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# Sedation and Psychoactive medications in Islamic jurisprudence and bioethics

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#### 1. Introduction

Scattered throughout the books of seerah are anecdotes that provide a glimpse into medical practice at the time of the Prophet Muhammad . One of the most striking stories is that of 'Urwa ibn al-Zubayr, a companion who developed gangrene of his foot requiring an amputation. When he was given a sedative to drink, he refused and instead chose to undergo the amputation while performing dhikr. His instructions to the physicians was to begin sawing when he appeared to be in full contemplation. The physicians amputated his leg without any kind of sedation. After the procedure, it was narrated that 'Urwa was lucid enough to take his amputated foot with his hand and say, "By Allah, I have never used you for anything forbidden."

From a medical perspective, this story is astounding. Very few people can withstand such a procedure without the use of medications. This story also highlights an important question: what is the Islamic position on sedatives in the medical context?

Sedating substances have been used for centuries for a variety of medical purposes. Scholars have addressed some of the jurisprudential issues related to these medications as they arose during their time. Today, some of the most common medications used in daily medical practice can alter mental processes in numerous ways. Some medications can alter one's perceptions and experiences. Some medications include sedating effects amongst their side effects rather than main effects. The distinction between those causal effects termed "main effects" of a medication and those termed "side effects" is related to the intention of treatment and patient safety, and a construct that helps guide clinical practice, regulation, medical research and patient care. Understanding the nuances of these medications, their differences and similarities, is crucial to develop an accurate figh opinion on these matters.

There are also scenarios today that require levels of sedation that were previously impossible to attain, creating further ethical dilemmas and jurisprudential questions. Deep sedation, colloquially referred to as a "medically-induced coma", is only possible through the use of artificial life support such as mechanical ventilators and vasoactive medications. Oftentimes, these medications are used in patients who are quite sick, and whose condition is beyond the point of medical reversibility. The ethics of sedating medications become complex when the goal is for palliative care of the dying patient.

To address these issues, this paper has two main objectives. The first is to summarize some of the

<sup>1</sup> Ibn Asakir. Tarikh Dimashq. Vol. 40, Dar Al Fikr, 1995.

broad categories of psychoactive medications, their uses, and highlight the fiqh issues that arise with their use. The second objective is to highlight some of the challenging ethical issues that come with the use of sedation, particularly in the context of end-of-life care, and provide legal opinions on this topic. The goal of this paper is to provide imams and legal scholars important medical context and informed legal opinions on some of the most challenging ethical scenarios in medical practice today.

#### 2. Brain biology and Psychoactive medications

Extensive neuroscience research has elucidated the roles of various structures and chemicals in the brain. However, despite significant advances in the field over the last several decades, the experience of human consciousness continues to defy naturalistic accounts. This is a problem philosophers have termed the 'hard problem of consciousness'. From the perspective of Islamic theology, consciousness is linked to the soul. However, it is also linked to the brain and a large body of empirical knowledge has elucidated how various aspects of human consciousness are connected with particular brain structures and can be altered by manipulating interactions between neurotransmitters and their receptors. Understanding the physiology of the brain is essential to grasp how many psychoactive medications exert their effects on human consciousness.

Neurotransmitters are chemicals that transmit signals between neurons, the functional unit of the nervous system. Excitatory neurotransmitters increase the likelihood that the receiving neuron will fire an impulse, while inhibitory neurotransmitters decrease the likelihood. Some neurotransmitters have different effects depending on the type of receptor of the receiving neuron, or depending on the location. Others modulate the sensitivity of neurons to neurotransmitters, allowing for fine-tuning of signal transmission. Neurotransmitters like histamine are involved in maintaining wakefulness while others like GABA are associated with sedation and relaxation.

Psychoactive medications influence different neurotransmitter systems to produce varying effects. Psychoactive medications are medications that have "significant effects on psychological processes, such as thinking, perception, and emotion" according to the American Psychological Association.<sup>2</sup> Within this broad category, there are numerous classes of medications that each have their own mechanisms of action and medical uses. While it is difficult to form distinct categories between these medications, as there is significant overlap between them, they are often divided into the following categories: sedatives, antidepressants, antipsychotics, antiepileptics, mood stabilizers,

<sup>2</sup> VandenBos, Gary R. Apa Dictionary of Psychology. American Psychological Association, 2015.

and stimulants. A brief overview is provided in the following table:

Antidepressants	<ul> <li>Selective Serotonin Reuptake Inhibitors (SSRIs): Increase the availability of serotonin by inhibiting its reuptake into presynaptic neurons. Example: fluoxetine.</li> <li>Serotonin-Norepinephrine Reuptake Inhibitors (SNRIs): Act on both serotonin and norepinephrine. Example: venlafaxine.</li> <li>Tricyclic Antidepressants (TCAs): Inhibit the reuptake of serotonin and norepinephrine. Example: amitriptyline.</li> </ul>
Antipsychotics	<ul> <li>Typical Antipsychotics: Block dopamine D2 receptors, reducing positive symptoms of schizophrenia. Example: haloperidol.</li> <li>Atypical Antipsychotics: Act on dopamine and serotonin receptors with more complex mechanisms. Example: risperidone.</li> <li>Many antipsychotics are known to have strong sedating effects.</li> </ul>
Sedatives	Primary  - Benzodiazepines: Enhance the inhibitory effect of GABA.
Sedatives	
Sedatives	- Benzodiazepines: Enhance the inhibitory effect of GABA.
Sedatives	<ul> <li>Benzodiazepines: Enhance the inhibitory effect of GABA.</li> <li>Example: diazepam.</li> <li>Barbiturates: Act similarly to GABA but with a different</li> </ul>
Sedatives	<ul> <li>Benzodiazepines: Enhance the inhibitory effect of GABA.</li> <li>Example: diazepam.</li> <li>Barbiturates: Act similarly to GABA but with a different mechanism. Example: phenobarbital.</li> </ul>
Sedatives	<ul> <li>- Benzodiazepines: Enhance the inhibitory effect of GABA.</li> <li>Example: diazepam.</li> <li>- Barbiturates: Act similarly to GABA but with a different mechanism. Example: phenobarbital.</li> <li>Secondary</li> </ul>
Sedatives	- Benzodiazepines: Enhance the inhibitory effect of GABA.  Example: diazepam.  - Barbiturates: Act similarly to GABA but with a different mechanism. Example: phenobarbital.  Secondary  Antihistamines with Sedative Effects:  - Diphenhydramine: Blocks histamine H1 receptors, leading to

Stimulants	<ul> <li>- Amphetamines: Increase the release of dopamine and norepinephrine, and inhibit their reuptake. Example: Adderall.</li> <li>- Methylphenidate: Primarily inhibits the reuptake of dopamine and norepinephrine. Example: Ritalin.</li> </ul>
Mood Stabilizer	Lithium: The exact mechanism is still not entirely clear, but it may modulate various neurotransmitters like serotonin, dopamine, and glutamate

Islamic jurisprudence treats various psychoactive substances according to the nature of their effects. For instance, not all stimulants produce the same effects. Caffeine increases alertness and wakefulness and can cause anxiety-like symptoms. On the other hand, methamphetamine and cocaine will cause increased alertness but can also cause euphoria, hallucinations, and psychosis. Because of these differences, these substances are treated separately in Islamic jurisprudence.

Nuances also arise in some of the other categories of psychoactive medications. Sedatives are some of the most common medications both in the hospital and outpatient settings, however there are also important differences between various kinds of sedatives. Some sedating medications are used specifically for their sedating effects. Others are used for effects other than sedation but, because of their mechanism of action, they may cause sedation as a byproduct of their use. For the purposes of this paper, these medications will be referred to as primary sedatives and secondary sedatives, respectively.

Primary sedatives are used in any setting where decreased awareness is necessary. This is usually to facilitate a medical procedure or to treat a patient with critical illness. Examples of these medications include inhalational anesthetics, propofol, and benzodiazepines. These medications are most commonly used in emergency departments, operating rooms, and intensive care units.

Secondary sedating medications are commonplace in both inpatient and outpatient settings. They are medications whose primary indication is not sedation. Dimenhydrinate (Gravol), an over the counter medication used to treat nausea, is a common example. Because it acts on histamine receptors, it can also cause drowsiness. A number of medications that belong to other categories of psychoactive medications, like some antiepileptics and antipsychotics, can also be sedating. One of the challenges of using these medications is the level of sedation that a patient may experience is difficult to predict. Some patients may become heavily sedated on relatively small doses compared

to others who may not experience any drowsiness. For this reason, it is more challenging to provide blanket statements about these medications compared to the primary sedating medications. The figh issues related to these medications will be discussed later on.

Some medications, such as opioids and ketamine, can fall into either category depending on the purpose of their use. Both medications can be used as analgesics but, at higher doses, can also be used as sedatives. This effect usually follows a dose dependent relationship where sedation is usually achieved at higher doses.

# 3. FIQH OF PSYCHOACTIVE AND SEDATING MEDICATIONS

When discussing the figh aspects of these medications, the primary criteria used to judge their permissibility or impermissibility is whether they cause the 'loss of intellect'. In other words, whether the user loses the cognitive capacity for rational decision-making and discernment, either through sedation or because of an altered state of mind. The Kuwaiti encyclopedia of Islamic jurisprudence notes the following definitions provided by scholars with respect to psychoactive substances:

The jurists differed regarding the definition of intoxication. The majority of jurists – including the Malikis, Shafi'is, Hanbalis, and the two companions of Abu Hanifa – opined that the definition of intoxication is when a person's speech becomes confused and is mostly delirious. Al-Shafi'i described the limit as when a person's rhythmic speech becomes disordered, and their secret thoughts are revealed.

Abu Hanifa, on the other hand, defined an intoxicated person as one who cannot distinguish the earth from the sky, or a man from a woman. This is also the opinion of Al-Muzani from the Shafi'i school of thought.<sup>3</sup>

There is agreement among all schools of jurisprudence that any substance that intoxicates is impermissible. Ibn Taymiyya comments, "Anything that obscures the mind (al-'aql) is forbidden, even if it does not result in ecstasy or elation. The obscuring of the mind is prohibited by the consensus of the Muslims." Each of the categories of psychoactive medications is to be judged according to the degree to which it impairs cognitive faculties and produces altered states of consciousness. Thus with regards to stimulants, they are impermissible if they impair one's cognitive faculties. This is the case for cocaine and methamphetamine. Other stimulants that do

<sup>3 &</sup>quot;Al-Mawsū'ah al-Fiqhīyah al-Kuwaytīyah," Wizārat al-Awqāf wa-al-Shu'ūn al-Islāmīyah, Kuwait, 1404-1427H, vol 25, p 92. 4 Ibn Taymiyya, *Majmu al-Fatawa*, vol 34, p 211.

not impair intellectual faculties such as Adderall and caffeine are permissible.

Antidepressants and mood stabilizers are permissible because they do not cause any significant sedating effects at therapeutic doses. Antipsychotics and antiepileptics fall under the same category as secondary sedatives. They are permissible for medical purposes and the sedation that may result is not blameworthy.

The permissibility of such medications in Islamic jurisprudence is tied to a number of issues that Muslim jurists have discussed. One such issue concerns the prohibition of using alcohol in medical treatment. A tradition related in Ṣaḥīḥ Muslim records that Ṭāriq ibn Suwaid a-Ju fī asked the Prophet Muhammad about using alcohol in medications, whereupon the Prophet replied, "It is not a medicine, but rather it is actually an ailment." The Ḥanafī school considered this prohibition to apply only in the absence of permissible alternatives. In the case of medical necessity, when there are no permissible alternatives and when one has certainty of the medication's effectiveness, they consider it permissible. Ibn Ḥazm of the Ṭāḥirī school considered it to be permissible due to medical necessity as well. Meanwhile, other schools considered alcohol to be categorically prohibited in medical treatment, although the Shafi'i school permitted under medical necessity and with specific conditions the use of a formulation that contains a non-intoxicating quantity of alcohol.

The jurisprudence related to the use of intoxicants and prohibited substances in medications has been previously summarized in a paper presented to AMJA during its annual conference in 2013 by Dr. Hatem al-Haj. After summarizing the views of the four schools of law, Dr. Hatem al-Haj writes:

The preferred view regarding medical treatment with generally prohibited substances is that the prohibition applies only when alternatives are available. However, when no alternatives are present and there is a necessity (or overriding need which takes the same priority as necessity), the need for treatment allows for the use of the prohibited substances. <sup>7</sup>

An important question is whether psychoactive medications fall under the category of alcoholic intoxicants (*muskirāt*) in the first place. Scholars discussed narcotics (*mukhaddirāt*), and differed over whether they should be considered under the same category of alcoholic intoxicants.<sup>8</sup> One group of scholars considered *mukhaddirāt* to fall under *muskirāt*, as a result of which, Ibn

<sup>5</sup> Sahih Muslim, 1984.

<sup>6</sup> Wahba al-Zuńayli, Al-Fiqh al-Islami wa-Adillatuh, (Damascus: Dar al-Fikr 2010), vol 4, p 509-510.

<sup>7</sup> Translated from: Hatem Al-Haj. *Hukm Isti'mal al-Mukhaddarat fi al-Tadawi*. AMJA 2013 annual conference, Kuwait, March 26-29, 2013. Available online (Arabic) [link].

<sup>8</sup> In one tradition, the Prophet forbade "every *muskir* and *mufattir*" Sunan Abi Dawud 3686. There is a difference of opinion on the authenticity of this hadith. However, some scholars cite this as evidence for a distinction between two categories of intoxicants.

Taymiyya advocated the same legal punishment for alcohol consumption apply to narcotics. Another group of scholars including al-Qarafi and al-Dasuqi considered these to be separate categories, and deemed alcoholic intoxication to be unique. These scholars also permitted treatment with *mukhaddirāt* if it is confirmed to be effective, as they did not consider the prohibition on using alcohol in treatment to apply to these substances.

Dr. Hatem al-Haj has observed that some classical jurists distinguished between eating prohibited meat to stay alive and using prohibited substances in medical treatments because they considered the latter to be less certain given the state of medical practice of their times. However, modern jurists noted the advancement in medical practice and therefore considered the use of such prohibited substances in life-saving treatments to be a matter of necessity ( $\phi$ ar $\bar{u}$ ra) recognized by the shari'ah.

Moreover, one may add that with respect to the goals of the shari'ah (maqāsid al-sharī ah), that alcohol and recreational drug use clearly undermine the spiritual, intellectual, moral and societal prosperity of humanity that Islam intends. The crime, corruption, disease, and sin that result from these substances has had an incalculable negative impact on society. On the other hand, the evidence-based use of psychoactive medications by qualified physicians to alleviate disease symptoms, facilitate medical procedures, or initiate "life-saving" medical interventions, is one of the most important achievements of modern healthcare by the blessings of Allah, and one that furthers Islam's emphasis on the preservation of human life, and its concomitant goals of alleviating disease and strife. Moreover, the Islamic legal maxims concerning harm reduction (aldarar yuzāl) and "hardship begets ease" (al-mashaqqa tajlibu al-taysīr) require that we consider very seriously the hardship and harms of withholding such medications in the delivery of vital health services. These considerations alongside the aforementioned juristic points strongly favor the Islamic permissibility of psychoactive medications where clinically indicated, with benefits that outweigh the harm of reducing/altering patient consciousness. This careful evaluation of benefit and harm also allows Muslim physicians and Islamic ethicists the opportunity to advocate for optimizing medical practice by recommending the use of clinical tools that ensure that the degree of sedation and analgesia is proportionate to what is required. 11

<sup>9</sup> Abdullah al-Tayyar, *al-Mukhaddirat fi al-Fiqh al-Islami*, (Dammam: Dar ibn al-Jawzi 1997), 203-207. Also see Hatem al-Haj, *Hukm Isti'mal al-Mukhaddarat fi al-Tadawi*. Al-Tayyar considers *mukhaddirat* to fall under *muskirat*, while al-Haj regards *mukhaddirat* to be a separate category.

10 Ibid.

<sup>11</sup> Mohammed Ghaly (editor), Randi R. Diamond, Maha El-Akoum, Azza Hassan. Palliative care and Islamic ethics: Exploring key issues and best practices (special report in collaboration with research center for Islamic legislation and ethics). (Qatar Foundation; World Innovation Summit for Health 2018), 34.

#### 4. MEDICALLY INDUCED COMAS

During the CoVID-19 pandemic, pictures of intensive care units became commonplace, circulating on social media and the news. Most of these images showed rows of unconscious patients connected to ventilators. In modern ICUs in North America, almost all of these patients will be on some form of sedating medication, often several, to ensure patient comfort and facilitate treatment. In many cases, these patients can interact with their environment and communicate through writing or gestures. For a select group of patients, however, even this level of sedation is not enough. Because of the severity of their illness, some patients need to be in a level of sedation often colloquially referred to as a "medically induced coma". In modern ICU terminology, this is also known as deep sedation.

## 5. THE RATIONALE FOR SEDATION

Sedation management is a vital component of critical care medicine and is an area of active research. Historically, patients admitted to ICUs were often deeply sedated as that was felt to provide the best chance for the body to "rest" and recover from critical illness. Over the last several decades, research has shown that deep sedation has more negative consequences on the body than light sedation. These consequences include longer days on the ventilator, more weakness, and more confusion and delirium.<sup>12</sup>

A common tool used to gauge the level of sedation is called the Richmond Agitation Sedation Scale (RASS) score and is a scale that ranges from -5 to +4. A RASS score of 0 corresponds to a calm, cooperative patient that is awake and capable of answering questions and following commands. A RASS score of -4 corresponds to a patient that is deeply sedated. This patient does not rouse to voice and has no physical movements. A patient that is combative and violent has a RASS score of +4. In the majority of patients, a RASS score of 0 is the desired goal and this is often achieved through the use of sedating medications and analgesics. In select patients that require deep sedation, often a RASS score of -3 to -4 is required. This requires high doses of sedating medications, often in combination, and analgesics. In very severe cases, the use of paralytic medications to remove the possibility of muscular activity is required and sedation is maximized to avoid any possibility of patient awareness. A standardized scoring system for level of sedation allows medical providers to accurately describe a patient's condition and titrate medications to

<sup>12</sup> Stephens, Robert J et al. "Practice Patterns and Outcomes Associated With Early Sedation Depth in Mechanically Ventilated Patients: A Systematic Review and Meta-Analysis." Critical care medicine vol. 46,3 (2018): 471-479. doi:10.1097/CCM.0000000000002885

achieve a sedation goal.

RASS Score	Description	Example
+4	Combative	Patient is actively fighting, striking out, or displaying aggressive behavior towards staff or objects.
+3	Very agitated	Patient is not cooperating with care, pulling on tubes, attempting to get out of bed, and may be shouting or yelling.
+2	Agitated	Patient is restless, moving around in bed, may try to remove medical devices, and may be anxious or visibly upset.
+1	Restless	Patient is mildly agitated, shifting in bed, fidgeting, and may have trouble settling down or remaining still.
0	Alert and calm	Patient is awake, oriented, and appropriately responsive to their surroundings.
-1	Drowsy	Patient is drowsy but easily arousable and able to maintain eye contact when spoken to, although they may drift back to sleep.
-2	Light sedation	Patient is drowsy and able to respond to simple commands but might drift off to sleep between interactions.
-3	Moderate sedation	Patient is frequently drowsy, responds only to loud or repeated stimuli, and might require moderate stimulation to wake up.
-4	Deep sedation	Patient is difficult to arouse, only responding to painful stimuli, and is largely unresponsive to verbal or light touch.
-5	Unarousable	Patient is completely unresponsive, even to the most intense stimuli, such as deep pain or noxious stimuli.

Despite some of the detrimental effects of deep sedation, in a subset of patients – oftentimes those

that are the most critically ill – deep sedation can be lifesaving. These patients may have respiratory failure, severely low blood pressure, or severe neurologic disease such as refractory seizures. Using lighter sedation in these patients bears the risk of causing more injury and harm. Below are some potential indications for offering deep sedation to patients in the ICU:

- 1. **Severe Respiratory Failure:** Patients with severe respiratory failure often need deep sedation to tolerate the ventilator and to reduce the work of breathing. Conditions where this may be required include Acute Respiratory Distress Syndrome (ARDS) and severe asthma.
- 2. **Controlling Agitation**: To prevent self-inflicted harm or interference with medical devices and lines in patients who are excessively agitated.
- 3. **Increased Intracranial Pressure**: Certain conditions such as intracranial hemorrhage or traumatic brain injury result in elevated pressures in the brain which can be life threatening. Sedation is used to decrease intracranial pressure and minimize metabolic demands on the brain.
- 4. **Refractory Seizures**: Sedation can be used to control seizures that are not responsive to standard anticonvulsant medications.
- 5. **Facilitating Certain Diagnostic or Therapeutic Procedures**: Some procedures conducted in the ICU can be extremely uncomfortable or painful, and deep sedation can facilitate their performance.
- 6. **Reduction of Metabolic Demand**: In certain critical illnesses like septic shock, reducing metabolic demand through sedation can improve blood pressure.

It is essential to note that the use of deep sedation in the ICU must be carefully considered and tailored to the individual patient's needs. It requires ongoing assessment and monitoring by experienced healthcare professionals to ensure that it is used appropriately and that potential complications are minimized. In many cases, guidelines now encourage the lightest possible sedation that still accomplishes therapeutic goals. As soon as there has been sufficient medical recovery or reversal of the acute illness, sedation is decreased. The goal is always to use the minimum amount of sedation that will promote patient recovery.

## 6. ETHICAL CONSIDERATIONS OF SEDATION

As previously discussed, there is clearly a role for sedation in medicine, whether as an adjunct to life-saving treatment or to treat distressing symptoms such as pain and agitation. The ethical

dilemmas with using sedation arise once those medical treatments have failed - at the end of life.

In medicine, the primary goal is to treat disease and prolong life in patients who are ill. At some stage, however, a patient's disease will progress despite all medical treatments. At this point, further medical treatments are considered futile and the goal will change from prolonging life to alleviating suffering. As patients near the end of life, they may experience distressing symptoms such as pain, delirium, and difficulty breathing. In this context, sedatives such as opioids and benzodiazepines are used to treat these symptoms. The area of medicine that focuses on the management of patients at the end of life is called palliative care. In our healthcare system, this is usually carried out on an inpatient ward, a specialized palliative care unit, or intensive care unit. The ethical dilemmas associated with the use of sedatives at the end of life occur primarily in the context of palliative sedation.

Palliative sedation refers to the administration of sedatives at the end of life to achieve a state of mild to deep sedation reserved for palliative patients with severe, refractory symptoms. Compared to standard palliative care practices that aim to balance symptom control and awareness, patients receiving palliative sedation are intentionally sedated to decrease their level of consciousness. This form of sedation can occur in a specialized palliative care unit or intensive care unit and is commonly achieved through the use of long-acting subcutaneous or intravenous medications given intermittently or through the use of continuous intravenous infusions. The ethical dilemmas surrounding the use of palliative sedation are threefold: determining the candidates for this treatment, the religious ramifications of decreased awareness at the end of life, and whether palliative sedation will hasten death.

#### 7. INDICATIONS FOR PALLIATIVE SEDATION

Due to the invasive nature of palliative sedation, guidelines exist to outline the indications and application of this treatment. In a literature review which included nine published guidelines on the use of palliative sedation, the majority of guidelines include "refractoriness" and "unbearable" suffering as prerequisites to receive palliative sedation. Most guidelines refrain from defining both "refractoriness" and "unbearable" suffering, with two stating these terms are defined by the patient. The most common symptoms that would qualify for palliative sedation include pain, dyspnea, and delirium and agitation but the majority of guidelines mention psychological and

<sup>13</sup> Schildmann, Eva, and Jan Schildmann. "Palliative sedation therapy: A systematic literature review and critical appraisal of available guidance on indication and decision making." *Journal of Palliative Medicine*, vol. 17, no. 5, May 2014, pp. 601–611, https://doi.org/10.1089/jpm.2013.0511.
14 ibid.

existential suffering as potential considerations as well.<sup>15</sup>

From an Islamic point of view, the use of palliative sedation for psychological and existential suffering bears special consideration. For patients or families who request palliative sedation for psychological or existential suffering, an attempt should be made to understand the nature of the request. As the Prophet Muhammad stated, "none of you should die but hoping only good from Allah."

Allah."

If the fears around death are spiritual in nature, attempts should be made to alleviate these fears. This recommendation is consistent with the multidisciplinary approach that some guidelines suggest for this form of suffering.

The prophet Muhammad stated in nature, attempts should be made to alleviate these fears. This recommendation is consistent with the multidisciplinary approach that some guidelines suggest for this form of suffering.

From a practical standpoint, it is often difficult to distinguish the type of suffering a patient may be experiencing. Even psychological or existential suffering may manifest as physical symptoms such as agitation or dyspnea. In cases where patients continue to describe distressing symptoms despite optimal medical and spiritual support, these symptoms should be taken at face value and palliative sedation may be offered. A more detailed legal analysis of palliative sedation will follow.

## 8. AWARENESS AND DEATH

One of the most often recited du'a is asking Allah \* for " $husn\ al$ -khatimah", a good death. As explained to us by the Prophet Muhammad \*, one of the signs of a good death is saying the  $shah\bar{a}da$  as the last action before death. For this to be possible, individuals must be conscious and understand they are nearing death. The use of palliative sedation would make this unlikely.

When patients are receiving sedation at the end of life, decreasing sedation may not be an option. Due to the severity of the disease and the lingering effects of sedating medications, even if sedation is decreased, it is very unlikely that patients will be coherent enough to understand their circumstance and articulate the *shahāda*. We suggest the following strategies to mitigate this:

- 1. In the case of palliative sedation, it would be advisable to prompt the patient to articulate the shahada prior to the onset of sedation if possible.
- 2. If a patient is critically ill and an admission to ICU is imminent, we recommend prompting the patient to say the shahadah prior to intubation (insertion of a breathing tube). This will fulfill the sunnah of the Prophet (peace be upon him) in case the patient

<sup>15</sup> ibid.

<sup>16</sup> Sahih Muslim, 2877.

<sup>17</sup> Schildmann, Eva, and Jan Schildmann. "Palliative sedation therapy: A systematic literature review and critical appraisal of available guidance on indication and decision making." *Journal of Palliative Medicine*, vol. 17, no. 5, May 2014, pp. 601–611, https://doi.org/10.1089/jpm.2013.0511.

<sup>18</sup> Sahih Muslim, 916

does not survive their ICU admission.

If a patient is already intubated and sedated in the ICU, we recommend saying the shahada in their ear prior to withdrawal of life support. While patients appear to be unconscious, they may still have the ability to hear and experience the environment around them.19

#### 9. DOES PALLAITIVE SEDATION HASTEN DEATH?

The biggest ethical dilemma with palliative sedation discussed in the literature is whether it hastens death. If it does, would it be analogous to euthanasia? From an Islamic point of view, this question is crucial as euthanasia is explicitly prohibited. There has been some discussion from contemporary Muslim scholars and ethicists regarding the distinction between euthanasia and palliative sedation. Mohammed Ghaly and colleagues have noted that with respect to analgesics that may hasten death, the European Council for Fatwa and Research prohibited them as indirect euthanasia while the Islamic Organization for Medical Sciences permitted such medications.<sup>20</sup> The exact reasoning and deliberations that led these councils to their respective conclusions has not been sufficiently detailed in the available publications, Ghaly et al note. We may add that the former view (of prohibition) is also seen in the verdicts issued by certain prominent scholars on the basis of analogy with euthanasia.<sup>21</sup> We will examine some of the frameworks that have been invoked in the evaluation of palliative sedation in bioethics before analyzing the Islamic position.

In the bioethical and medical literature, much of the discussions around this topic focus on differentiating between palliative sedation and euthanasia. According to this literature, the differences between the two lie in the intention of the physician. With palliative sedation, the intention is to alleviate suffering and the desired effect is sedation to the point where distressing symptoms are treated. On the other hand, the intention behind euthanasia is to end a patient's life as quickly as possible. With this distinction in mind, the doctrine of "double effect" has been used to defend the practice of sedation at the end of life<sup>22</sup>. The doctrine of double effect is a philosophical principle that tries to explain how it can sometimes be morally acceptable to perform an action that has both a good effect and a bad effect. This doctrine is used by the Roman Catholic

<sup>19</sup> Costa, Jaquilene Barreto da et al. "Sedation and memories of patients subjected to mechanical ventilation in an intensive care unit." Revista Brasileira de terapia intensiva vol. 26,2 (2014): 122-9. doi:10.5935/0103-507x.20140018 20 Ghaly et al, 35.

<sup>21</sup> See Yusuf al-Qaradawi, "Qatl al-Rahmah: Haqiqatuhu wa Hukmuhu", online [link] and Ibn Baz, "Hukm I'tā' al-Marīd

Adwiyah li-Takhfif Alam al-Mawt," online [link]. 22 Hawryluck, Laura, et al. "Consensus Guidelines on the Use of Analgesia and Sedation in Dying Intensive Care Unit (ICU) Patients." *Critical Care Medicine*, vol. 27, no. Supplement, Dec. 1999, p. A83, https://doi.org/10.1097/00003246-199912001-00210. Accessed 18 Aug. 2023.

Church and was first described by Thomas Aguinas<sup>23</sup>. The doctrine states that actions are permissible when the good effect is intended. There are four requirements to fulfill this doctrine:

- 1. The action itself must be morally good or neutral.
- 2. One must intend only the good effect and not want the bad effect to happen.
- 3. The good effect shouldn't come about as a direct result of the bad effect.
- 4. The good effect must be significant enough to outweigh the bad effect.<sup>24</sup>

Notably, this doctrine has also been used to defend the use of tactical bombs in warfare, justifying the civilian casualties as collateral damage, as well as active self defence if a perpetrator is killed by the victim in an act of self defence (the archetypal scenario in which Aguinas formulated the doctrine). Ghaly et al have taken an example akin to a double effect from Islamic jurisprudence in order to argue that in palliative care, the good outweighs the harm:

...creating a well for people to use is a morally good act, but putting the well in the middle of a busy road could lead to injuries or deaths. The unintended harm of causing injuries or deaths cannot be tolerated by arguing that the good act of providing water was the intended one. That is because the unintended harm was always very likely to happen. The ethical judgment would be different if digging the water well was inside a home. Yes, users may fall in and come to harm, but it is unlikely and the benefits of the water outweigh this small risk. The appropriate use of analgesics in [palliative care] seems to be closer to digging a well inside a home rather than on a busy road.<sup>25</sup>

This example offers some nuance in distinguishing between two scenarios that could both be regarded as a "double effect". From an Islamic perspective, the intention of the action is pivotal but cannot fully justify the harms of an action if the harms are considered to be a predominant effect of the action. The doctrine of "double effect" stipulates that the good effects of an action must be proportional to or outweigh the negative consequences of the bad effects. Critics have argued that this "proportionality condition" is vague and could allow for significant harm to achieve a desired end.<sup>26</sup> Furthermore, the application of the "double effect" doctrine to palliative sedation has been criticized since many palliative care physicians or nurses may regard 'hastening death' as

<sup>23</sup> McIntyre, Alison, "Doctrine of Double Effect", *The Stanford Encyclopedia of Philosophy* (Fall 2023 Edition), Edward N. Zalta & Uri Nodelman (eds.), forthcoming  $URL = \frac{https:}{plato.stanford.edu/archives/fall2023/entries/double-effect/>$ . 24 ibid.

<sup>25</sup> Ghaly et al, 35. 26 McIntyre, Alison. "Doing Away with Double Effect." Ethics, vol. 111, no. 2, Jan. 2001, pp. 219–55, https://doi.org/10.1086/233472.

something desirable rather than an evil effect.<sup>27</sup> One may consider, as a case-in-point, the rise of "medical assistance in dying" (MAID) in Canada and its expanding scope.<sup>28</sup>

Let us consider how Islam provides a more robust set of ethical considerations and juristic maxims on which to evaluate the morality of palliative sedation. Islam provides an ethical framework that regards human life as fundamentally inviolable and sacred. Saving a single life is as blessed as saving all humanity (Qur'an 5:32) and ending one's life is categorically prohibited (Qur'an 2:195). Islam also recognizes the alleviation of suffering as a virtuous act. The Prophet Muhammad said, "Whoever alleviates the suffering of a believer from the tribulations of this worldly life, Allah will alleviate his suffering from the tribulations of the Day of Resurrection."<sup>29</sup> This includes the alleviation of suffering in the dying process, as in the case of palliative care. When a patient's illness has progressed beyond the point of medical reversibility, the goal of therapy is to minimize suffering and increase comfort. For those afflicted with much suffering, the Prophet has provided the prayer, "O Allah, keep me alive as long as life is better for me, and allow me to die if death is better for me."<sup>30</sup>

While the doctrine of "double effect" does not have a direct counterpart in Islamic jurisprudence, Muslim jurists have recognized the reality that some unintended negative consequences of good actions are unavoidable. The following are some of the legal maxims that can be used to evaluate an action in such circumstances:

- 1. Al-umūr bi-maqāṣidihā Matters are evaluated by their aims and goals. This is one of the five major legal maxims arising from the famous hadith, "Actions are judged by their intentions."
- 2. Al-Aṣl bināʾ al-aḥkām ʿalā al-ghālib, al-nādir la ḥukma laha. Rulings are based on what is predominant, and not what is rare.<sup>31</sup> This is one of the maxims that falls under the major maxim "Custom is the basis of judgement" (al-ʿādatu muḥakkama).
- 3. Al- $t\bar{a}bi$ '  $hukmuh\bar{u}$  hukm al- $matb\bar{u}$ '. The ruling of what follows is the same as what is followed. What this entails is that something that is derivative, secondary, or subsidiary takes the same ruling as that upon which it is dependent.<sup>32</sup>

<sup>27</sup> Faris, H., Dewar, B., Dyason, C. et al. Goods, causes and intentions: problems with applying the doctrine of double effect to palliative sedation. BMC Med Ethics 22, 141 (2021).

<sup>28</sup> https://www.justice.gc.ca/eng/cj-jp/ad-am/bk-di.html

<sup>29</sup> Sahih Muslim 2699.

<sup>30</sup> Sahih Bukhari 5671.

<sup>31</sup> Muhammad Mustafa al-Zuhayli, *al-Qawāʾid al-fiqhiyya wa taṭbīqātihā fī al-madhāhib al-arbaʾ*, (Damascus: Dar al-Fikr 2006), vol 1, p 325.

<sup>32</sup> Muhammad bin Ibrahim Namlah, "Abraz al-Qawā'id al-Fiqhiyya al-muta'alliqa bi-l-tābi' wa al-matbū'", vol 4 no 24 (2022):2587-2626.

Based on these maxims, we can derive a different conception of the doctrine of "double effect" that can be used to justify the use of palliative sedation at the end of life. This formulation has the following principles:

- 1. The intention of the agent must be good and the objective of the action must be good.
- 2. The negative effects of a good action must be rare or minor, while the good effects are predominant.
- 3. If a negative effect does occur as an inseparable part of the process, the ruling of that effect follows the ruling of the good action (i.e. if the initial action is permissible then the negative consequence is permissible).

In palliative care, the fundamental intent of the therapy is the alleviation of suffering. So long as it achieves that, the goal of therapy has been successfully met. Whether a patient will die in hours, days, or weeks, is not an objective of the treatment algorithm. Secondly, while every medication carries certain risks that are rare, these do not override the main effects that are seen in the vast majority of cases. Thirdly, the process by which palliative sedation occurs is such that the primary effect of the treatment is its role in alleviating pain and discomfort, which therefore determines its ruling. Any secondary and subsidiary process that arises as a result of this mechanism takes the same ruling of permissibility.

Moreover, the ethical dilemma concerning hastening death may be avoided entirely when one turns to the empirical data on palliative sedation. While the quality of the evidence is poor, most studies suggest that palliative sedation, primarily with the use of morphine and benzodiazepines, does not hasten death. A Cochrane review found that 12 out of 13 studies support this finding<sup>33</sup>. One must bear in mind, however, that sedation can lead to respiratory arrest in almost all patients receiving large doses of medication. These studies evaluated patients who were receiving doses of medications that did not cause respiratory arrest. The conclusion from these studies, therefore, is that palliative sedation does not seem to hasten death with appropriate doses. On this basis, one may also apply the Islamic legal maxim: *al-yaqīn la yazūlu bi-l-shakk*, certainty is not overtaken by doubt. The certain benefit of palliative care in alleviating suffering is not undermined by a doubtful and unsubstantiated risk of impact on when the patient will die. In a scenario where death is imminent or significant harm is anticipated with lighter sedation, the harm associated with higher sedation is far less certain than the benefits gained from alleviating pain and suffering in the moments before death. In these situations, it is justifiable to continue sedation at higher doses at

<sup>33</sup> Beller, Elaine M et al. "Palliative pharmacological sedation for terminally ill adults." The Cochrane database of systematic reviews vol. 1,1 CD010206. 2 Jan. 2015, doi:10.1002/14651858.CD010206.pub2

the discretion of the physician.

# 10. CONCLUSION

The use of sedating and psychoactive medications have a long history in medicine and in Islamic legal discourse. These medications are very common and essential to current medical practice. Islamic law emphasizes the importance of preservation of intellect which forms the basis for the prohibition of intoxicating substances but the use of psychoactive or sedating medications is permissible if medically necessary. While light sedation is generally desirable, in patients who are critically ill where there is fear of significant harm associated with decreasing sedation, it would be ethically appropriate to pursue deep sedation as determined by the physician. Examples of such circumstances include severe respiratory failure with significant ventilatory requirements, severe hypotension with imminent cardiovascular collapse, status epilepticus with ongoing seizures while off sedation, among other scenarios. In patients receiving palliative sedation or patients in the ICU who could tolerate decreasing sedation, the goal should be to target the lowest dose possible to achieve a level of sedation that alleviates distress without causing significant respiratory depression or hypotension. In the ICU, this could mean targeting a RASS score of -1. In a palliative care unit, clinical assessments can be performed to ensure patients are not overly sedated.

The ethical issues around the use of sedation at the end of life are complex and require careful consideration on the part of the healthcare team. Based on our assessment, the use of sedation at the end of life is permissible following certain criteria are met. The ultimate goal is to alleviate suffering in accordance with the Islamic teachings.<sup>34</sup>

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