FEATURE ARTICLE

Palliative Sedation: A Review of the Ethical Debate

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Editor's Note: The author of this article, Joseph A. Raho, has just completed his doctoral work in philosophical bioethics at the University of Pisa, Pisa, Italy. His dissertation and several of his publications are on palliative sedation.

Introduction

Despite state-of-the-art palliative care, there may be rare instances in which distressing symptoms persist. Within this context, an ethical discussion has taken place concerning the use of sedatives. *Palliative sedation* may be defined as "[...] 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 [...]" (Cherny and Radbruch 2009, p. 581). After more than twenty years of research and discussion, this practice remains ethically charged. Under what circumstances might sedation be a morally appropriate intervention? After situating the debate, clarifying the clinical and ethical indications for commencing sedation, and reviewing problematic aspects, I will argue that palliative sedation may be an ethically appropriate option in certain well-defined situations of last-resort. Central to the ethical evaluation of the practice is the *principle of proportionality*.

Situating the Debate

Recourse to sedation for the palliation of refractory symptoms was first described as an emerging (and potentially problematic) practice in an early Italian study (Ventafridda *et al.* 1990). One year later, the expression *terminal sedation* was coined to refer to "sedation-induced unconsciousness" in order to relieve uncontrolled symptoms (Enck 1991, p. 5). This terminology, although widely used, is ambiguous, leading many health professionals to wonder whether palliative sedation aims exclusively at symptom relief or whether it might constitute *slow euthanasia* or *euthanasia in disguise*, especially when artificial nutrition and hydration (ANH) are withheld (see Billings and Block 1996; Tännsjö 2004).

In recent years, international studies (both retrospective and prospective in design) have cast some light on clinical practice, although large divergences remain both within and among countries concerning the frequency of palliative sedation.[1] Comparative research from six European countries found that, among all deaths in 2001, *continuous deep sedation* (CDS) was

resorted to in 2.5 percent of cases in Denmark, whereas the percentages were 5.7 in the Netherlands, 8.2 in Belgium, and even 8.5 in Italy (Miccinesi *et al.* 2006). This study also revealed that CDS was performed without ANH in 35 to 64 percent of cases. The frequency of sedation has also increased in recent years. CDS in the Netherlands, previously estimated at 5.7 percent of all deaths, grew to 7.1 percent by 2005 (Rietjens *et al.* 2008) and even 12.3 percent by 2010 (Onwuteaka-Philipsen *et al.* 2012). In Belgium, CDS increased from 8.2 percent to 14.5 percent by 2007 (Chambaere *et al.* 2010). And data from the U.K. indicates that CDS is as high as 16.5 percent (Seale 2009).

Such frequencies suggest that palliative sedation may no longer be a measure of last resort. Might physicians be using sedation when other less-aggressive options remain available? Does the use of sedation circumvent attempts to provide intensive caring at life's end? If sedation is administered without ANH, are patients' deaths being hastened? How might one draw a distinction between palliative sedation and euthanasia or physician-assisted suicide?

Palliative Sedation: Consensus and Contestations

Sedation is used in a variety of palliative care contexts—*e.g.*, in trauma and burn care, as well as during ventilatory withdrawal. In the end-of-life setting, it is generally indicated for patients who experience intolerable distress from symptoms that have proven refractory to traditional palliative interventions. Palliative sedation may be administered either intermittently or continuously, and its intensity may be either mild or deep (Morita *et al.* 2002).[2]

Since the early position statement by Quill and Byock (2000), many professional guidelines on palliative sedation have been published.[3] Although some differences are evident, a professional "consensus," however tentative, has emerged. Palliative sedation is generally considered clinically indicated and ethically permissible only in certain rare circumstances. Patients must be (1) terminally ill, (2) imminently dying, and (3) suffering from one or more refractory symptoms. Moreover, CDS should only be attempted when (4) either intermittent or respite sedation has been unsuccessful in reducing the severity of the refractory symptom (5) within an acceptable time frame. In addition to these criteria, informed consent must be obtained from the patient (or surrogate). Finally, the decision to continue or discontinue ANH is usually considered to be a separate decision.[4]

Let us briefly clarify these points. Concerning the terminality condition, patients must be in the final stages of a "*severe, chronic, life-threatening illness*" (Krakauer and Quinn 2010, p. 1563; emphasis in original). Regarding the imminence condition, death will be expected to occur within a very short time, usually measured in hours or days (according to the EAPC) or, at most, two weeks (according to the RDMA and the NHPCO). Furthermore, refractory symptoms are to be distinguished from

difficult-to-manage symptoms. Common refractory symptoms include delirium, dyspnea, pain, and fatigue. Krakauer and Quinn (2010, p. 1560) state that "[s]uffering is refractory when it cannot be adequately relieved despite aggressive and concerted efforts both to determine its causes and to treat them using standard palliative interventions without inducing sedation." Cherny and Portenoy (1994) also include in this category those therapies that are associated with excessive or unacceptable morbidity. CDS should only be offered when intermittent or respite sedation has failed to reduce the suffering associated with the refractory symptom. Intermittent sedation allows for periods of alertness and respite sedation is "time-limited." These types of sedation are believed to offer short-term relief from discomfort and may be used even earlier in the patient's disease trajectory (Cherny and Radbruch 2009, p. 584). If traditional palliative measures are unlikely to provide relief within a reasonable time frame, the symptom may be considered refractory.[5] Finally, ANH is considered to be a separate decision. As Claessens *et al.* (2008. p. 329) have argued, "If a patient shows signs of imminent death (*e.g.*, loss of appetite, decreased food/fluid intake) before sedation, then it seems irresponsible and unethical to hamper the natural dying process by administering artificial food or fluid during sedation." When provided during the final three weeks of life, the associated risks of medically assisted hydration include "[...] exacerbation of oedema, ascites and pleural effusions" and there may be "[...] no improvement in the level of confusion or the ability to communicate" (Sykes 2013, p. 97; reference omitted). In light of these issues, the benefits and burdens of providing ANH should be assessed on their own basis, independent of the decision to begin sedation.

Aspects of this consensus have been contested, however. With regard to the imminence condition, physicians often have difficulty prognosticating (Swart *et al.* 2014, p. 28) and when death is not imminent—*i.e.*, anticipated within hours—estimating life expectancy can be difficult, perhaps even impossible (van Delden 2013, p. 221). The guidelines in the Netherlands permit palliative sedation without ANH when death is expected within two weeks. The idea here is that a patient will not die from dehydration. However, this presumption may be questioned: although death from dehydration usually occurs after about two weeks, patients who receive palliative sedation are seriously ill and have sub-optimal hydration status. As van Delden (2013, p. 221) points out, "[...] accepting a two-week limit actually means accepting that the moment of death of at least *some* patients will be determined by the dehydration that comes with continuous sedation (without ANH) and not by the underlying disease."

For sedation to be clinically indicated, symptoms must be refractory—not merely difficult-to-manage.[6] There are a couple of problems here. First, as Sterckx *et al.* (2013, p. 14) note, "[...] what defines refractoriness is not the nature of a symptom, but *how* one may fail to treat it." For example, treatments might be available, but take too long to become

effective. Sometimes treatments that are readily available in one setting (*e.g.*, a hospital) may be unavailable in another (*e.g.*, at home). Also, physicians may lack expertise, and hence conclude too quickly that the symptom is refractory when other less-aggressive options exist. Second, the experience of suffering is inescapably subjective. If this is granted, how can physicians determine whether a particular symptom is refractory? A case can be made that only patients can determine whether a symptom is intolerable—physicians, for their part, must assess whether a given treatment will respond to that distress. This means, however, that decision-making authority effectively shifts from the physician to the patient. May patients request deep and continuous palliative sedation in the absence of first having tried mild or deep intermittent sedation? Is it also morally licit to do so while withholding ANH?

Ethical Analysis

The principles of *beneficence* and *non-maleficence* occupy a central place in discussions of medical ethics. Simply stated, physicians should benefit patients and not bring harm to them. However, palliative sedation is controversial. There are a number of anticipated adverse outcomes and potential complications associated with the practice—including respiratory depression, aspiration, hemodynamic compromise, paradoxical agitation, as well as hastening of death (Cherny 2009, p. 1153; Cherny and Radbruch 2009, p. 582). Moreover, reducing a patient's consciousness is a far-reaching intervention. Although mild levels of sedation will allow for interaction with family, friends, and caregivers, deeper levels will not. Human consciousness is a human good, and many patients and families value mental awareness during life's final moments (Steinhauser *et al.* 2000). Thus, at a minimum, human consciousness should not be taken away, except under valid moral reasons. This point is underscored in a recent statement by the International Association of Catholic Bioethicists (2012, p. 497):

Consciousness is integral to human flourishing and remains a good for persons who are seriously ill or dying. Thus care providers should protect and promote unclouded consciousness in patients whenever possible, especially to allow them to prepare for death. Care providers should suppress consciousness beyond the natural wake-sleep cycles only for very serious reasons.

In the literature, numerous authors cite the *doctrine of double effect* (DDE) as important to the ethical analysis of palliative sedation. Central to this discussion is the intention of the moral agent; physicians should aim exclusively at the relief of suffering, not the hastening of death (even though the latter may result as a foreseen, unintended result). This strategy, however, has not been beyond dispute. Critics charge that the doctrine's reliance on the intention of physicians is problematic, as intentions can be "complex, ambiguous, and often contradictory" (Quill 1993, p. 1039). Others assert that the loss of consciousness engendered by palliative sedation is not simply unintended; instead, it is the

means by which symptoms become controlled (Raus, Sterckx, and Mortier 2013, pp. 189-190). This contradicts one central criterion of the DDE, since the bad effect (loss of consciousness) is the means to the good effect (symptom relief).

Although the DDE plays an important role in discussions of end-of-life care, I would suggest that an alternative principle—that of *proportionality*—is really at the heart of the ethics of palliative sedation. To recall the distinctions outlined earlier: palliative sedation may be administered intermittently or continuously, and its intensity may be mild or deep. When considering CDS, intermittent (either mild or deep) sedation should be tried first. However, in the case of a catastrophic emergency—such as massive haemorrhage, asphyxiation, severe terminal dyspnea or overwhelming pain crisis (Cherny and Radbruch 2009, p. 584)—CDS may be needed from the start, even if such instances are likely to be rare (de Graeff and Dean 2007, p. 74).

Following these distinctions, palliative sedation refers to a spectrum of therapeutic interventions aimed at reducing the severity of a refractory symptom. Central is the notion of symptom control. Sedatives should be titrated to effect and there should not be a presumption in favor of causing rapid unconsciousness. As explained by Sykes (2013, p. 95), "[...] relief of distress is the endpoint, not a particular level of consciousness." The aim of sedation is not to cause more harm than necessary, which means that there should be a correspondence between the symptom and the way it becomes controlled. One way to verify this is to place notations in the medical record. As De Graeff and Dean (2007, p. 70) relate, "Repeated doses, titrated to ease an individual's distress, are the mark of proportionate sedation. Single large doses are the mark of ignorance or intentional harm." Consciousness should be maintained whenever possible, although some clinical circumstances and patients' preferences will require deeper levels of sedation. As the need for targeted relief may evolve during their clinical trajectory, it is an open question whether patients will receive deeper forms of sedation. CDS, the most extreme form, should be reserved for true situations of last resort.

These points also help us to distinguish palliative sedation from euthanasia and physician-assisted suicide. With the latter practices, no titration is involved, as the death of the patient is their immediate goal. With palliative sedation by contrast, "[...] the death of the patient is not a criterion for the success of the treatment […]" (de Graeff and Dean 2007, p. 76). Moreover, whereas patients who request euthanasia and physician-assisted suicide have a terminal illness, many are not imminently dying (as previously defined). One study found that "[...] patients who are terminally sedated are generally sicker and closer to death than patients receiving euthanasia" (Rietjens *et al.* 2006, p. 752). One might counter that sedatives provided in high enough doses will cause respiratory depression and precipitate death. Even if this is granted, the potential life-shortening effects of palliative sedation have not been confirmed by recent

research.[7] Again, the ethical core of palliative sedation is the notion of proportionality; all interventions short of compromising consciousness should have been offered before resorting to palliative sedation.

Conclusion

Palliative sedation, although controversial, remains an important clinical intervention for select patients at the end of life. In recent years, a tentative professional consensus has emerged. Before considering this intervention, a number of clinical and ethical criteria should be satisfied. Patients must be (1) terminally ill, (2) imminently dying, and (3) suffering from one or more refractory symptoms. CDS should only be attempted when (4) either intermittent or respite sedation has been unsuccessful in reducing the severity of the refractory symptom (5) within an acceptable time frame. Proportionality is crucial to the ethics of this practice. The purpose of palliative sedation is to respond to a symptom refractory to state-of-the-art palliative interventions. Clinicians should begin generally with the lowest level of sedation and increase its depth only as much as necessary to control the refractory symptom. As some circumstances will require lesser amounts of sedatives, others may require more. It is therefore an open question whether resorting to CDS will be required from the start. This highlights the importance of working case-by-case. In providing holistic care at the end of life, palliative medicine should be well-positioned to meet this challenge.

NOTES

1. For two literature reviews, see de Graeff and Dean (2007) and Claessens *et al.* (2008). For a more recent review, see Bruinsma *et al.* (2013).

2. Whereas mild sedation aims "to maintain consciousness so that patients can communicate with caregivers," deep sedation aims "to achieve almost or complete unconsciousness." Similarly, intermittent sedation aims "to provide some periods when patients are alert," whereas continuous sedation aims "to continue to alter patient consciousness until death." Morita *et al.* (2002, p. 450).

3. See the guidelines of the Veterans Health Administration (VHA) (National Ethics Committee 2007), the American Medical Association (AMA) (Council on Ethical and Judicial Affairs 2008), the European Association for Palliative Care (EAPC) (Cherny and Radbruch 2009), the National Hospice and Palliative Care Organization (NHPCO) (Kirk and Mahon 2010), and the national guideline of the Royal Dutch Medical Association (RDMA 2009) in the Netherlands (which has legal ramifications in that country).

4. The guidelines of the VHA, AMA, EAPC, and NHPCO support this position.

5. Consider the following example: some treatments—*e.g.*, for clinical depression—require more than two weeks of therapy in order to have a satisfactory result. If a patient has a prognosis of death estimated at one week, pharmacotherapy is unlikely to be effective, and therefore depression would be considered refractory. See Wilson *et al.* (2000 p. 38).

6. If sedation is used for a symptom that is merely of the latter sort, it is considered either an "abuse" or "injudicious use" of sedation. See Cherny and Radbruch (2009, p. 582).

7. On this point, see Sykes and Thorns (2003); Maltoni *et al.* (2009); and Sykes (2013, pp. 95-96).

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