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Comparative Analysis of Palliative Sedation and Euthanasia - a literature review

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Abstract

Introduction and purpose: Palliative care is designed to ensure proper comfort in living and dying, primarily by alleviating suffering in patients for whom medical interventions have proved ineffective. In situations where suffering is unbearable, palliative care offers "last resort" treatment, namely palliative sedation. This involves the intentional administration of sedative drugs to the patient to reduce the level of consciousness, even inducing sleep, in order to control suffering caused by conditions that are resistant to other treatments. The aim of this article is to present various perspectives on palliative sedation.

Description of the state knowledge: Topics discussed include: cessation of hydration and nutrition, loss of patient control over decision-making in treatment progression after the induction of pharmacological coma, the principle of double effect, complications arising from the use of indiscriminate polypharmacy, and views on life shortening through palliative sedation or its comparison to euthanasia. The distinction between palliative sedation and euthanasia is explored, with arguments on both sides contributing to ongoing debates. The paper concludes by advocating for comprehensive guidelines and interdisciplinary assessments to ensure ethical and patient-centered decision-making in the application of palliative sedation in terminally ill patients.

Summary: A discussion is necessary on the creation of acceptable and appropriate procedures that would not arouse the controversies currently associated with the use of palliative sedation.

KEYWORDS: palliative sedation, euthanasia, terminal state

Introduction

Palliative treatment refers to the approach aimed at alleviating or modifying the signs, including symptoms, of a progressive and incurable chronic disease with a poor prognosis,

including advanced cancer. [1] Physicians attempt to reduce suffering with various analgesics such as fentanyl, pethidine, or morphine. In medical practice, sedation can also be applied, which involves inducing a state of unconsciousness in the patient. Several issues, both medical, legal, and ethical, are associated with palliative sedation. In this study, we will try to explore the controversies related to palliative sedation mainly from a medical point of view, but also from other disciplines.

DESCRIPTION OF THE STATE KNOWLEDGE

1.1. Definition

In the medical community, there are different views on the risk of using certain treatment methods for patients in terminal states. This is especially related to the administration of pain-relieving drugs and terminal sedation, also known as palliative, which raises the most controversy in clinical practice. [2] Palliative sedation is used to reduce persistent symptoms that occur at the end of life. These include difficult-to-relieve pain, pulmonary symptoms such as lung edema or the inability to cough up secretions accumulating in the lungs, and psychological problems, including anxiety or depression. [3] Palliative sedation involves inducing a pharmacological coma in the patient using drugs such as fentanyl, morphine, midazolam, or propofol. The result of such action is the reduction of the patient's consciousness or even its complete elimination. Another controversial issue is the lack of hydration and nutrition for the patient in many cases. [4,5,6] Sedation is also used when there is no other way to reduce symptoms associated with the disease, most often cancer disease. [7] There are the following forms of palliative sedation: deep sedation, which involves a complete elimination of consciousness. It is used in patients in the dying phase, in the last hours and days of life. The second form is sedation in terminal patients who are not dying. It is characterized by a shallow level of sedation and does not always cause the elimination of consciousness. It is mostly used in the last weeks of life. The last form is deep sedation combined with the withdrawal of hydration and nutrition in terminally ill patients. [5,25,29] This raises the question, what is terminal sedation? In the international literature, there is not only a lack of unified terminology but also a universal definition of palliative sedation. [2,3] According to the American scientific society, National Hospice and Palliative Care Organization (NHPCO), and the European Association for Palliative Care (EAPC), palliative sedation is defined as "the controlled use of non-opioid drugs to relieve immense (intolerable for the patient) suffering caused by physical symptoms, which cannot be managed with other means, by reducing the consciousness of a patient with an incurable and advanced disease in

the period when death is inevitable and imminent." [4] However, the use of sedative and analgesic drugs carries the risk of hastening the death of terminally ill patients. [5] Thus, ethical questions arise, what is palliative sedation, also called terminal sedation? Its proponents argue that it is part of palliative care, which is consistent with the principle of protecting the patient's life. Opponents, however, see it as a covert form of euthanasia. Is palliative sedation one of the permissible forms of combating suffering and pain in terminal states, or is it actually a form of slow euthanasia, aimed at shortening the life of the patient? [7,8]

1.2. Impact of Palliative Sedation on Patient's Life Expectancy - Controversies

The primary cause of ethical controversies associated with the use of palliative sedation is its potential negative impact on the patient's life expectancy. Some studies suggest that palliative sedation may indeed shorten life, [9] while others try to prove that it can slightly prolong it. [10] There are also studies confirming that it has no impact on life expectancy. [11,12] Due to many discrepancies in the research, it is not possible to definitively determine the impact of palliative sedation on the patient's life expectancy. The presented studies have methodological and interpretative limitations. Comparing the results of these studies is impossible due to the lack of a clear definition of palliative sedation, as the authors refer to different definitions. [13] To definitively determine the impact of palliative sedation on patient's life expectancy, it would be necessary to conduct randomized trials using a double-blind method and compare the survival of patients with persistent symptoms who underwent palliative sedation or placebo. Such studies are ethically impermissible. Therefore, the principle of double effect was introduced, which was intended to alleviate ethical controversies and justify the potential negative impact on the patient's life expectancy. [14,22,27] However, this principle also raises some reservations. It is a principle created by Catholic theologians, who recognized that an action having simultaneously two effects (beneficial and harmful) is morally acceptable, provided all four conditions are met. The first condition is that the action is morally good or at least neutral. The next condition is that the good effect does not result from the bad effect but is simultaneous or precedes it. The last two are that the bad effect, although foreseeable, is not intended by the agent, but acceptable, and there must be a proportionally important reason for this action. [15] The "good effect" of palliative sedation is considered to be relief from pain and suffering, and the "bad effect" is the possible hastening of death. [16] All the above criteria must be met for palliative sedation to be ethically acceptable. However, it is important to note that, apart from the possible risk of shortening life, palliative sedation disrupts the

patient's consciousness, and in some cases, even induces sleep. This deprives the patient not only of relationships with others but also of autonomy – they become completely dependent on others and cannot decide on the course of their own treatment, thereby depriving them of the fundamental right to decide about their own life. [17]

From a medical standpoint, the fundamental element underlying the decision-making process and differentiating the practice of palliative sedation from euthanasia is intention. The main goal of terminal sedation is to bring relief from suffering by reducing consciousness, even completely eliminating it, rather than shortening the life of the patient, as is the case with euthanasia. Therefore, it is very important to express the opinions and intentions of the entire medical team caring for the patient. [10] Despite the difficulties in objectification, two elements allow for a retrospective assessment of the doctor's intentions. [16,18,19] The first is the selection of doses of sedative drugs. If the doses of drugs were increased despite the cessation of the patient's suffering, the doctor's intention seems dubious. The second way is the application of procedures when making decisions about starting palliative sedation, which help to specify the doctor's intentions and, although there is no guarantee that the action will be moral, it increases the likelihood of such action. These procedures include: informing the patient and their relatives, taking into account the opinions of the patient and their relatives, recording the decision, and describing the method of implementing sedation in the medical documentation during discussions in the team. [19] Although the practice of terminal sedation is in no way a euthanastic action, but solely a therapy alleviating persistent symptoms in patients at the end of life, there are fears that it may be used for the purpose of euthanasia. Administering sedatives in large doses with the intention of euthanizing the patient is a hidden form of active euthanasia, i.e., cryptoeuthanasia. [20]

1.3. Artificial Hydration and Nutrition in Sedation

By intentionally inducing a pharmacological coma in a terminal patient, which results in the inability to ingest food and drinks, artificial hydration and nutrition are also intentionally not provided. In such cases, death is inevitable, not just probable as with the use of sedation drugs alone. According to the principle of double effect, the hastening of death due to administering drugs that cause a comatose state is justified. When a physician decides to cease hydration and nutrition, it ensures the patient's death, as no one can survive without water and food. [6,7,30] In the case of terminal sedation, the dying process is prolonged, unlike euthanasia, where death occurs after administering a lethal dose of drugs. [6] Contrary to this, proponents of using sedation in palliative care believe that the patient has the right to refuse artificial

hydration and nutrition but must be informed about the consequences of this decision. [31,32] Patients often refuse to eat or drink, and their decision must be respected. [31] The cessation of hydration and nutrition is controversial among doctors and nurses caring for terminal patients, and not every hospice employs palliative sedation, arguing that it amounts to starving the patient. However, it must be acknowledged that in the final phase of cancer, symptoms may occur that cannot be managed with drugs, such as lung edema, peripheral edema, or accumulation of secretions in the respiratory tract. Intravenous hydration does not quench the thirst of a terminal patient. However, a state of dehydration can bring relief from suffering due to the reduction of nausea, chronic pain, ease of breathing, or decreased production of secretions in the respiratory tract. It is very important in such cases to take an individual approach to the patient and rationally assess whether there is a need for fluids and food. [3,11,33] The benefits and negative effects for the patient must be considered. If the patient is dying and unable to ingest fluids and food, it is assumed that the patient's death results from the terminal illness. [34] A sedated patient is completely dependent on the caregivers, so providing water and food during sedation should not be considered therapy but a part of regular care for the patient. [24] Polish scientists also have different views; the first position states that there is no reason to hydrate and feed patients if they do not feel hunger or thirst. [25] The second stance suggests appropriately limiting the intake of fluids and food before the dying process begins so that the direct cause of death is the disease, not the physician's management. [11] Another publication, whose position seems to be a compromise between the two sides of this issue, states that in the case of palliative sedation, the stance on hydration and nutrition is not clearly defined. Decisions regarding treatment modifications should be made individually for each patient, regardless of sedation procedures. [23] The difficulties that may arise in making decisions about stopping hydration and nutrition in terminally ill patients are due to the problem of determining the cause of death. The decision to cease hydration and nutrition should not be applied to every patient, but the verdict should be made after calculating the burdens and benefits for the patient and respecting their will.

1.4. Irrational Polypharmacy – Description of the Problem

Another issue that raises controversies in palliative sedation is the use of irrational polypharmacy, which in cancer patients in the terminal phase of the disease causes many adverse effects. During therapy, we deal with rapidly occurring changes in the pharmacokinetics of drugs, resulting from complex pathophysiological processes. The average number of medications taken by patients in palliative care is as high as 9.3. When

using two drugs simultaneously, the risk of adverse interactions between them should be considered, and in the case of using more than six drugs, interactions are inevitable. Unfortunately, in patients treated in palliative care, changes in the pharmacokinetics of drugs are rarely considered. Adverse interactions between pharmaceuticals are also rarely properly estimated, which consequently leads to the occurrence of drug-induced diseases. [1,2,11] A comparative study by J. Woronin and colleagues,[28] in which the author compares the adverse effects of drugs used in cancer patients in terminal states, such as morphine, fentanyl, and pethidine, has led to conclusions that should guide physicians during therapy. According to the authors, the analysis of drug interactions should become an integral part of assessing a patient treated for pain in terminal states. It is also advisable to develop a formulary for assessing drug interactions, which would help in clinical practice to avoid combinations with a high risk of adverse effects. This is especially true for patients treated in palliative care. Given that adverse interactions occur quite frequently and often have serious manifestations such as bleeding, dystonia, excessive sedation, or respiratory depression, it is necessary to thoroughly inform the patient, if conscious, about the existing risk and indicate actions they can take after observing alarming symptoms. [24]

1.5. Patient Autonomy

Palliative sedation is a very radical procedure, therefore the patient should be informed about all the consequences of this method. [25] Although the doctor is responsible for the clinical condition of the patient, the patient must first make an autonomous, sovereign decision regarding the manner of death, i.e., whether to undergo sedation or remain conscious until the end of life. [35,36] However, during the sedation procedure, the patient loses the ability to make conscious decisions due to being in a state of coma. [37] Some authors argue that it is assumed that when persistent therapy is discontinued, the patient dies as a result of the terminal illness, not as a consequence of the doctor's actions and decisions. [6,38] The doctor receives permission to perform the sedation procedure, but the patient is not allowed to request euthanasia. [5] The patient's consent should also cover the cessation of hydration and nutrition during sedation. The resignation from hydration and nutrition is treated in the same way as the cessation of treatment. [5,26,31] The patient also has the right to oppose such a radical method as sedation and be assured that they will not be subjected to this procedure against their will. [5,32] Sedation, treated as part of palliative care, should be a method of pain control and allow the patient to die in comfort, therefore it should be used in an atmosphere of trust in doctors and respect for patient autonomy. [3,38] In response to the

question of whether sedation should be used in cases of psychological and existential suffering related to terminal illness, it should be stated that it should be a procedure used in exceptional cases to eliminate troublesome symptoms for the patient that cannot be managed in any other way – however, psychological suffering alone is not a sufficient basis for such a radical procedure. If we have learned to treat pain and resort to sedation to eliminate psychological suffering, it may indicate that we are not coping with such suffering, meaning one of the fundamental goals of palliative care has not been achieved. [10] Moreover, resorting to sedation in cases of psychological suffering could open the way for abuses, so this procedure should not be reached for too easily. [5,39] Another issue raising doubts is the situation of patients who are incapable of making decisions. According to the guidelines of the European Association for Palliative Care, in such cases, it is important to reconstruct the patient's will based on a previously made statement or consultations with the family. If this is impossible, the decision should be made by the team caring for the patient, guided by the patient's welfare and the intention of alleviating suffering. [10,39] Proponents of the view that sedation is essentially a form of "voluntary" euthanasia argue that patient autonomy, understood as the possibility of renouncing the right to life, should be a sufficient basis to justify carrying out this procedure. [40] In this case, the patient's request for life-shortening in the form of euthanasia and assisted suicide is considered permissible. [35]

1.6. Palliative Sedation – Assisted Death or Permissible Element of Palliative Care?

A further issue is whether we are dealing with euthanasia or whether it is a permissible resignation from aggressive therapy. [34] The American Medical Association and other medical associations have expressed the opinion that when therapy is ceased, the patient dies as a result of the ongoing disease process, while euthanasia is distinguished from palliative sedation by the intentional administration of drugs causing the patient's death. This forms the basis for justifying the procedure of terminal sedation and differentiating it from euthanasia. [31,35] There is a fundamental moral difference between consenting to death and intentionally causing it. Palliative sedation is presented as a permissible medical process that allows the patient to die naturally and painlessly. In this case, the ultimate cause of death is considered to be the patient's terminal illness, not the deliberate action of the attending physician. The focus is on the phase of dying where death is inevitable and only pain and suffering can be alleviated. [34] However, this significant difference is continuously questioned, especially when an integral part of palliative sedation is the cessation of nutrition and hydration, as discussed in previous chapters, thus one cannot speak of natural death, as

the physician induces a coma in the patient. [39] The key in this procedure is the patient's informed decision, signed by them to undergo sedation. [26] According to some sources, palliative sedation is portrayed as part of the natural process of leaving this world, to justify that it is a permissible practice resulting in a peaceful and painless death of the patient. This absolves the medical staff of responsibility and improves the perception of this procedure among potential patients who are qualified for it and their families. [7,39] On the other hand, according to the most definitive view, palliative sedation is considered a form of euthanasia "in disguise." The main argument is that accepting the practice of sedation simultaneously cannot dismiss euthanasia and assisted suicide. If we induce a coma in a patient and simultaneously cease providing food and drinks, we contribute to death through the cessation of therapy. However, sedation must be rejected as a violation of the sanctity of life if it is considered part of normal patient care. The entire process of palliative sedation can only be initiated after the patient's autonomous decision, who should have the right to choose their manner of death. [40] A serious problem is that palliative sedation prolongs the dying process of the patient, and the patient loses the ability to make decisions during therapy, so paradoxically, it is worse than euthanasia. [6,11,30] A certain group of scientists shares these doubts, recognizing that there is a thin line between terminal sedation and euthanasia, which is extremely easy to cross. [4,41] In the Kingdom of Netherlands, many doctors use palliative sedation with the intent to shorten life. This is because the sedation procedure does not require the fulfillment of the formal requirements necessary for euthanasia and assisted suicide. Such requirements include, for example, consultation with an independent specialist and documenting the use of this procedure instead of shortening the patient's life at their request. [7,42,43] Legal loopholes and lack of requirements create opportunities for abuse. Not every patient is informed about the consequences of this procedure, and most importantly, some are not even asked for their consent. This is a significant problem, as it is an intentional process that shortens patients' lives without their knowledge. [10,31] Despite palliative sedation leading to reduced pain and suffering for the patient, it poses a serious threat because the patient does not have the opportunity to decide on the timing and manner of their death. Contrary to these views against palliative sedation, there are supporters of this process who argue that it is a permissible element of palliative care. According to them, it is a medical solution for sometimes unimaginable suffering and symptoms associated with dying, which the patient has to endure. [3,43] They also claim that sedation as an element of palliative care is consistent with the main goals of medicine. If a doctor cannot offer a cure to a patient, they should help reduce pain, suffering, and provide professional care, which is so important for

patients in terminal states. [33,44] If palliative sedation is used in the last phase of an incurable disease, such as cancer, there is a very low risk of accelerating death, e.g., due to respiratory depression, which can be a complication of the use of sedative drugs like morphine or fentanyl. [10] The authors find no confirmation of a link between the use of sedation and survivability. This arises from the fact that sedation is applied for several days, not weeks, so there is no difference in life expectancy between patients who underwent sedation and those who did not. After being put into a coma, death usually occurs after about three days. [36,44] Therefore, it cannot be said that sedation is an extended form of euthanasia. It is one of the positively conducted actions within palliative care and thus is the opposite of euthanasia. [33,36] According to Sykes and colleagues, it is important not to define sedation as terminal, as such a definition suggests that it accelerates death, but as palliative, because it is fundamentally different from euthanasia. [3,33] In Poland, there is a stance that proper application of sedation requires intensive education of physicians. A lack of proper training leads to a common reluctance to use appropriate pain therapy for fear of being accused of contributing to a patient's death. [36] However, the procedure of palliative sedation should be used in cases where there is no other possibility to alleviate pain and suffering in a terminal patient. [26,37] Therefore, it is crucial to create appropriate guidelines for the conditions of its use in terminally ill patients to avoid controversy. [38] According to the guidelines of the European Association for Palliative Care, palliative sedation should be used at the express request of a terminally ill patient, whose death may occur within a few days. Guidelines for medical staff also suggest that a comprehensive interdisciplinary assessment of the patient's condition by the team caring for them is necessary, and if required, additional consultation, preferably by an independent expert. The decision to cease hydration and nutrition should be made separately by the patient. It is also important to have a conversation with the family accompanying the patient in a terminal state, explaining the procedure, complications, and consequences of this method. [21] The primary goal of palliative sedation is to reduce burdensome symptoms of the disease that cannot be managed by other methods, not to accelerate the patient's death. [10,26] Careful and gradual increasing of drug dosages is very important. [36] Proper care of the patient is also crucial, hence sedation should not be seen as the only option in the care of the terminally ill and should be considered as a final procedure. [31,40]

Summary

The final moments of a patient's life should be free from persistent symptoms and suffering, but not through death caused intentionally by the physician. The patient has the right to die without pain and suffering, but respecting their right to decide the manner of their death is also important. The patient should be aware of the course, complications, and consequences of the palliative sedation process. Equally important is comprehensive and multi-level care by medical staff for the patient, as well as for the family, to ensure they are aware of what palliative sedation entails. This method is very radical, so it should be used as a last resort, and the decision to use this procedure should be made jointly with the patient and the family, not solely by the doctor to hasten the patient's death. Such an approach is contrary to palliative care, which aims to assess the patient, establish indications for such treatment, and then cautiously and prudently apply palliative sedation.

Author's contribution:

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