

Rethinking Guidelines for the Use of Palliative Sedation

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Current guidelines treat palliative sedation to unconsciousness as an effective medical treatment for terminally ill patients who need relief from severe symptoms, yet also restrict its use in ways that are extraordinary for medical treatments. A closer look at the kinds of cases in which palliative sedation is used suggests a way of adjusting the guidelines to resolve this seeming contradiction.

Imagine a seventy-three-year-old man admitted to the hospital for abdominal pain and vomiting. He has a history of colon cancer; three years ago, doctors removed a portion of his bowel. Now, a CT scan shows that his bowel is obstructed. It also shows that the cancer has returned—he has evidence of tumors in his liver, throughout his abdomen, and even in his bones. His doctors predict that he will survive only a month or so. They start him on high doses of narcotics to control his pain, but the side effects—primarily nausea and muscle twitching—are intense and distressing. The drugs also keep his bowel obstruction from resolving.

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After a week of hospitalization, the bowel obstruction has not improved much, and neither has his pain. His physicians recommend a spinal catheter to deliver the narcotics, hoping that the medications will cause fewer side effects if they are administered this way. But the man is horrified by the thought of a tube sticking out of his spine. He begs his doctors to sedate him in order to relieve his pain. His doctors tell him that sedation will almost certainly shorten his survival to mere days, but he doesn't care. He doesn't see why he should have to go through all this just to live a few more horrible weeks.

Sedation is used to provide relief in a variety of medical contexts. It can be used concurrently with life-sustaining and curative treatments for patients who are not terminally ill, such as burn victims; it can be continuous or not, and it can vary in degree

Table 1. Summary of Authoritative Guidelines for Use of PSU

	<i>Only if patient has a terminal condition</i>	<i>Only if symptoms are intolerable and refractory</i>	<i>Expected survival</i>	<i>Permissible for existential suffering</i>
American Academy of Hospice and Palliative Medicine ^a	Yes	Yes	"Very end of life"	Not specified
American College of Physicians-American Society of Internal Medicine Consensus Panel ^b	Yes	Yes	"End of life"	Not specified
Calgary Regional Hospice ^c	Yes	Yes	Days	Controversial
Council on Ethical and Judicial Affairs, American Medical Association ^d	Yes	Yes	"Final stages of terminal illness"	No
Cherny and Portenoy ^e	Yes	Yes	"End of life"	Yes
International Consensus Panel ^f	Yes	Yes	Hours to days	Yes
Royal Dutch Medical Association ^g	Yes	Yes	One to two weeks	Yes

^a <http://www.aahpm.org/positions/sedation.html>.

^b T.E. Quill and I.R. Byock for the American College of Physicians-American Society of Internal Medicine End-of-Life Care Consensus Panel, "Responding to Intractable Terminal Suffering: The Role of Terminal Sedation and Voluntary Refusal of Food and Fluids," *Annals of Internal Medicine* 132 (2000): 408-414.

^c T.C. Braun, N.A. Hagen, and T. Clark, "Development of a Clinical Practice Guideline for Palliative Sedation," *Journal of Palliative Medicine* 6 (2003): 345-50.

^d http://www.ama-assn.org/ama1/pub/upload/mm/369/ceja_5a08.pdf.

^e N.I. Cherny and R.K. Portenoy, "Sedation in the Management of Refractory Symptoms: Guidelines for Evaluation and Treatment," *Journal of Palliative Care* 10 (1994): 31-38.

^f A. De Graeff and M. Dean, "Palliative Sedation Therapy in the Last Weeks of Life: A Literature Review and Recommendations for Standards," *Journal of Palliative Medicine* 10, no. 1 (2007): 67-85.

^g <http://knmg.artennet.nl/web/file?uuid=e9a9c569-39de-4dd7-8265-870dd0c39640&owner=fa2e6416-a32f-4eaa-872e-7b5866b34ec2>.

from light sedation to full unconsciousness.¹ Continuous palliative sedation to unconsciousness, or PSU, is a special case, limited to terminally ill patients and even then reserved for cases in which severe symptoms persist despite intensive interdisciplinary efforts to find a tolerable palliative treatment that does not affect the patient's level of consciousness.² It is a last resort. For some patients, however, PSU may be the only effective means of symptom palliation.³

The use of PSU rests on a consensus that leads quickly to controversy. For example, although there is consensus on the criteria of a terminal state and symptom refractoriness, authorities disagree about whether PSU is appropriate for existential suffering and about how close to death the patient should be before PSU is introduced. Some authorities stipulate

that PSU should be withheld until the patient is within hours to days from death, while others specify no particular time frame for its use once the patient has a terminal prognosis.⁴ (Table 1 summarizes the key points of current guidelines and other authoritative statements on PSU.) A patient sedated to unconsciousness is unable to eat or drink, and terminally ill patients under palliative sedation generally receive neither enteral nor parenteral fluids. These patients die from dehydration in two weeks or less unless—as in fact typically happens—they die first from the underlying disease.⁵

There is also a consensus within medicine that PSU is a medical treatment and is therefore not tantamount to active euthanasia. However, the consensus also holds that PSU should be subject to restrictions

that do not otherwise apply to medical treatments. In short, PSU is both a medical treatment and subject to restrictions that are extraordinary in medicine. Medical authorities have not articulated a cogent medical and ethical rationale for this seeming contradiction. This article delves into this problem, along with some others associated with PSU, and offers revised guidelines for its use.

Ethical Consensus and Moral Debate

Although PSU is sanctioned both legally and professionally,⁶ questions about its use continue to linger. The chief concern is whether PSU can be distinguished from active euthanasia. The concept of double effect is often invoked on this point. According to this line of thinking, the

prescribing physician does not intend to cause death, but merely to palliate symptoms, and she is therefore morally blameless in the rare event that a patient is killed by the narcotic side effect of respiratory depression. Nevertheless, many continue to have moral qualms about the use of PSU, particularly relating to the patient's hydration.⁷ Because sedated patients are unable to drink, dehydration becomes a foreseeable cause of death for a patient who receives PSU—a cause that is neither attributable to the underlying disease process nor inherently part of sedation. Moreover, since dehydration can be prevented without interfering with the palliative effects of sedation, death from dehydration is difficult to justify as an unavoidable side effect of palliation.⁸

The concept of double effect, however, seeks to clarify only the circumstances in which an act of killing is morally excusable, not whether an act constitutes killing. Yet this latter distinction is critical for making some ethical judgments about the use of PSU in particular situations. Current guidelines—Dutch ones excepted⁹—do not address situations when PSU additionally shortens life and when it does not. This deficit makes guidelines conceptually impoverished and of limited clinical utility. Moreover, these guidelines require that exceptional conditions be met prior to use. I will address these unusual inclusion criteria before returning to the issue of the particular lethality of PSU.

Choosing among Treatment Options

If PSU is a medical treatment, as most guidelines now hold—including those of the American Medical Association and the American Academy of Hospice and Palliative Medicine—then its use should be based on the same considerations that determine the appropriate use of medical interventions generally, including high-risk and life-sustaining treatments. It would be acceptable depending on whether: 1) the in-

tervention has acceptable and proportionate medical efficacy, 2) there is a reasonable expectation that the intervention will meet a treatment goal of the patient, and 3) the burden-benefit calculus is acceptable to the patient. Yet guidelines that support PSU as a medical treatment do not employ these parameters; instead, they mirror the Dutch requirements for active euthanasia, which include unbearable suffering with no "feasible alternative."¹⁰

Guidelines for the use of PSU, including those of the AMA and American College of Physicians, require patients to first aggressively try alternative treatments—presumably even those that are not expected to be optimally effective, that have objectionable elements or impose distressing burdens (as distinguished from physical intolerance), and that have an inferior burden-benefit calculus as assessed by the patient. In comparison, for all other kinds of medical treatments, patients may choose among available and reasonably efficacious medical treatments and are not necessarily limited to selecting less risky options first; merely the harms associated with a treatment must be in some reasonable proportion to its benefits.

To illustrate, consider a patient with a cancerous obstruction of the stomach. There are at least two effective palliative treatment options. One is a metal sleeve called a stent that is placed through the narrowed area using an endoscope. The other is a surgical procedure requiring an incision into the abdomen to reroute the intestine around the blockage. Stenting has been shown to be very effective and is the safer of the two options. However, this particular patient already has an artificial blood vessel in his arm for dialysis and a catheter implanted into a vein in his chest for chemotherapy. He is distressed by the prospect of having yet another foreign object implanted into his failing body and therefore prefers the surgical procedure. Must the patient

be compelled to try the safer option first?

Guidelines that include the criterion of symptom refractoriness impose a value judgment that may not be uniformly shared by patients. PSU guidelines put a priority on preserving consciousness. This compels patients to conform to the view that maintaining consciousness is valued over immediate relief from symptoms. There is no sound ethical basis for imposing this restriction in situations in which PSU does not shorten survival. Many patients place a high priority on maintaining interactional function,¹¹ but some do not, and clinical guidelines should accommodate diversity among patients' primary goals of care, particularly near the end of life.

If PSU is a medical treatment, should it not be available alongside all other palliative treatments of similar net effect? On what basis may its use be predicated on "refractory symptom" and "last resort" criteria? An obvious response is that PSU should be restricted because of its lethality. On the other hand, emphasizing its lethality risks undermining the premise that PSU is a medical treatment. What ethical-medical paradigm best describes PSU?

What Bioethical Paradigm Should Govern PSU?

A medical treatment paradigm does not provide a principled and patient-centered basis for restricting the use of PSU to refractory symptoms and imminent death. Rather, the standard medical approach to deciding on a treatment would support a more liberal use of PSU than is currently advocated. In fact, studies report that physicians provide PSU in situations in which death is not imminent.¹²

Alternatively, placing PSU within an active euthanasia paradigm could justify strict limits on its use. However, this paradigm also fits poorly since active euthanasia is palliation through death, whereas PSU is generally

palliation alongside death. Furthermore, a shift to an active euthanasia paradigm would harm suffering patients by raising obstacles to using PSU¹³ and discouraging physicians from treating severe symptoms.¹⁴ One response to mitigate concerns about the death-accelerating potential of PSU is to require that it be used together with hydration, nutrition, or both in order to obviate its lethal effect, leaving the timing of death to be unambiguously determined by the underlying disease. However, such a coercive modification of practice would be untenable because it would violate established ethical norms of respect for persons.

Neither the medical treatment paradigm nor the euthanasia paradigm is satisfactory because PSU is an intervention that can be either straightforwardly a treatment or as lethal as active euthanasia, depending on clinical context. Consider a patient who will die in the next day or so. Initiating PSU will have no negative effect on her survival, since her death from the disease is expected to occur far sooner than her death from PSU-induced dehydration would. For such a patient, PSU is ethically uncontroversial. On the other hand, consider the seventy-three-year-old man with colon cancer, whose doctors expect him to die within a month. PSU-induced dehydration will cause his death within two weeks. Since his death would be most directly due to the medical intervention and not to disease, this use of sedation is both palliative and a form of killing. In fact, any sedated person, healthy or ill, would die from dehydration in a similar time frame. The impact of PSU on survival should distinguish morally uncomplicated uses of PSU from the morally challenging ones. Where PSU clearly shortens survival, it is a manner of killing. Is it justifiable then, and, if so, for what reasons and in what circumstances?

A Survival-Based Model for Evaluating PSU

PSU usually does not shorten the lives of its recipients.¹⁵ However, dehydration associated with sedation causes death typically within two weeks. Based on these effects, the use of PSU can be categorized as follows:

1. *No Reduction in Survival.* The patient is expected to die from the underlying disease process before death from terminal dehydration would occur. For example, the patient's death is expected in one to two days, and lethal dehydration is not expected to develop for four to six days.
2. *Equivocal Reduction in Survival.* Death from the underly-

surrogates should be free to choose PSU among various palliative treatments of similar net effect, and symptoms should not be subject to a test of refractoriness.

Category 2 is also not particularly ethically problematic. PSU has no clear impact on survival in these cases. Of course, determining that PSU and the terminal disease carry similar prognoses for survival requires a competent, objective, and clear assessment of prognosis. Admittedly, physicians are frequently inaccurate in predicting survival—they are heavily biased toward overestimation.¹⁶ This bias would result in less use of PSU, since some patients would be excluded based on their physicians' mistaken view that they will survive for more than two weeks. Prognostic inaccuracy notwithstanding, this

There is no sound ethical basis for restricting the use of sedation based on "refractory symptom" and "last resort" criteria in situations in which its use will not shorten survival.

ing disease process is expected to occur in approximately the same time frame as death from terminal dehydration. For example, the patient's survival from his disease is expected to be two weeks or less, which correlates with the time frame for death from terminal dehydration.

3. *Expected Reduction in Survival.* Sedation-induced dehydration is expected to shorten the time to the patient's death.

Category 1 is ethically uncontroversial. In these cases, PSU is wholly palliative and does not run a risk of shortening life. This use of PSU should be governed by standard considerations that apply to medical treatments. Patients and their

category of PSU would remain ethically supportable because prognostic uncertainty is accepted and managed in all aspects of clinical care.

Category 3 is far more complex because death is an assured consequence of PSU, no matter how the disease progresses. Advocates of permitting PSU in category 3 might argue that it is distinguishable from explicit euthanasia and less ethically problematic because—among other reasons—death is not the primary endpoint of sedation. Conversely, supporters of active euthanasia might argue that category 3 PSU is *more* ethically objectionable because it violates the patients' dignity by pointlessly protracting the process of dying. Nevertheless, category 3 PSU is implicitly supported by guidelines

Table 2. Current vs. Proposed Guidelines for When PSU is Acceptable

<i>Current Guidelines</i>	<i>Proposed Guidelines</i>
The patient has a terminal disease	The patient has a terminal disease
Death expected within hours to days, or not specified	Time to death from disease is less than or equal to time to death from PSU-induced dehydration ^a
Severe and refractory symptoms (other aggressive measures have failed or proven inadequate)	Severe symptoms for which no other reasonably effective treatment is acceptable to the patient
Preserving consciousness is a clinical priority	Preserving consciousness is one of the patient's considerations
Informed consent from patient/surrogate	Informed consent from patient/surrogate
Do-not-resuscitate order in place	Do-not-resuscitate order in place
No consensus for use in cases involving primarily existential suffering	Severe existential suffering for which all available and reasonably effective treatments are unacceptable to the patient

^a Although most patients will die within one week without fluid support, many patients survive up to two weeks or longer. See T. Morita, J. Tsunoda, S. Inoue, and S. Chihara, "Survival Prediction of Terminally Ill Cancer Patients by Clinical Symptoms: Development of a Simple Indicator," *Japanese Journal of Clinical Oncology* 29 (1999): 156-59.

that do not specify a circumscribed time frame for death.

The current guidelines' restrictions concerning symptom intolerance and symptom refractoriness would be justifiable for category 3 PSU. Although most patients with truly intractable physical symptoms are very near to death, some are not, as illustrated by the introductory case. The guidelines should better account for patients that fall into this category. If guidelines are to explicitly endorse category 3 PSU, we must more carefully assess its use.

First, we must clarify the sorts of conditions that meet the criterion of "terminal." Guidelines for PSU employ various terms to describe the requisite underlying state, including "terminally ill," "terminal condition," "the very end of life," and "advanced disease." These terms are somewhat ambiguous. *Illness* refers to the way in which a patient experiences a disease. For example, a patient could have advanced heart disease while feeling quite well, or could feel deathly ill despite having a good prognosis. *Terminal condition* specifies nothing about the nature of the process that is

limiting survival. Must the condition be intrinsically pathophysiological? For example, a patient who voluntarily ceases all oral intake will develop a "terminal condition" and approach "the very end of life" even in the absence of a terminal disease.

How should guidelines for PSU address patients whose survival is shortened volitionally? If voluntary dehydration satisfies the end-of-life criteria of PSU guidelines, some may argue that PSU would be *less* ethically troubling, since initiating PSU does not introduce any *new* lethal dehydrating processes. Others may argue that when a patient has voluntarily stopped drinking, PSU is *more* ethically problematic because sedating this kind of patient is a form of physician-assisted suicide. Moreover, patients who are sedated after ceasing oral intake of fluids may not be able to reconsider their decision (and reverse their "terminal" condition). These patients could end up sedated to death nonvoluntarily since, if given the choice, they might have changed their minds. For these reasons, PSU should be restricted to patients who

have a terminal *disease* rather than a condition or illness.

Second, if category 3 PSU is to be explicitly accepted, how much active shortening of a life would be acceptable—a week, a couple of weeks, a month, or several months—and why? Is there a clear, nonarbitrary way to determine limits on additional shortening of life once it is accepted at all?

Proposed Guideline Revisions

Guidelines that require imminent death and refractory symptoms overburden patients whose survival is not jeopardized by the use of PSU, whereas guidelines that permit PSU with any terminal prognosis tolerate medical killing unsupported by an adequate medical-ethical framework. For patients for whom PSU is not expected to additionally shorten survival, the requirements of having refractory symptoms and a survival time of hours to days should be lifted. These requirements are unnecessary, poorly serve patients' needs, and are exceptional among other medical treatments. PSU should be available to these patients along with other pal-

liative treatments, and its use should be contingent on efficacy, proportionality, informed consent, and an analysis of the benefits and burdens. PSU should be available to treat severe symptoms, not just ones that are refractory. Of course, patients should be counseled about the implications of induced unconsciousness on the existential and interpersonal dimensions of dying and should be vigorously supported in order to allow them to make choices as authentically as possible. Additionally, PSU should be accepted for existential suffering, with the caution that sedation should not be used as a shortcut that lets caregivers skip the hard work of providing spiritual and emotional support to the patient (see Table 2).

For patients whose survival time is likely to be shortened by PSU, its use is more ethically problematic. Some existing guidelines prohibit using PSU for these patients, but some do not. Therefore, further discourse is needed, both within medicine and between medicine and society, to explicitly establish whether PSU is a justifiable action for these patients based on its harm-benefit ratio or on a compassionate exception to killing, or whether it should be prohibited because of a principled objection to killing or some other weighty societal interest. I submit that this kind of PSU should be prohibited as a matter of policy. It is an outlier medical practice, its moral relationship to active euthanasia is not well defined, and the extent of its ethical complexities has not been fully elucidated.

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