work was done.

Today the practice of medicine has of course changed dramatically. One way this is true is that in many economically developed countries, people no longer die at home. While the hospice movement has increased opportunities for dying in the location of one’s choosing, (Cross and Warraich 2019), the percent of people who die in hospitals remains high in many places (De Roo et al. 2014). In Europe, for example, the percentage of home deaths in 2014 ranged from 35.5 in Belgium to 50.6% in the Netherlands. When patients die in hospitals, managing the dying process presents a medical challenge. Today, there is widespread agreement among bioethicists that it is ethically permissible to cease LST when patients request it and a growing movement to discourage the use of medically futile interventions. While physicians and hospitals

limit patients' choices to a range of medically suitable options, defenders of physician assisted dying want to say that physician assisted death should be among the range of medically allowed options that patients may request after LST are withdrawn.

The practice of physician assisted death may take the form of a physician prescribing a lethal dose of medication that the patient self-administers (sometimes referred to as 'physician-assisted suicide', although this terminology has fallen out of favor), or it might involve the physician administering a lethal dose of medication, usually for a patient who is unable to self-administer it (sometimes referred to as 'active euthanasia'). As of January 2021, physician assisted dying of some form is legally allowed in six countries: Belgium, Canada, Luxembourg, the Netherlands, Spain, and Switzerland (Rada 2021), and in some U.S. jurisdictions (California, Colorado, District of Columbia, Hawaii, Maine, New Jersey, New Mexico, Oregon, Vermont, and Washington) (Oregon Health Authority 2021a, b). Regardless of the view one holds about it, there is agreement that physicians have a duty not to abandon patients and to aggressively pursue palliative and comfort care (Schneiderman et al. 1994). For this reason, providers should avoid saying, 'there is nothing we can do for you,' which may signify abandonment. They should also avoid referring to *care* as 'futile,' a *situation* as 'futile,' or a *patient* as 'futile;' instead, healthcare professionals should apply 'futility' to a particular intervention at a particular time for a particular patient.

Ethical arguments in favor of physician assisted dying that link most directly with medical futility often appeal to the physician's role prior to a request for assisted death. First, physicians who participated actively in prescribing treatments to extend a patient's life bear some responsibility for bringing about the patient's present predicament. Second, physicians who stand in a close patient-physician relationship may have a role-related responsibility to help. Third, if a physician is already omitting LST and if acting and omitting are morally equivalent, then actions to end life seem ethically defensible too. Finally, respect for patient dignity and the value of ensuring a dignified death as part of a dignified life lends support to physician assisted death. A counter argument to all of these claims is that patients requesting assisted death cannot be making a rational decision. They stand in need of help of a very different kind, for example, help treating clinical depression, or aid finding meaningful ways of living out their remaining life. Throughout the analysis I bracket these debates, assuming that the request for assisted dying can be rationally justified. This assumption is controversial. Mental health practitioners standardly hold that suicide is often the product of mental illness and contrary to the interests of the individual. However, it is increasingly recognized that the medical case of patients suffering from terminal illness who are imminently dying is ethically different and that for these cases, this standard view is out of place (Nelson and Ramirez 2017). Even if some terminally ill and imminently dying patients suffer from untreated clinical depression which determines or shapes their choice to die, it is not necessarily the case that a request to die is always arrived at in this way. Notwithstanding the significant concern to rule out and treat depression, this section assumes that for some patients, the request to die is informed and justifiable.

12.4.1 *The Role of Physicians*

In many respects, medicine has made it harder to die: when a person's heart stops beating, they can be resuscitated, when someone's lungs stop respiring, they can be ventilated, and when an individual's kidneys cease functioning, they can be dialyzed. While these interventions can extend life in positive ways, they also can make a patient miserable. One reason for holding physicians responsible for assisted dying then is that in many instances, physicians bear significant responsibility for a patient's predicament. For example, when oncologists extend the lives of cancer patients with chemotherapy, radiation, surgery, cardiopulmonary resuscitation, artificial ventilation, and other means, they contribute to that patient's subsequent condition in the sense that absent these lifesaving treatments, the patient would probably have died sooner and been spared much misery. Although physicians do not cause a patient's cancer, they repeatedly furnish medical treatments that extend the lives of cancer patients. It is in this respect that they help bring it about that a patient is in a situation where their quality of life has plummeted, and they endure prolonged suffering. In short, medicine can unwittingly make life worse for terminally ill patients. A patient with anal cancer describes the effects of medical treatment on the quality of her life this way:

In order for people to maintain life in terminal illnesses, they very often have to be on wretched volumes of drugs that make them sick, that make them queasy, that make them extraordinarily sad, that sink them into a depression regardless. So then you're on this whole superhighway of trying to balance the depressants, the drugs that they have to have to keep them alive is giving them, needs to be counteracted with drugs to try and lift their spirits like with [antidepressant]. (Karsoho et al. 2016, 192)

When medicine makes life worse for terminally ill patients in these ways, it is beholden upon physicians to ensure first, that futile interventions are not offered and are withdrawn if they are already underway; second, that palliative and comfort care are provided; third, in instances where pain and suffering cannot be adequately controlled, and more is needed to ensure a good death, physicians should offer other options, including hastening death for patients who request it.

Even when pain is adequately controlled, hastening death might be preferable for some patients. For example, Angell describes the situation of her husband, Arnold Relman, a physician and editor-in-chief of the *New England Journal of Medicine*, who suffered from end stage cancer and was concerned with having his mind and thinking affected by the drugs that would be needed to prevent his suffering; Angell argued that for her husband, a good death required other means, such as a lethal prescription of drugs to end his life (Angell 2014). For others, existential suffering, which includes feelings of hopelessness, futility, and meaninglessness; anxiety about death; and disruption of personal identity, detract from a good death. To address it, therapies that promote continued life as well as those that allow patients the ability to choose the timing and manner of their death, are needed (Gopal 2015).

One way to formulate an argument on the basis of these reflections is to say that if assisted death is permissible, then the task of assisting rests with physicians because of their role in extending patients' lives.

The Significant Responsibility Argument

1. *Physicians often play a significant role in extending the lives of patients to the point where patients' quality-of-life plummets and they no longer desire to continue living.*
2. *For some patients, after life sustaining treatments are stopped, the available options (palliative and hospice care) are inadequate to ensure a good death.*
3. *In these cases, physicians bear responsibility to help patients who ask for assistance dying, because they acted in ways that helped bring about the patient's present predicament.*

A variation of this argument points not to the causal contribution that physicians made to the patient's condition, but to the significant relationship that physicians develop with patients during the course of care.

The Significant Relationship Argument

1. *Physicians are often by a patient's side throughout the course of their illness, which, however long or short, often includes intense emotions, such as grief, fear, shock, pain, and suffering; hard choices about continuing or stopping treatment; and powerful memories of what was said and done.*
2. *This history creates a significant bond between doctors and patients, typically involving the patient knowing, trusting, relying on, and expecting their relationship with a particular physician (or with physicians as a group) to continue.*
3. *If it is ethically permissible to assist a patient's death, physicians should be the ones to assist, given their history of being known, trusted, relied on, and expected to be there.*
4. *Therefore, the burden of proof lies with those who oppose physicians standing in this role.*

The Responsibility of Physicians argument and the Significant Relationship argument make several key assumptions which limit their scope of application. First, the arguments assume that patients have an ongoing illness, rather than an acute event or injury, leading to their current states and that a particular physician (or physicians) has been involved in their care. Second, the arguments assume that these relationships are positive, and the patient wants them to continue. Since these assumptions do not obtain in every case, the arguments do not apply to every case. However, they do cover a substantial subset of cases. For example, the arguments would apply to patients with chronic conditions such as cancer, chronic obstructive pulmonary disease, or cardiovascular disease who have positive relationship with the oncologists, pulmonologists, and cardiologists who care for them. The arguments would also apply to patients who suffer severe injuries, such as spinal cord injury, and have ongoing positive relationships with rehabilitation medicine physicians. Yet, even

though the arguments are limited in scope, they represent one of several important paradigm situations.

Against the Significant Responsibility and Significant Relationships arguments it could be said that ending life has not been part of the physician's historic role. As noted already, it is explicitly excluded from the Hippocratic oath. According to the latest version of the American Medical Association's code of medical ethics, helping a patient to die is "fundamentally incompatible with the physician's role as healer" (American Medical Association 2001). In reply, as Miller and Brody note, the ends of medicine are not static and fixed, but evolving. Medicine's ends are neither "Platonic forms, historically unchanging," nor "invented more or less at whim;" instead, the goals of medicine "evolve along with human history and culture. At least some changes in the goals of medicine, to make the practice of medicine more congruent with contemporary social conditions, represent positive evolutionary changes" (Miller and Brody 2001, 585). The analysis given here makes evident that the responsibilities of contemporary physicians extend beyond the responsibilities that physicians have historically had. Prior to the nineteenth century, few means were available to extend life and the question of what physicians owed to patients they had repeatedly kept alive did not arise with any regularity. Moreover, while physicians from antiquity left their patients in the hands of deities, today's providers lack these assurances. To take leave from a patient today is tantamount to abandoning them, which seems not only cruel, but unprofessional.

Yet, another objection to the Significant Responsibility and Significant Relationship arguments holds that although physicians have a duty to help patients, they do not have a duty to help in a particular way. Therefore, the arguments establish only a *prima facie* duty to help while leaving open the possibility that a physician could help in another way, such as by means of terminal sedation. One way of responding to this objection is to say that there are many reasons why a patient (or their surrogate) may decide that a terminally sedated human life is not right for them and that the only ethically viable option is to hasten death. For example, for some patients, a terminally sedated life seems to lack dignity and to be worse than death.

An objection to the Significant Responsibility argument is that the patient autonomously chose to undergo prior treatments, including LST; hence, the patient, not the physician, is responsible for their current predicament. The rejoinder to this objection is that medical decision making at the end of life is typically shared. The physician who stood in a fiduciary role with respect to the patient, directed the course of care, and prescribed a path. In this capacity, the physician is often a significant influencer and to the extent that they are, they cannot ethically extricate themselves when 'the going gets rough.'

A final worry with the Significant Role and Significant Relationship arguments is that the process of dying is already overly medicalized and assigning physicians responsibility for patients' deaths only exacerbates the problem. Rather than expanding medicine's role, we ought instead to diminish it, to allow death to occur in a more 'natural' and less medicalized way. Just as the continued use of medically futile

interventions extends medicine's role beyond reasonable limits, physician assisted death gives too much power to physicians and medical institutions. According to Karsoho et al. (2016, 192), medicine is "increasingly colonizing ever more and more parts of the end of life, to the detriment of dying persons." According to Illych (1995, 210), medicalization has unfortunately "brought the epoch of natural death to an end."

In reply to this last objection, it can be noted first, that the notion of 'natural death' has been overly romanticized; in contemporary society, technology is commonplace, and its use today seems ordinary and in many ways 'natural' (Seymour 1999). Second, even if some patients prefer a so-called 'natural' death, some do not. As noted, one reason for hastening death is that the alternative of dying 'naturally' may be more suffering, and this suffering may be the sort that cannot be alleviated by medications in a way that preserves dignity and maintains life's meaning. Undeniably, there are losses that life's ending and the dying process bring that palliative care is not designed to alleviate: loss of independence, loss of the ability to remember and think clearly, loss of the ability to communicate and affiliate in ways one did before.

If these arguments are compelling, then physicians are ethically justified in offering assisted dying as a last resort option for terminally ill and imminently dying patients. Yet, a further question is what are the scope and limits of this duty in jurisdictions where physician assisted death is legally prohibited? In response, even if physicians are not required to violate the law to serve their patients' interests, they should contribute to efforts to reform laws that prevent them from helping their patients die.

12.4.2 The No Difference View

A second set of arguments that lend support to physician-assisted death holds that actions to end life are not significantly different from omitting sustaining life. Angell (2014) puts the point bluntly: "If we grant patients the choice to hasten their deaths by refusing dialysis, mechanical ventilation, antibiotics, or any other life-sustaining treatment... why deny them what is essentially the same choice" by denying them the option to hasten their death by obtaining a lethal dose of medication? The claim here is that even if there is a *conceptual* difference between omitting extending life and acting to end life, there is not a *moral* difference. One reason there may not be a moral difference is that the outcome of both is equivalent.

No Difference in Consequences

1. *Acting and omitting are morally equivalent when there is no significant difference in their consequences.*
2. *The consequences of omitting LST from a terminally ill and imminently dying patient are similar to the consequences of performing an action to bring about a patient's death. In both instances, the consequence is the patient's death.*

3. *Therefore, if omitting LST from a terminally ill and imminently dying patient is morally permissible, then so is physician assisted dying.*

However, it might be thought that even if the outcome is the same, the reasons for action and specifically, the intention of the agent, matter. When a physician prescribes a lethal dose of medication, their intention is to deliberately hasten the patient's death, but this differs from the intentions associated with withholding or withdrawing LST, which are, e.g., letting a terminal disease run its course or not using extraordinary means to continue a patient's life. Although death is a foreseen and predictable outcome, it is not the physician's aim.

To address this objection we might modify the No Difference in Consequences argument to specify that moral equivalence applies only if the physicians' intentions are similar in both the case of withholding or withdrawing LST and the case of assisted death. For example, it would pertain to cases where the intention of a physician who prescribes a lethal dose of medication is to end the patient's suffering, respect the patient's autonomy, or preserve the patient's dignity. The argument can be recast as following.

No Difference in Consequences and Intentions

1. *Acting and omitting are morally equivalent when there is no significant difference in the consequences and intentions associated with them.*
2. *It follows that when the consequences and intentions of physicians omitting LST and physicians assisting with death are the same, they are morally equivalent.*
3. *Therefore, if omitting LST is ethically permissible and if moral equivalence applies, then physician assisted dying is morally permissible.*

Taken together, these two arguments establish that omitting futile life sustaining interventions is not morally different from assisted dying merely because the former is an omission, and the latter is an action.

An objection to both arguments holds that even if it is not wrong to act to end a patient's life, it undermines physicians' personal or professional integrity. Integrity indicates "the condition of having no part or element taken away or wanting; undivided or unbroken state" and "the condition of not being marred or violated" (Oxford English Dictionary Online). To act with integrity indicates acting in ways that are consonant with one's deeply held moral convictions. In the case of personal integrity, physicians violate their integrity if they assist with dying in opposition to their deeply held personal values, while in the case of professional integrity, violations occur when a person acting in the role of a physician acts contrary to the values and ends of medicine. Professional integrity in medicine "represents what it means normatively to be a physician; it encompasses the values, norms, and virtues that are distinctive and characteristic of physicians" (Miller and Brody 1995, 10).

In reply to the integrity objection, it can be said first, that physicians who personally oppose assisted dying are free to abstain from providing it. Second, in response to the objection that assisted dying is contrary to the professional values inherent in medical practice, this view can be persuasively challenged. Amundsen (1978) notes that preserving biological life per se has never been part of the historical practice

of medicine. Miller and Brody (1995, 12) argue that today, the goals of medicine include “healing, promoting health and helping patients achieve a peaceful and dignified death.” They go on to delineate the goal of helping patients achieve a peaceful and dignified death and hold that it lends support to assisted dying as a last resort medical therapy to achieve a peaceful and dignified death. To fully flesh out this argument requires unpacking the concept of “dignity” to which the third goal appeals. I have done this at length elsewhere (Jecker 2020), and provide a preview of this argument below.

Another objection to the above arguments, which falls outside the scope of this chapter, is that although the moral equivalence thesis is widely accepted within Western-oriented bioethics, it is not universally accepted (Kadooka et al. 2014; Nakazawa et al. 2019). This may limit the force of the argument outside Western settings.

12.4.3 *Dignified Lives*

Just as the continued use of futile medical interventions can result in a loss of patient dignity, the symptoms associated with end-stage terminal disease can bring about profound loss of dignity that persists after futile interventions are stopped. In fact, dignity is among the most frequently reported end-of-life concerns for patients with terminal illness who request assisted dying. In Oregon (USA), annual reports assessing the use of services permitted under the state’s Death with Dignity Act consistently find that patients rank loss of dignity among their chief concerns; in 2020, 72% of patients who requested a lethal dose of medication cited dignity as a central reason for their request (Oregon Health Authority 2021a, b).

Dignity can be understood in terms of the central things human beings can do and be, such as the capacity to have an ongoing narrative or story of one’s life; be healthy and well nourished; have bodily integrity; affiliate with others; express a range of human emotions; exercise senses, imagination, and thought; deliberate about goals and plans for one’s life; play and recreate; and regulate one’s immediate environment. Serious illness can cause a person to lose these capabilities altogether or cause them to be markedly diminished. When central human capabilities fall below a threshold the patient considers minimal, they may express this by saying ‘I don’t have a life’, which may indicate that in some important respect the narrative or story of their life is over. When the symptoms associated with end stage disease have this outcome, patients perceive a loss of dignity. Evidence shows that concerns about diminished capabilities are central for dying patients. Chochinov et al. asked patients with terminal illness about their specific dignity concerns and found that they related precisely to a diminution of capabilities such as mental/thinking capacity; the ability to move independently from place to place and perform activities of daily living; loss of health and well-being due to physical pain and psychological anguish (Chochinov et al. 2002).

To counter dignity threats, dignity conserving measures ought to include measures that help patients find a way of looking at their situation that can promote dignity and helping them engage in specific practices that compensate for capability shortfalls (Chochinov et al. 2002). For some patients, however, reasonable efforts to counter dignity threats are not enough. To avoid a loss of dignity, they request the ability to also have a measure of control over the manner and timing of their death. Patients may arrive at such a decision in a variety of ways. If they suffer a longstanding chronic progressive disease, the decision may be reached gradually over time, as their quality of living diminishes. If they experience a sudden devastating injury, the decision-making process will look different. Either way, patients in this situation have reached what we may call ‘a tipping point,’ which can be described as a point where there is

significant diminishment of our ability to think coherently and feel effectually by physical maladies, by accompanying continuous suffering, and by the effects of medication intended to relieve our pain, erodes our personhood. It is rational to choose to die as oneself rather than survive as a lessened entity (Prado 2015, 442).

For some patients, a tipping point occurs when they lose significant capacities to affiliate, move independently from place to place, or have a measure of control over their immediate environment. While suffering might be part of the mix, it need not be. Likewise while losing the ability to think might be a central loss for some, for others what matters more is the ability to communicate and interact with their family. When serious illness leads to permanent capability loss in areas that matter most to a person, this is an assault on dignity that sometimes even our best efforts cannot forestall.

Drawing on this analysis, we can summarize the Dignified Lives argument for assisted dying this way.

The Dignified Lives Argument

1. *Retaining dignity at the end of life requires retaining a threshold level of the central human capabilities that matter most to a patient.*
2. *Serious illness can interfere with these threshold human capabilities, and thereby undermine patient dignity.*
3. *Measures to counter illness-related loss of dignity may also prove inadequate.*
4. *When this is the case, protecting dignity for terminally ill and imminently dying patients may require, as a last resort, offering them the ability to control the timing and manner of their death.*

The Dignified Lives argument establishes that when patients lose threshold central human capacities that matter most to them, physician assisted dying should be considered as a treatment of last resort. The argument is notably distinct from arguments that appeal to autonomy to justify assisted dying. In contrast to autonomy-based arguments, dignity-driven arguments present a larger picture of what makes human life valuable. This picture assumes that there are a range of central capabilities that matter to us as human beings, which include not only the ability to think but also the ability to have an unfolding narrative or story of our lives, emote, affiliate, play, be

healthy, move from place to place and relate to nature and other species. In short, dignity is a far broader concept than autonomy; while it includes the ability to plan our lives, it includes many other capabilities too. In this respect, the Dignified Lives argument is at odds with views that hold dignity is redundant with or reducible to autonomy (Macklin 2003). While it builds in the capacity for autonomy as one of the central things that people can do and be, it does not regard this as a standalone capability. Instead, the Dignified Lives argument better captures what is at stake, i.e., the loss of all the capacities that are central to human beings.

Admittedly, those who argue for physician-assisted dying by appealing to respect for patient autonomy need not argue that autonomy is the only thing that makes human life valuable. Other goods, such as close relationships, bodily integrity, and health, might be highly valued too. However, what distinguishes the Dignified Lives defense from an autonomy approach is that it holds that a range of goods play a foundational role, whereas the autonomy account renders all goods other than autonomy secondary and conditional; they matter if and only if an autonomous person chooses them.

The Dignified Lives argument is also distinct from meaning of life defenses of assisted dying which maintain that a healthy people should be allowed to die if their life has lost meaning. For example, members of the Dutch parliament backed a proposal to legalize assisted death for persons who determined that their lives were without purpose and were 'completed' (Government of the Netherlands 2016). This position relies on the individual's subjective assessment of their life's value to determine if life is 'completed.' The Dignified Lives argument, by contrast, assumes a partially objectivist conception, one that identifies dignity with possessing a list of threshold capabilities.

The Dignified Lives argument is similar in key respects to rights-based defenses of assisted dying. For example, Battin (1994) calls assisted dying, "the least worst death." She defends it by invoking a fundamental right to die, which she says is analogous to the right to life, liberty, freedom of speech and worship, education, political representation and the pursuit of happiness. Battin also hints at a deeper reason, rooted in dignity. She states that the right to die relies on the fact that we are entitled "to do certain things just because doing those things tends to be constitutive of human dignity" (Battin 1994, 280). In this way, dignity furnishes the philosophical underpinning for Battin's rights claims, making her arguments well-matched with the Dignified Lives argument presented here.

One concern a Dignified Lives argument raises is a slippery slope. A slippery slope objection might gain support by noting, as Gawande (2014, 245) does, that "assisted living is far harder than assisted death" and that ultimately, no matter how carefully crafted laws are to avoid potential abuse, the larger culture determines how the practice unfolds. Yet, in reply, it seems much easier to avoid a slippery slope by bringing assisted dying out in the open, setting standards that include checks and balances, and monitoring outcomes, than it is to offering assisted dying behind closed doors and without explicit oversight. Moreover, making available a right to die leaves individuals free to exercise or not exercise this right; no one has a duty to

die (Jecker 2014). Likewise, no one has a moral duty to assist; a particular physician is morally free to refuse a request for physician assisted death if meeting it would violate their personal moral beliefs.

Opponents of assisted dying also express concern about a related slippery slope, namely that racial and ethnic minorities might not be able to receive high quality medical care that would improve the quality of their life and they will instead be encouraged to use assisted dying instead (Cain and McCleskey 2019). However this argument relies on empirical predictions which have not been borne out in practice. For example, the state of Oregon has collected annual data about requests for assisted dying since its 1997 passage of the “Death With Dignity Act,” which allowed physicians to legally prescribe terminally ill and imminently dying patients a lethal dose of medication that they can choose to self-administer, provided certain conditions are satisfied. The state consistently reports that those requesting assisted death are white, educated, and affluent. In 2020, for example, 96% of patients were white; most (53%) were well educated, with at least a bachelor’s degree; and 75% were older (age 65 or over) (Oregon Health Authority 2020). These data suggest that the objection to assisted dying should be turned on its head. If the Dignified Lives argument is sound, then more should be done to ensure that all people can exercise a right to die, including non-white people, less educated people, and younger adults.

Table 12.2 summarizes the arguments of Sect. 12.4.

Table 12.2 Ethical bases for physician assisted dying

Features	Values	Implications
Physician’s role	Recognizing the physician’s responsibility and the significance of the doctor–patient relationship	Physicians bear partial responsibility for the situation of some dying patients; they also stand in significant relationships with patients
Moral equivalence	Recognizing the moral equivalence of acting and omitting based on similar effects and intrinsic qualities	Omitting LST and assisting with dying are not morally different just because one is an omission while the other is an act
Loss of threshold central human capabilities	Patient dignity and rights	When patients lose threshold central human capacities that matter most for them, physician assisted dying should be available as a treatment of last resort

12.5 Conclusion

In conclusion, people who take on the role of doctoring have a duty to withhold and withdraw medically futile life sustaining treatment, and in some instances, they also have a duty to help patients die if they request help. These duties relate directly to the moral ends medicine serves.

References

- American Medical Association. 2001. *AMA code of medical ethics, opinion 5.7*. <https://www.ama-assn.org/delivering-care/ethics/physician-assisted-suicide>.
- Amundsen, Darrel W. 1978. The physician's obligation to prolong life: A medical duty without classical roots. *Hastings Center Report* 8 (4): 23–30.
- Angell, Marcia. 2014. The Brittany Maynard effect: How she is changing the debate on assisted dying. *Washington Post*, 31 Oct.
- Ardagh, Michael. 2000. Futility has no utility in resuscitation medicine. *Journal of Medical Ethics* 26: 396–399.
- Battin, Margaret P. 1994. *The least worst death*. New York: Oxford University Press.
- Beauchamp, Tom L., and James F. Childress. 2019. *Principles of biomedical ethics*, 8th ed. New York: Oxford University Press.
- Browlnee, Shannon, Kalipso Chalkidou, Jenny Doust, et al. 2017. Evidence for overuse of medical services around the world. *Lancet* 390 (10090): 156–168. [https://doi.org/10.1016/S0140-6736\(16\)32585-5](https://doi.org/10.1016/S0140-6736(16)32585-5).
- Cain, Cindy L., and Sara McCleskey. 2019. Expanded definitions of 'good death'? Race, ethnicity, and medical aid in dying. *Social Health and Illness* 41 (6): 1175–1191.
- Chochinov, Harvey M., Thomas Hack, Susan McClement, et al. 2002. Dignity in the terminally ill: A developing empirical model. *Social Science and Medicine* 54: 433–443.
- Cross, Sarah H., and Haider J. Warraich. 2019. Changes in the place of death in the United States. *New England Journal of Medicine* 381: 24.
- De Roo, Maaïke L., Guido Miccinesi, Bregje D. Onwuteaka-Phillipsen, et al. 2014. Actual and preferred place of death of home-dwelling patients from European countries. *PLoS One* 9 (4): e93762. <https://doi.org/10.1371/journal.pone.0093762>.
- Gawande, Atul. 2014. *Being mortal: Medicine and what matters in the end*. New York: Henry Holt and Co.
- Gopal, Abilash A. 2015. Physician-assisted suicide: Considering the evidence, existential distress, and an emerging role for psychiatry. *Journal of the American Academy of Psychiatry and Law* 43: 183–190.
- Gourevitch, Danielle. 1969. Suicide among the sick in classical antiquity. *Bulletin of the History of Medicine* 43 (6): 501–518.
- Government of the Netherlands. 2016. *Government: Scope for assisted suicide for people who regard their life as completed*, 10 Dec. <https://www.government.nl/latest/news/2016/10/21/government-scope-for-assisted-suicide-for-people-who-regard-their-life-as-completed>.
- Hippocratic Corpus, The Art. 1977 (400 BCE). In *Ethics in medicine: Historical perspectives and contemporary concerns*, ed. Stanley J. Reiser, Arthur Dyck, and William J. Curran, 6–7. Cambridge, MA: MIT Press.

- Hippocratic Oath. 1923 (5th century BCE). In *Hippocrates of cos, the oath*, trans. William H.S. Jones, 298–299. Loeb Classic Library, Harvard University Press. https://www.loebclassics.com/view/hippocrates_cos-oath/1923/pb_LCL147.299.xml;jsessionid=25C42D950420953E4A01B0B67AC69595.
- Hurley, Richard. 2014. Can doctors reduce harmful medical overuse worldwide? *BMJ* 349: g4289. <https://doi.org/10.1136/bmj.g4289>.
- Illych, Ivan. 1995. *Limits to medicine, medical nemesis: The expropriation of health*. London and New York: Marion Boyars.
- Jecker, Nancy S. 2013. The problem with rescue medicine. *Journal of Medicine and Philosophy* 38 (1): 64–81.
- Jecker, Nancy S. 2014. Against a duty to die. *Virtual Mentor: American Medical Association Journal of Ethics* 16 (5): 390–394.
- Jecker, Nancy S. 2015. Futility and fairness: A defense of the Texas advance directive law. *American Journal of Bioethics* 15 (8): 43–46.
- Jecker, Nancy S. 2017. Doing what we shouldn't: Medical futility and moral distress. *American Journal of Bioethics* 17 (2): 41–43.
- Jecker, Nancy S. 2020. *Ending midlife bias*. New York: Oxford University Press.
- Kadooka, Yasuhiro, Atushi Asai, Miki Fukuyama, et al. 2014. A comparative survey on potentially futile treatments between Japanese nurses and laypeople. *Nursing Ethics* 21 (1): 64–75.
- Karsoho, Hadi, Jennifer R. Fishman, David K. Wright, and Mary E. Macdonald. 2016. Suffering and medicalization at the end of life: The case of physician-assisted dying. *Social Science & Medicine* 170: 188–196.
- Lichtenberg, Pesach, Uriel Heresco-Levy, and Uriel Nitzan. 2004. The ethics of the placebo in clinical practice. *Journal of Medical Ethics* 30: 551–554.
- Macklin, Ruth. 2003. Dignity is a useless concept. *BMJ* 327: 1419–1420.
- Miller, Franklin G., and Howard Brody. 1995. Professional integrity and physician-assisted death. *Hastings Center Report* 25 (3): 8–17.
- Miller, Franklin G., and Howard Brody. 2001. The internal morality of medicine. *Journal of Medicine and Philosophy* 26 (6): 581–599.
- Moerman, Daniel E., and Wayne B. Jonas. 2002. Deconstructing the placebo effect and finding the meaning response. *Annals of Internal Medicine* 136: 471–476.
- Nakazawa, Eisuke, Keiichiro Yamamoto, Reina Ozeki-Hayashi, and Akira Akabayashi. 2019. A global dialogue on withholding and withdrawal of medical care: An East Asian perspective. *American Journal of Bioethics* 19 (3): 50–52.
- Nelson, Lawrence J., and Erick Ramirez. 2017. Can suicide in the elderly be rational? In *Rational suicide in the elderly*, Kindle ed, ed. Robert E. McCue and Meera Balasubramaniam. Springer International.
- Oregon Health Authority. 2020. *Oregon death with Dignity Act: 2019 data summary*. <https://www.oregon.gov/oha/PH/PROVIDERPARTNERRESOURCES/EVALUATIONRESEARCH/DEATHWITHDIGNITYACT/Documents/year22.pdf>.
- Oregon Health Authority. 2021a. *Death with Dignity Act*. <https://deathwithdignity.org/learn/death-with-dignity-acts/>.
- Oregon Health Authority. 2021b. *Oregon death with Dignity Act: 2020 data summary*. <https://www.oregon.gov/oha/PH/PROVIDERPARTNERRESOURCES/EVALUATIONRESEARCH/DEATHWITHDIGNITYACT/Documents/year23.pdf>.
- Plato. 1981 (375 BCE). In *Republic*, trans. G.M.A. Grube, 76–77. Indianapolis/Cambridge: Hackett Publishing.
- Prado, Carlos G. 2015. Ageism and elective death. *Ethics, Medicine and Public Health* 1: 442–449.
- Rada, Aser G. 2021. Spain will become the sixth country worldwide to allow euthanasia and assisted suicide. *BMJ* 372: 147. <https://doi.org/10.1136/bmj.n147>.
- Schneiderman, Lawrence J., and Nancy S. Jecker. 2011. *Wrong medicine: Doctors, patients, and futile treatment*, 2nd ed. Baltimore and London: Johns Hopkins University Press.

- Schneiderman, Lawrence J., Nancy S. Jecker, and Albert R. Jonsen. 1990. Medical futility: Its meaning and ethical implications. *Annals of Internal Medicine* 112: 949–954.
- Schneiderman, Lawrence J., Kathy Faber-Langendoen, and Nancy S. Jecker. 1994. Beyond futility to an ethic of care. *American Journal of Medicine* 96: 110–114.
- Schneiderman, Lawrence J., Nancy S. Jecker, and Albert R. Jonsen. 1996. Medical futility: Response to critiques. *Annals of Internal Medicine* 125 (8): 669–674.
- Schneiderman, Lawrence J., Nancy S. Jecker, and Albert R. Jonsen. 2017. The abuse of futility. *Perspectives in Biology and Medicine* 60 (3): 295–313.
- Seymour, Jane E. 1999. Revisiting medicalisation and ‘natural’ death. *Social Science and Medicine* 49: 691–704.
- Shapiro, Arthur K., and Elaine Shapiro. 2000. The placebo effect in medical history. In *The powerful placebo: From ancient priest to modern physician*, ed. Arthur K. Shapiro and Elaine Shapiro, 1–27. Baltimore and London: Johns Hopkins University Press.
- The Oregon death with Dignity Act, Oregon revised statutes, 127.800–127.995.* <https://www.oregon.gov/oha/PH/PROVIDERPARTNERRESOURCES/EVALUATIONRESEARCH/DEATHWITHDIGNITYACT/Documents/statute.pdf>.
- Veatch, Robert M., and Cian M. Spicer. 1992. Medically futile care: The role of the physician in setting limits. *American Journal of Law & Medicine* 18: 15–36.
- White, Douglas, and Thaddeus Pope. 2016. Medical futility and potentially inappropriate treatment. In *The Oxford handbook of ethics at the end of life*, ed. Stuart J. Youngner and Robert M. Arnold, 65–86. New York: Oxford University Press.
- Wicclair, Mark R. 2016. Conscientious objection. In *The Oxford handbook of ethics at the end of life*, ed. Stuart J. Youngner and Robert M. Arnold, 87–108. New York: Oxford University Press.

Nancy S. Jecker is Professor of Bioethics and Humanities at the University of Washington School of Medicine. She holds Visiting Professorships at the University of Johannesburg and Chinese University of Hong Kong. Dr. Jecker’s research spans a range of topics, most notably justice and resource allocation, individual and societal aging, global perspectives in philosophy and bioethics, medically futility, and artificial intelligence and social robots. Dr. Jecker has published over 200 articles and 4 books, including a 2020 book, *Ending Midlife Bias* (Oxford University Press).