

REVIEW ARTICLE

Ethical Decision-Making Regarding Life Sustaining Treatment in End-Of-Life Care: A Scoping Review of the Similarities and Differences Between Two Viewpoints

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Abstract: Decisions on life-sustaining treatment depend on evaluating fundamental ethical principles regarding taking human life. This study aimed to compare the Islamic standpoint with secular views on ethical decision-making in end-of-life care. We conducted a scoping review to analyze and compare articles published in 2000-2022, regarding ethical criteria for withdrawing life-prolonging treatments in dying patients, and the final decision-maker in such cases. The main difference between the two viewpoints, however, lies in the perspective that in Islam to save human life is of utmost importance, and therefore the criteria for treatment benefits, indications, and goals should all be evaluated in the light of this profound Islamic concept. The most significant similarity discovered between the two standpoints was that a terminal patient's wish not to prolong the process of dying should be respected, and the physician's opinion in determining the benefit or futility of treatment is of utmost importance. Comparison of Islamic and Secular perspectives about ethical decision-making in end-of-life care regarding life sustaining treatment indicates that benefits of treatments for patients, and healthcare goals are among the major factors in decision-making according to both viewpoints, and patients, their families, physicians, and the medical team are all involved in making the final decision.

Keywords: Terminal care; Patients; Ethics, clinical; Decision making

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1. Introduction

A terminal or dying patient is one who suffers from an advanced incurable disease and does not respond to active treatments. Death is inevitable within a short period of time in the case of such patients, but supportive treatments can improve the quality of their lives in the final stages (1). Physicians constantly encounter such patients and can keep them alive through supportive or life-prolonging treatments, without changing or reversing their underlying illness. During the past decades, however, cardio pulmonary resuscitation (CPR) has gone from being an advanced intervention for saving those who suffer reversible cardiac arrest to being used in

all cases of death in hospitals. As a result, advanced medical centers throughout the world implement "Do Not Resuscitate" (DNR) orders, and refer to it as an order to allow natural death, believing that we must know when to withhold resuscitation efforts. Consequently, healthcare providers face ethical challenges regarding death in end-of-life care (2).

Three major issues are discussed in end-of-life care. The first is that considering disease patterns and the prevalence of chronic illnesses, a great number of patients in different societies rely upon end-of-life care, and therefore the quality of such care is an important healthcare problem. The second issue is that despite the existing guidelines, the boundaries for end-of-life care remain vague and unclear. The decision whether to start or withdraw life sustaining treatment, therefore, poses numerous ethical problems. Finally, where palliative sedation represents the optimal treatment approach, even though it may superficially resemble euthanasia or physician-assisted suicide. The distinction between the two has, therefore, been repeatedly and emphatically

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cally pointed out by thinkers and scholars, and is an important issue in end-of-life care.

As a matter of fact, any perspective on withdrawing or withholding life-sustaining treatments is contingent on the evaluation of the assumed fundamental ethical principles in taking human life (3). This issue overshadows many subjects, such as the debate over futility of treatment and the right to refuse it, the nature of professional responsibility, and the most desirable approach to discussing end-of-life options with patients and their families.

Islamic teachings offer notable instructions regarding the final stages of illness where there is no hope for improvement and death is imminent in a short period of time, so that the patient will receive the blessings of God almighty and experience a good death. Nonetheless, verses of the Holy Quran highlight the sanctity of human life and God's absolute power over man's life and death, and forbid taking human life for any reason (4).

As a result, it appears that health care providers need to set and follow certain criteria for starting or continuing life-prolonging treatments in terminal patients in order to better the quality of care and specify boundaries. Considering the criteria for offering such treatments, the next great challenge is determining who should perform evaluations and make the final decision. Patients, their families, or the physician cannot make the final decision alone and they must decide based on suitable criteria. This issue usually is a morally stressful subject for physicians which cause conflict between obligations to patients and society (5-7). Currently, there is no ethical framework in Iran that can simply and unequivocally be used to make decisions about withholding or withdrawing life-prolonging treatments. Occasionally, the best efforts and wisest decisions create ethical problems and appear rather inhuman. Therefore, this study attempted to compare the Islamic and secular medical ethical viewpoints on the two major issues in end-of-life care, that is, the criteria for withdrawing life-prolonging treatments of terminal patients such as CPR, and the final decision maker, in the hope that it can assist health care providers in making decisions.

2. Methods

2.1. Study design and setting

This study was designed as a scoping review to compare Islamic and secular perspectives on end-of-life care, utilizing the PRISMA-ScR ("Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews") guideline (8) to ensure transparency and rigor. The primary objective of this review was to comprehensively assess the existing literature to address two key ethical questions in end-of-life care:

What are the determining ethical criteria for withdrawing life-prolonging treatments, such as CPR, in terminal or dying patients?

In cases of uncertainty or disagreement regarding the con-

tinuation or withdrawal of life-prolonging treatments, who should be responsible for making the final decision?

The scoping review aimed to clarify the ethical concepts from both Islamic and secular viewpoints, focusing on these two main questions. This involved a systematic drafting, reviewing, and extraction of relevant texts, followed by a description and comparison of the identified ethical concepts.

2.2. Search strategy and data gathering

To gather relevant literature on Islamic and secular opinions regarding end-of-life care, a systematic search was conducted across three major international databases: Web of Science, PubMed, and Scopus. The search employed a combination of keywords, including: "ethics," "end-of-life care," "withdraw," "withhold," "dying patient," "terminal patient," "life-sustaining treatment," "life-prolonging treatment," "advance care," "ethical decision-making," "Islam," and "secular." The time frame for inclusion was from January 2000 to December 2022, with an additional search conducted in 2023 to capture any recent publications.

To include Persian-language sources, searches were also performed in Magiran and SID databases using equivalent Persian keywords.

Furthermore, Google Scholar, Google, and reputable websites were searched to identify additional documents, such as books and ethical guidelines, relevant to end-of-life care. For Islamic references, specific articles and books written by Muslim scholars, available in electronic format, were included for Quranic citations. The search strategy was developed and refined by two investigators (MM and AZ), and a representative search query used for PubMed was:

("End-of-Life Care"[Title/Abstract] OR "Terminal Patient"[Title/Abstract] OR "Life sustaining Treatment"[Title/Abstract]) OR ("Terminal Care"[Mesh])) AND (withdraw [Title/Abstract] OR withhold [Title/Abstract] OR "Ethical Decision-Making"[Title/Abstract] OR "dying patients"[Title/Abstract] OR "life prolonging treatments"[Title/Abstract] OR "advance care"[Title/Abstract]).

2.3. Selection of relevant studies

Studies were eligible for inclusion if they provided data on ethical criteria for withdrawing life-prolonging treatments and decision-making for end-stage cancer patients. Articles were limited to those published between January 2000 and December 2022, and only those written in English or Persian were considered. Exclusion criteria included studies that focused on chronic obstructive pulmonary disease (COPD), or end-stage kidney or heart disease. The database search and initial screening of titles and abstracts were conducted by one author (MM), while duplicates were removed using EndNote version 8. The eligibility of the studies was then assessed independently by two authors (MM and FZ). Full-text articles that appeared potentially relevant were further reviewed. Priority was given to national and international surveys, reviews, and guidelines on life support limitation

policies from both Islamic and secular perspectives. Reference lists of selected studies were also examined to identify additional relevant documents. Data collection continued until data saturation was achieved, ensuring a comprehensive overview of the literature. Any disagreements regarding study selection were resolved through discussions with the research team.

2.4. The process of extracting, summarizing, and reporting the relevant studies

The researchers (MM and FZ) screened documents, yielded by the search to match the two questions of this study, based on titles and abstracts. After reviewing these documents, documents were selected for the final review. We found that 45 documents could help answer the two main questions of the study including 4 guidelines, 5 books or book chapters and 36 articles, which are presented in Table 1 by title, first author, publication year, journal, country, method, language, study design, population, data collection instrument, reliability and validity, and outcome. After finalizing the list of selected articles, the full texts were thoroughly reviewed, and the relevant data were systematically extracted. The authors (BL, MM, FZ, MT) examined documents, systematically reporting and comparing data from the main studies where possible. To identify key concepts and primary themes, each selected article was meticulously analyzed. Upon completing the data extraction based on the main questions, the researchers presented the identified concepts to the other members of the research team for achieving a consensus. Studies that did not meet the inclusion criteria, as judged by the research team, were excluded. To ensure the comprehensiveness of the obtained data, information related to two main questions was collected from various guidelines, based on availability, ease of access, and citation frequency. This approach aimed to capture a broad spectrum of perspectives on end-of-life ethical decision-making. We had two main questions and managed the documents based on the main concepts including sanctity of life, benefit of treatments, and authority of decision maker. The study described areas of agreement and disagreement between Islamic and secular ethical viewpoints on these topics. However, it is important to note that the researchers did not analyze these perspectives themselves. To maintain objectivity, the authors explicitly set aside personal views during the data analysis process, striving to present an impartial academic description. The researchers made deliberate efforts to ensure that their findings did not favor either Islamic or secular viewpoints. The process of document extraction is illustrated in Figure 1.

2.5. Ethical consideration

The authors strictly followed principles of publishing ethics, ensuring the process was conducted with integrity, transparency, and respect for all sources throughout the literature review. In addition, they carefully addressed ethical considerations during the review, selection, description, and

analysis of key concepts to answer the two main questions of the scoping review by applying ethical standards in line with Iran's publication ethics guideline and the Committee on Publication Ethics (COPE) Code of Conduct. The authors observed the reliability, validity, and overall quality of the sources used by evaluating source credibility, methodological rigor, transparency and reporting, consistency and consensus, timeliness of data, and limitations of the data.

3. Results

A total of 13,208 articles were identified. After removing duplicates, 8332 articles remained. By an initial screening of titles and abstracts 7877 articles were excluded. Of the remaining 455 records, the full texts of 379 articles were retrieved and assessed for eligibility. After further review, 300 articles were excluded due to inappropriate study design or lack of relevance to the research questions and objectives (Figure 1). Finally, 45 documents were selected that could help answer the two main questions of the study including 4 guidelines, 5 books or book chapters and 36 articles. Bibliographic profile of final included studies is presented in Table 1. After extracting relevant documents, the results of this study have been examined under the three topics including sanctity of life, goals and benefits of treatment, authority of the physician and the patient's family. Results from comparisons in each topic have been presented briefly in Table 2.

3.1. Sanctity of life

a) Islamic perspective

According to the comprehensive and valuable teachings of Islam and Quran, human life is extremely sanctified, and can be ended only through the Will of God. Every moment of a person's life is precious, even if its quality is low (9). In patients who are dependent on medical assistance to stay alive, measures taken by physicians, patients, or their families that shorten their lives are unacceptable (10). Preservation of life is a duty, and it is the responsibility of both the patient and the physician to save it (11), and taking it is considered a great sin (9). It is stated in Sura Al-Ma'ida, Verse 32 ("If someone kills a person in the land who is not guilty of murder or depravity, then it is as if he has killed all mankind, and if someone saves one person from death, then it is as if he has given life to all mankind."). This verse legitimates the implementation of medical advances in saving lives, and forbids suicide and euthanasia. In fact, human life falls under the category of the Lord's rights and His authority.

It seems that no principle, including man's autonomy, can permit people to exercise their authority in this area (12). In Sura At-Tawbah, Verse 116, the authority of God over life and death has been emphasized ("He is the Lord of heaven and earth, and He is the one who gives and takes life.").

The pivotal value and sanctity of life are not obstacles to our decisions. Thus, regarding the sanctity of human life and its existential value, therapies that cause serious complications and lead to loss of human dignity should not continue (4).

The values such as sanctity of life will lead to equilibrium and proportionality in providing health care.

b) Secular perspective

Secular guidelines on end-of-life care points to the necessity of different treatment of terminal patients. In the case of such patients, the focus is not on the value of the patient's life, but rather on an acceptable justification of life-prolonging treatments and palliative care (13, 14). This does not mean that the patient's life has no value, but that any medical intervention should be justifiable based on its benefits for the patient, and the patient's opinions, values, wishes, and philosophy must be considered in this respect (14). One of the authors discussed medical interventions against their benefits. They believe that medical treatments should not target an anatomical, physiological, or chemical unit in the patient's body, but rather his or her welfare, then life-prolonging treatments must be offered as they are to the patient's benefit. Furthermore, physicians should empower patients' autonomy to decide about care of end of life by informing them and sharing decision making (15).

Accordingly, relational autonomy concept suggests that the patients do not separate from their life environment and need to interact with families and the other relatives for making decision in end-of-life care (16).

3.2. Benefits of treatment

a) Islamic perspective

From the Islamic perspective, evaluation of benefits and harms is influenced by the value of human life, spiritual growth and development, and happiness in afterlife and the final stages of life. Therefore, the quality and quantity of a patient's life in the last days through medical treatments, sedation and relief are not the only factors that come into question in this evaluation. In the Islamic worldview, a good life results from a balance between partaking of the blessings and riches of earthly life, and achieving the true purpose of life, that is, spiritual elevation through obeying and praising the Lord. Thus, both body and soul are the criteria for measuring the quality of life.

From the Islamic viewpoint, saving all forms of life is equally valuable. The care should be offered based on the Islamic principle that regards life as a divine gift, not just the prognosis that can determine the benefits of treatments (12, 17).

Numerous studies emphasize the sensibility of saving the patient's life, and note that in Islam, one obligation toward patients is to not prolong the process of dying. Also, they believe that having clear insight and attitude towards death, along with other influential factors, will help making decisions with less internal challenges (4, 11, 18). Based on Islamic Code of Ethics, by accepting death as a phase in man's spiritual life, Islam does not approve of prolongation of the dying process through futile medical technology in all patients. In addition to the concepts above, many Muslim authors (19, 20) cite principles of Fiqh such as illegitimacy of harm (*la darar wa la dirar*), financial hardship (*al-usr*

wa al-h.araj), and prudence (*mas.lah.a*) in their analyses of issues related to end-of-life care for terminal patients. The reason is that there are rules in Fiqh that expound the principles of beneficence and non-maleficence in Islamic ethics. One well-known principle of Fiqh often cited in relation to worship and transactions is illegitimacy of harm. This principle has two implications: God has not set any harmful rules in primary Islamic commandments, and if a rule is generally and by nature harmless, but can in practice harm a Muslim, it will be waived in that special case. Likewise, Islamic scholars emphasized that if the treating physician finds out that the treatment is not beneficial to the patient or that it causes them more suffering, the treatment should be stopped. This has been mentioned regarding withholding unhelpful or harmful treatments, since the principle of non-maleficence is the base of Islamic medical ethics (21). In a narrative review study, the researchers found that the basic criteria for withholding or withdrawing life-sustaining treatment in Islamic view point are "futility of continued therapy, depressed neurological status of the patient, and compounding harms from continued clinical care". Also, the assessment of these conditions should be evaluated by expert physicians (22). Furthermore, Stable (Mustaqarr) and Unstable life (Ghayr- Mustaqarr) (20) are the other concepts in Islamic teachings, which may be useful in ethical decision making to care for terminal patients who are not dead according to any of the criteria (brain or heartbeat and respiration). Based on the concept of unstable life, they are already moving toward the separation of body and soul (23), and therefore measures such as cardiopulmonary resuscitation cannot help them. It seems that, futile care takes on a clearer meaning by applying these concepts.

b) Secular perspective

Hippocrates believed that one of the medical goals is to relieve patients' pain and suffering and one of the duties of physicians is to refrain from treating patients who are defeated by disease. For all patients in the final stages, if life-prolonging treatments fail, medical care should aim at pain relief and sedation. Sometimes treatments focus on physiological goals, but are not beneficial to the patient overall. At other times treatment benefits are limited to sustaining the patient's condition and stopping it from deteriorating (24, 25). In some cases, treatments may keep the patient alive, but cannot prevent the course of illness, and there is no hope that the patient will achieve the required level of consciousness to interact with others. In many of the above cases, caregivers will decide to stop treatments aimed at improvement, and to focus on relieving symptoms and preparing the patients for their passing. Such decisions are made based on certain rules. For instance, if there is no chance of recovery or a level of improvement that is beneficial to the patient, CPR is not performed (26).

Any decision on withholding or withdrawing treatment must be based on the best clinical evidence, and guidelines for identification and investigation of the situation need to be

observed. Consequently, evaluations must establish whether any given accessible treatment is beneficial for the patient or not (27).

However, the concept of futility in medicine is a difficult and confusing concept. Pope believed that “futile treatment” is a misleading terminology, furthermore, we should use “inappropriate or non-beneficial treatment” as a value-laden concept to decide withholding or withdrawing life-sustaining treatment (28). Futile treatment should concisely be discussed based on a specific intervention and its outcome for end stage patients. Thus, the concept of futility reminds us that in the provision of therapeutic measures such as life-saving treatment only the assessment of benefits and risks of treatment based on the knowledge and beliefs of health care providers about end stage disease must be taken into consideration (29).

3.3. Authority of the physician and the patient's family

a) Islamic perspective

Some Muslim thinkers believe that regarding decisions to continue life-prolonging treatments, opinion of the physician and the patient's family can be considered (4, 10). Based on the principle of illegitimacy of harm (*la darar wa la dirar*), for a patient who is in the final stages and cannot be cured by a certain treatment, the benefits should be weighed against the harms that it can inflict upon the community, the families of patients, and sometimes even the patients themselves (20).

There are numerous fatwas on stopping resuscitation efforts in cases of brain death, and it has been mentioned that artificial ventilation can be withdrawn in such cases. It has been emphasized, however, that this should be done through medical diagnosis, and not by the family's request alone (12). Likewise, Islamic Code of Ethics stated that if the treating physician finds out that the treatment is not beneficial to the patient, or that it causes them more suffering, the treatment should be stopped (21). As regards life-sustaining treatments, decisions need to be made by a committee of treating physicians, philosophy, ethics, jurisprudence, and law experts (4).

b) Secular perspective

From the point of view of modern medical ethics, capacitated patients must be encouraged to express their wishes for future treatments.

Physicians are therefore obligated to adjust care to the patient's best interest. A surrogate decision-maker may be appointed to give consent on behalf of the incapacitated patient, and this person must be consulted about the medical procedures (30). If a surrogate decision-maker has not been appointed, physicians will do what they deem advisable under the circumstances to improve the mental or physical well-being of the patient. There are different opinions on the factors that need to be considered in decisions about life-prolonging treatments beneficial to these patients. There are

inner values in being alive, and therefore prolonging life is always a form of benefit (31). The following criteria must be considered in evaluations concerning life-prolonging treatments: patients' wishes and values (where they can be established); clinical judgment of how effective certain treatments can be, including their benefits and harms; possibility of the patient experiencing great and unmanageable pain and suffering; patient's level of consciousness of self and surroundings, the ability to interact with others, the capacity to perform self-directed activities, or control over different aspects of one's life; chance and extent of improvements in the patient's condition through treatments; justifiability of invasive procedures; viewpoints of the patient's family; and perspectives of the surrogate decision-maker regarding benefits of the treatment. Discussions with the patients' families can often provide valuable insight into whether the patients would consider life-prolonging treatments to be beneficial. The patient's outlook on harm or danger that is considered acceptable can affect treatment decisions greatly. Thus, capacitated patients must be conferred with so it can be determined whether the benefits of CPR outweigh its harms (10). Foster emphasized that uncertainties in life-sustaining treatments are ethically acceptable for these interventions and should not to be withdrawn (32). Sometimes the worthy goal of these patients is to continue living for a farewell to one of the relatives. Thus, unilateral decision-making by physician without the involvement of patient and his/her family about withdrawing of life saving treatments is considered an old and unacceptable view. However, discussion with these patients and their families about providing advanced end of life care need inter-professional collaboration (25).

On the other hand, lack of communication can be a significant cause of distress for health care providers. Furthermore, when there appears to be little hope, decisions regarding withdrawing or withholding life-sustaining treatments by physicians alone could be very difficult and complex (33). European Resuscitation Council Guidelines 2021 emphasized that withdrawing or withholding life-sustaining treatments as a collaborative process, which involved patients and their families as well as health care team (34). In a study, researchers recommended that physicians should inform the patient and their relatives about the incurable disease, so that they can participate in an active and collaborative decision-making process with the physician (35). In a study, it was shown that ICU specialists can help the patient's family to decide to withdraw life-sustaining treatments and avoid futile interventions (36). The authors of a scoping review have expressed that the role of family for decision-making in end-of-life care has been emphasized in different literature now (37).

4. Discussion

This scoping review was conducted to explore and compare the ethical considerations surrounding end-of-life care from Islamic and secular perspectives, by focusing on two

main questions: the criteria for withdrawing life-prolonging treatments and the determination of decision-making authority when disagreements arise. The review revealed that both perspectives emphasize the importance of weighing the benefits of life-sustaining treatments for the patient and the broader healthcare goals. In both views, although the roles and hierarchies differ slightly, patients, their families, physicians, and medical teams are involved in the decision-making process.

4.1. Islamic Perspective

The Islamic ethical framework places a strong emphasis on the sanctity of life, guided by religious texts and interpretations of Sharia law. Life is considered sacred, and the prolongation of life is viewed as a moral obligation, particularly when the treatment is not deemed futile. However, Islamic ethics also recognize to allow for the withdrawal of treatment in certain cases where it causes excessive suffering, pain, or when the treatment is medically futile. When a patient is in the normal process of dying, acceptance of death as the Will of God is unavoidable. It will therefore be permissible not to use procedures that based on medical knowledge are considered futile, will not save the patient, and cannot stop the process of death (12, 38). On the other hand, based on Islamic Code of Ethics, prolongation of this process is not acceptable from the Islamic perspective, and if physicians do not see any chance of recovery, they must not cause pain and suffering for patients and their families, and continue supportive treatments only to prolong the process of dying. Therefore, physicians are allowed to withdraw treatments that are considered futile according to medical knowledge (4, 20). Even if the patient or the family requests resuscitation, there is no need for resuscitation and physicians can refrain from offering it when they believe it is not beneficial (21).

Uncertainty is of great importance in establishing the final stages of illnesses such as advanced cancers, as uncertain prognosis makes it hard to decide whether to start advanced and invasive treatment, and if so, when, and how to stop (39, 40). If a patient suffers from multiple organ failure but is not brain dead, however, there is the possibility of an active and conscious life, and death is not certain, so the patient must be allowed to live to the last minute. In such cases many Islamic experts believe that stopping treatment is the same as non-voluntary active euthanasia, which is forbidden from the Islamic perspective. Therefore, most Islamic experts are of the opinion that one should wait for the normal process of nature to take over, until artificial ventilation and other forms of support can be withdrawn (2, 41). One Muslim author has emphasized this issue and believes that there is a difference between withholding medical interventions while the normal process of dying is in progress, and active euthanasia and assisted suicide. Some philosophers in ethics draw a distinction between active and passive euthanasia, and consider the latter acceptable as they see a difference between killing a person and withholding life-sustaining procedures.

In fact, no one has the right to kill another, but keeping people alive is not an obligation (21, 42). A survey of Islamic sources reveals that to this point there has been no clear directive in Sharia regarding DNR and discontinuation of futile treatments, and science and human intellect must be the guiding lights in these issues or making Islamic laws in this respect (2).

4.2. Secular perspective

In the secular perspective, the criteria for withdrawing life-prolonging treatments, such as cardiopulmonary resuscitation (CPR) or mechanical ventilation, are often guided by patient autonomy, quality of life, and medical futility. Patient autonomy is emphasized as a cornerstone of ethical decision-making, with the belief that individuals have the right to refuse or withdraw treatment, especially when it no longer offers therapeutic benefits or contributes to an improved quality of life. The concept of medical futility is critical in secular ethics, focusing on the balance between the burdens and benefits of treatment, and is often grounded in evidence-based clinical guidelines and the physician's professional judgment. So, there is a fundamental difference between avoiding treatment that cannot benefit the patient overall, and an intentional act of hastening death (14). In any event, this is an ongoing discussion from the legal point of view as well. The law, however, clearly states that neither the physician nor any other person has the right to hasten the death of a dying patient, much in the same way as a healthy person. Withholding or withdrawing treatment is not the same as the intent to kill, but rather avoidance of offering treatment that cannot have any benefits for the patient (27). Respiratory or cardiac failure is part of the dying process, and in theory, everyone can be given resuscitation before death (43). For patients whose death is inevitable and who experience cardiac or respiratory arrest due to a terminal illness, sustaining treatment such as CPR is inappropriate. In many DNR directives, a lot of the problems associated with communication with patients and their families have not been resolved. These directives are nevertheless useful with regard to CPR for the purpose of establishing ethical and legal standards in care planning (44). Decisions on resuscitation are part of the patient's treatment planning that are discussed with the patient much in the same way as the other aspects of health care. The decision not to resuscitate should be taken only after proper consultation and a comprehensive evaluation of the patient's condition (43).

When making decisions about offering life-prolonging treatments, both medical and economic factors need to be considered. These procedures should not be performed on patients with poor prognosis as part of their standard care. In fact, some treatments must be withheld due to financial considerations, and under certain circumstances, expenses and treatment benefits for patients, their families, and the society should also be examined (45). Furthermore, some guidelines emphasize some points regarding the DNR order, the most

important of which are: the necessity to ascertain that resuscitation is pointless; observance of the patients' rights in discussing DNR with them or their legal guardian, and the need for their consent to DNR; (44) transparent policies that everyone can acquire information on; and the necessity for supervision, and gaining the trust of the National Health System. On the other hand, one author believed that three categories of patients need end of life care and decision making to withdraw life sustaining treatment. They believed that patients commonly suffer from organ failure, especially both heart and lung disease are very complicated for decision making to care and determine their prognosis. Because terminal phase of their diseases is not clear and predictable (46).

The findings of this review have important implications for clinical practice and policy-making in multicultural and religiously diverse contexts. Understanding these ethical differences is essential for healthcare providers, particularly those working in environments where patients and families from different cultural or religious backgrounds are making decisions about end-of-life care. Clinicians must not only provide medical advice but also navigate the complex ethical terrain shaped by religious and secular values. In Islamic sciences saving human life is of utmost importance, and therefore the criteria for treatment benefits, indications and goals should all be evaluated in the light of this concept.

Consequently, this evaluation cannot be left to patients, their families, or the physician alone. For this reason, examination of medical criteria for initiating or continuing life-prolonging procedures needs to be done with the help of a team of experts, and in view of the value and sanctity of each moment of a person's life. From the secular perspective, although, human life is considered valuable, but due to the emphasis on freedom and the individuals' interest in their life, the medical criteria for starting or continuing life-prolonging treatments, namely the aims and benefits of treatment, can be assessed by patients, their surrogate decision-makers, or the medical team.

5. Limitations

Despite the comprehensive approach employed in this scoping review, several limitations must be acknowledged. First, in this study, we used with a few articles by Islamic Shiite experts due to accessibility issues. Moreover, the inclusion of literature was limited to English and Persian languages, potentially excluding relevant studies published in other languages. While these documents may have provided additional insights into Islamic or secular perspectives on end-of-life care. Second, the search was restricted to publications from the year 2000 onward. This time frame was chosen to reflect more contemporary ethical debates, but it may limit the scope of historical perspectives. Third, we used end of life care guidelines more than articles in secular standpoints because we think that they show the common perspective in secular societies. In a scoping review, the evaluation process is not as rigorous as a systematic review. Additionally, the

study focused primarily on end-of-life care in terminal cancer patients, which may not fully represent ethical considerations in other terminal conditions, such as heart failure or chronic obstructive pulmonary disease (COPD). The exclusion of studies on these conditions may have resulted in a narrower scope of the review.

Forth, this scoping review could provide a general perspective of the topic and identify concepts about the two main ethical questions regarding end-of-life care. Thus, this study provides an overview of general trends and serves as a foundation for future research on the comparison of Islamic and secular perspectives on end-of-life care. Finally, by identifying key ethical concepts and gaps in the literature, this review can influence subsequent research addressing the critical issues of this study-namely, the criteria for withdrawing life-prolonging treatments and determining decision-making authority in end-of-life care as well as clinical practice aimed at improving the quality of care for terminally ill patients.

6. Conclusions

This review revealed that while both Islamic and secular frameworks engage deeply with these issues, both Islamic and secular perspectives emphasize the importance of weighing the benefits of life-sustaining treatments for the patient and the broader healthcare goals. In both views, patients, their families, physicians, and medical teams are involved in the decision-making process, although the roles and hierarchies differ slightly. Apparently, one important similarity between Islamic and secular perspectives is that both of them respect the patient's request not to prolong the process of dying, or to receive futile care. Moreover, both views consider medical principles to be the most important factor in determination of treatment benefits and futile care.

7. Declarations

7.1. Acknowledgments

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7.2. Financial support

None

7.3. Conflict of Interest

The authors stated that there was no conflict of interest.

7.4. Author contribution

Study design and supervision: BL

Performing search and designing search strategy: MM.

Data gathering, quality assessment of included studies and solving disagreements: BL, MM, FZ, MT

Analysis: MM and FZ

Drafting: MM, FZ, MT

Critically revised: MM and FZ

All authors reviewed the final draft of this article.

7.5. Using artificial intelligence chatbots

We used ChatGPT for English editing of some parts of manuscript, for example some parts of the method, limitation and conclusion only. But we revised them again. All of this article was written by the authors before popularity of ChatGPT in 2023.

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Table 1: Bibliographic profile of final included studies

Title	First Author	Publication Year	Journal	Country	Method	Language	Study design	Population	Data gathering instrument	Reliability and Validity	Outcome
Islamic Theology and the Principles of Palliative Care	Mohammad Zafir Al-Shahri	2016	Palliative & Supportive Care	Saudi Arabia	Review	English	Employs a literature review and analysis of Islamic theology to explore principles relevant to palliative care	The Muslim population, particularly patients receiving palliative care	Not applicable	This is not an empirical study	Discusses how Islamic theology can inform and support the principles of palliative care, emphasizing values such as compassion, relief of suffering, and respect for patient dignity within an Islamic framework.
[Do-not-resuscitate order across societies and the necessity of a national ethical guideline]	Maryam Peimani	2012	Iranian Journal of Medical Ethics and History of Medicine (IJMEHM)	Iran	Review	Persian	A review of literature, ethical guidelines, and case studies to discuss DNR orders	Do-Not-Resuscitate (DNR) orders across different societies, particularly focusing on Iran	Not applicable	Based on the thoroughness of its ethical analysis and the extent to which it incorporates both national and international perspectives on DNR orders.	The necessity for a national ethical guideline on DNR orders in Iran, informed by an analysis of international practices and cultural considerations
Life-Sustaining Treatment and Euthanasia: I. Ethical Aspects	Dan W Brock	2004	Book	USA	Book	English	A review of ethical theories, legal precedents, and case studies, providing a philosophical and bioethical analysis of life-sustaining treatments and euthanasia	All Population	Not applicable	Brock is a well-known bioethicist, which enhances the credibility of his arguments.	Key ethical considerations surrounding decisions about life-sustaining treatment and euthanasia
End-of-Life Care Ethical Decision-Making: Shiite Scholars' Views	Mina Mobasher	2014	Journal of Medical Ethics and History of Medicine (JMEHM)	Iran	Original	English	Qualitative	Eight Shiite experts in Islamic studies	Structured interview	Based on the thoroughness of the analysis and the accuracy of the representation of Shiite scholars' views	The ethical frameworks and opinions of Shiite scholars regarding decisions about end-of-life care, highlighting principles such as the sanctity of life, patient autonomy, and permissible withdrawal of life-sustaining treatment under specific circumstances

Table 1: Bibliographic profile of final included studies (continued)

Title	First Author	Publication Year	Journal	Country	Method	Language	Study design	Population	Data gathering instrument	Reliability and Validity	Outcome
The Relationship Between Moral Distress and Perception of Futile Care in the Critical Care Unit	Melinda J Mobley	2007	Intensive and Critical Care Nursing	USA	Original	English	Quantitative	A cross-sectional survey consisting of 38 clinical situations	Questionnaire	Dependent on the robustness of the instruments used to measure moral distress and perceptions of futile care	A relationship between higher levels of moral distress and the perception that care being provided to critically ill patients is futile
Causes of Moral Distress in the Intensive Care Unit: A Qualitative Study	Natalie J Henrich	2016	Journal of Critical Care	Canada	Original	English	Qualitative	59 Healthcare professionals working in Intensive Care Units (ICUs)	Focus group	Would be enhanced by the use of well-established qualitative research methods	Identified several key causes of moral distress in ICU settings
Organizational Influences on Health Professionals' Experiences of Moral Distress in PICUs	Sarah Wall	2016	HEC Forum	Canada	Original	English	Qualitative	Healthcare professionals working in Pediatric Intensive Care Units (PICUs)	Interviews or surveys Content analysis of	Depends on the rigor of the qualitative methods	Specific organizational factors contributing to moral distress in PICU staff Bioethics for Clinicians: 21. Islamic Bioethics Abdallah S. Daar 2001 Canadian Medical Association Journal (CMAJ) Canada Review English A review of Islamic bioethical literature and religious texts Healthcare professionals, specifically clinicians Not applicable Dr. A.S. Daar is a well-known expert in this field, enhancing the article's credibility. Key Islamic bioethical principles, emphasizing the importance of patient autonomy, beneficence, and the role of religious authority in decision-making
End of Life Ethical Issues and Islamic Views	Farzaneh Zahedi	2007	Iranian Journal of Allergy, Asthma, and Immunology	Iran	Review	English	A review and analysis of Islamic religious texts, bioethical literature, and the viewpoints of Islamic scholars	Healthcare professionals treating Muslim patients	Not applicable	From the expertise of the authors in the field of Islamic bioethics and medical ethics	The balance between religious obligations and ethical decision-making in medical practice from an Islamic viewpoint

Table 1: Bibliographic profile of final included studies (continued)

Title	First Author	Publication Year	Journal	Country	Method	Language	Study design	Population	Data gathering instrument	Reliability and Validity	Outcome
Brain-Dead Patients Are Not Cadavers: The Need to Revise the Definition of Death in Muslim Communities	Mohamed Y. Rady	2012	HEC Forum	USA	Review	English	A review and analysis of medical and bioethical literature, Islamic jurisprudence, and religious texts	Muslim communities and the healthcare professionals working with Muslim patients	Not applicable	Are grounded in the expertise of the authors, who are well-versed in both medical ethics and Islamic bioethics	The conventional medical definition of brain death. Brain-dead patients should not be considered cadavers according to Islamic law
Euthanasia: Ethical Explanation and Analysis	Alireza Parsapour	2008	Iranian Journal of Medical Ethics and History of Medicine (IJMEHM)	Iran	Review	English	Qualitative analysis of ethical considerations surrounding euthanasia	Various stakeholders in healthcare	Ethical frameworks and philosophical analysis	Does not have traditional reliability and validity measures	Exploration and analysis of ethical dimensions of euthanasia
WMA Declaration of Venice on End-of-Life Medical Care	World Medical Association	2022	Not applicable	USA	Internet article	English	Development through consensus among medical professionals	Healthcare professionals and patients in end-of-life care	Ethical principles and guidelines for end-of-life care	Does not have traditional measures of reliability and validity	Guidelines and ethical principles for medical professionals regarding end-of-life care
Withholding and Withdrawing Life-Prolonging Medical Treatment: Guidance for Decision Making	British Medical Association	2008	Book	UK	Book	English	Consensus development among medical professionals and ethical analysis	Relevant to healthcare providers, patients, and families involved in decision-making	Ethical frameworks and clinical guidelines	Not applicable	Guidance for healthcare professionals on making decisions about withholding or withdrawing life-prolonging treatment
Dealing with Family Conflicts in Decision-making in End-of-Life Care of Advanced Cancer Patients	Katsiaryna Laryionava	2021	Current Oncology Reports	Germany	Review	English	Qualitative analysis of family dynamics and conflicts in end-of-life care	Family members of advanced cancer patients and healthcare providers involved in end-of-life decision-making	Ethical frameworks and decision-making models	Typically evaluated through peer review and expert consensus in qualitative studies	Applicable to multiple countries, with potential focus on western healthcare settings
Research Priorities in Geriatric Palliative Care: Informal Caregiving	Richard Schulz	2013	Journal of Palliative Medicine	USA	Review	English	Review and synthesis of existing research to identify priorities in geriatric palliative care	Older adults receiving palliative care and their informal caregivers (family and friends)	Surveys, interviews, or frameworks related to informal caregiving in palliative contexts	Not specifically stated	Key research areas related to informal caregiving in geriatric palliative care

Table 1: Bibliographic profile of final included studies (continued)

Title	First Author	Publication Year	Journal	Country	Method	Language	Study design	Population	Data gathering instrument	Reliability and Validity	Outcome
From Quality of Life to Value of Life: An Islamic Ethical Perspective	Waseem M. Fathalla	2010	Ibnosina Journal of Medicine and Biomedical Sciences	UAE	Review	English	Theoretical exploration and ethical analysis	Not explicitly stated; likely relevant to healthcare professionals and scholars interested in Islamic ethics	Ethical frameworks and Islamic ethical principles	Not specified	Discussion on the transition from quality of life considerations to the value of life from an Islamic ethical perspective
A Discussion on Some Ontological Components of Death in the Holy Quran	Bagher Larijani	2015	Iranian Journal of Medical Ethics and History of Medicine (IJMEHM)	Iran	Review	Persian	Philosophical/theological analysis of the concept of death as presented in the Quran	Not referring to a specific group of people	Qualitative tools such as textual analysis	The consistency of Quranic interpretation and alignment with Islamic jurisprudence and ethical theory	The ontological aspects of death as described in the Quran
Euthanasia from Islam and Modern Medical Ethics Perspectives	Zahra Hashemi	2008	Iranian Journal of Medical Ethics and History of Medicine (IJMEHM)	Iran	Review	Persian	Qualitative, involving comparative analysis	This is a comparative ethical discussion	Textual and comparative analysis	Reliability would be tied to the accuracy and consistency of interpretations of Islamic teachings and ethical principles. Validity would relate to how well the authors compare these perspectives.	A comparative perspective on euthanasia, highlighting differences and potential common ground between Islamic ethics and modern medical ethics regarding end-of-life care.
Death and Dying (Chapter) Islamic Biomedical Ethics: Principles and Application	Abdulaziz Sachedina	2009	Book	USA	Book	English	A qualitative and theological approach	Not applicable	Theoretical analysis of religious texts (Quran, Hadith) and ethical principles in biomedical contexts.	Sachedina is a well-known scholar in the field, which supports the credibility of the analysis.	In-depth exploration of Islamic perspectives on death and dying, and how these principles can be applied in contemporary biomedical ethics
Medical Fiqh	Seyyed Mostafa Mohaghegh Damad	2012	Book	Iran	Book	English	Qualitative analysis and Islamic legal reasoning, focusing on Fiqh principles	Not applicable	Legal analysis and jurisprudential reasoning	Mohaghegh-Damad is a respected scholar in Islamic law, lending credibility to the analysis.	A comprehensive legal framework for addressing modern medical issues through the lens of Islamic jurisprudence

Table 1: Bibliographic profile of final included studies (continued)

Title	First Author	Publication Year	Journal	Country	Method	Language	Study design	Population	Data gathering instrument	Reliability and Validity	Outcome
When Can Muslims Withdraw or Withhold Life Support? A Narrative Review of Islamic Juridical Rulings	Mohiuddin A.	2020	Global Bioethics	USA	Review	English	A narrative review methodology	Muslims, particularly patients and families facing decisions regarding life support withdrawal, as well as Islamic scholars and healthcare professionals	Textual analysis of Islamic legal opinions (Fatwas), scholarly articles, and bioethical literature	The involvement of A.I. Padela, a well-known scholar in Islamic bioethics, enhances the credibility of the review.	An overview of Islamic juridical rulings concerning the withdrawal or withholding of life support
Surveying Brain Death from the Perspectives of Jurisprudence and Criminal Law	Mohammad Rahmati	2011	Iranian Journal of Medical Ethics and History of Medicine (IJMEHM)	Iran	Review	Persian	Qualitative analysis	Muslims	Textual analysis of Islamic legal rulings (Fatwas), legal texts, and possibly criminal law cases involving brain death	Depend on the scholarly rigor	An analysis of how brain death is viewed from Islamic jurisprudence and Iranian criminal law perspectives
The clinical value of quality-of-life assessment in oncology practice—a qualitative study of patient and physician views	Galina Velikova	2008	Psycho-Oncology	Denmark	Original	English	Qualitative	Oncology patients and physicians	Interviews or focus groups (common in qualitative research to gather perspectives).	Are ensured through methods like triangulation, member checking, and clear documentation of coding and themes	The perceived value of quality-of-life (qol) assessments in oncology from the perspectives of both patients and physicians
Perceived Barriers to Goals of Care Discussions with Patients with Advanced Cancer and Their Families in the Ambulatory Setting: A Multi-center Survey of Oncologists	Josee-Lyne Ethier	2018	Journal of Palliative Care	Canada	Original	English	Quantitative	Oncologists	Survey questionnaire to assess perceived barriers to goals of care discussions	Assessed through measures such as pre-testing the survey instrument or using validated survey questions	Perceived barriers to discussing goals of care with patients with advanced cancer and their families in ambulatory settings
Why active euthanasia and physician-assisted suicide should be legalized	Len Doyal	2001	BMJ (British Medical Journal)	UK	Editorial	English	An argumentative essay	It does not focus on a specific study population.	Not applicable	Lies in its ethical reasoning and analysis of existing legal and ethical frameworks.	In favor of the legalization of active euthanasia and physician-assisted suicide based on ethical reasoning and patient autonomy

Table 1: Bibliographic profile of final included studies (continued)

Title	First Author	Publication Year	Journal	Country	Method	Language	Study design	Population	Data gathering instrument	Reliability and Validity	Outcome
Caring for patients at the end of life	Veronica English	2012	Medical Ethics Today: The BMA's Handbook of Ethics and Law	UK	Book	English	Ethical and legal analysis concerning end-of-life care, drawing from case studies, laws, and ethical principles	Healthcare professionals and stakeholders involved in end-of-life care decisions	Not applicable	Its grounding in UK law and British Medical Association (BMA) ethical guidelines	Guidance on best practices for healthcare professionals.
Medical futility and potentially inappropriate treatment: Better ethics with more precise definitions and language	Thaddeus Mason Pope	2018	Perspectives in Biology and Medicine	USA	Commentary	English	A theoretical exploration of the ethical language and definitions surrounding medical futility and inappropriate treatments	Focuses on healthcare professionals, ethicists, and policy-makers involved in end-of-life decision-making.	Not applicable	Is grounded in the ethical and philosophical rigor of the author's arguments	Definitions regarding "medical futility" and "inappropriate treatment," to improve ethical decision-making in healthcare, particularly at the end of life.
Barriers to goals of care discussions with seriously ill hospitalized patients and their families: A multi-center survey of clinicians	John J. You	2015	JAMA Internal Medicine	Canada	Original	English	Quantitative	Physicians and healthcare professionals	Questionnaire	Ensured through survey design (e.g., pre-testing, using validated questions) and appropriate sampling methods.	The key barriers clinicians face when having goals of care discussions with seriously ill patients and their families
Improvements in advance care planning in the Veterans Affairs system: Results of a multifaceted intervention	Robert A. Pearlman	2005	Archives of Internal Medicine	USA	Original	English	Quantitative	Veterans receiving care through the U.S. Veterans Affairs (VA) healthcare system	Questionnaire	The design of the intervention, appropriate sampling, and the use of validated tools for measuring outcomes	Improvements in advance care planning practices within the VA system
Medical treatment for adults with incapacity: Guidance on ethical and medico-legal issues in Scotland.	British Medical Association	2009	Book	UK	Book	English	Ethical and medico-legal guidance	Healthcare professionals and legal stakeholders	Not applicable	Use of established legal and ethical standards	Provides healthcare professionals with a framework to make ethical and legally sound decisions when treating adults who are unable to make decisions for themselves.

Table 1: Bibliographic profile of final included studies (continued)

Title	First Author	Publication Year	Journal	Country	Method	Language	Study design	Population	Data gathering instrument	Reliability and Validity	Outcome
It is never lawful or ethical to withdraw life-sustaining treatment from patients with prolonged disorders of consciousness	Charles Foster	2019	Journal of Medical Ethics	UK	Extended essay	English	Ethical and legal arguments against the withdrawal of life-sustaining treatment	Patients in a prolonged disorder of consciousness	Not applicable	Stems from the rigor of ethical and legal analysis	Discusses legal and ethical issues, likely focusing on the united kingdom's legal framework.
Guardianship and end-of-life decision making	Andrew B. Cohen	2015	JAMA Internal Medicine	USA	Original	English	A review and analysis of guardianship and its implications for end-of-life decision-making	Individuals requiring guardianship for end-of-life decision-making	Not applicable	Is grounded in the use of established legal and ethical standards.	Explores the complexities of guardianship in relation to end-of-life decision-making.
European Resuscitation Council Guidelines 2021: Ethics of resuscitation and end of life decisions.	Spyros D Mentzelopoulos	2021	Resuscitation	Greece, UK, Belgium, The Netherlands, Croatia, Czech Republic, Cyprus, Serbia, Sweden	Guideline	English	A synthesis of ethical principles and guidelines concerning resuscitation and end-of-life decision-making	Healthcare professionals	Not applicable	Based on the consensus of expert opinions and evidence-based practices; and referencing current ethical standards and clinical evidence.	The guidelines provide a framework for ethical decision-making regarding resuscitation efforts and end-of-life care.
Association of illness understanding with advance care planning and end-of-life care preferences for advanced cancer patients and their family members.	Shin Hye Yoo	2021	Supportive Care in Cancer	Korea	Original	English	A prospective cohort study	Advanced cancer patients and their family members	Questionnaire	Ensured through validated instruments for measuring understanding and preferences and the study's design.	Highlighting the importance of effective communication and education in cancer care
Decision-making regarding withdrawal of life-sustaining treatment and the role of intensivists in the intensive care unit: a single-center study	Seo In Lee	2020	Acute and Critical Care	Korea	Original	English	Qualitative and/or quantitative methods	Patients in the intensive care unit (ICU) and intensivists (critical care physicians) involved in end-of-life decision-making	The forms for the decision to withdraw or withhold LST	From the study's design and its focus on real-world decision-making	The complexities involved in decision-making regarding the withdrawal of life-sustaining treatment

Table 1: Bibliographic profile of final included studies (continued)

Title	First Author	Publication Year	Journal	Country	Method	Language	Study design	Population	Data gathering instrument	Reliability and Validity	Outcome
Discordance and concordance on perception of quality care at end of life between older patients, caregivers and clinicians: a scoping review	Joan Carlini	2022	European Geriatric Medicine	Australia	Review	English	A scoping review	Older patients, caregivers, and clinicians involved in end-of-life care	Thematic analysis	Is grounded in the systematic approach to reviewing literature.	Areas of concordance and discordance in perceptions of quality care at the end of life among older patients, caregivers, and clinicians
Islamic bioethics: Problems and perspectives	Dariusch Atighetchi	2007	Book	USA	Book	English	A philosophical and analytical approach	Scholars, healthcare professionals, and ethicists interested in bioethics from an Islamic perspective	Not applicable	Rigorous analysis and scholarly approach	Provides insights into the complexities of Islamic bioethics.
Truth-telling at the end of life: a pilot study on the perspective of patients and professional caregivers	Reginald Deschep-per	2008	Patient Education and Counseling	Belgium	Original	English	Qualitative	Patients at the end of life and professional caregivers involved in their care	Interviews, focus groups	Is grounded in the careful collection and analysis of qualitative data.	Highlighting the importance of honesty in communication during end-of-life care.
Ethical issues in the end of life care for cancer patients in Iran	Mina Mobasher	2013	Iranian Journal of Public Health	Iran	Original	English	Qualitative	Cancer patients receiving end-of-life care in Iran	Structured Interviews	A systematic approach to data collection	Various ethical dilemmas related to end-of-life care for cancer patients in Iran
Religious perspectives on withdrawal of treatment from patients with multiple organ failure.	Rachel A Ankeny	2005	Medical Journal of Australia	Australia	Original	English	Qualitative	Patients with multiple organ failure and healthcare professionals involved in their care	Qualitative interviews or surveys	Ensured through systematic qualitative analysis.	Various religious viewpoints on the ethical implications of withdrawing treatment from patients with multiple organ failure
Euthanasia from Christian and Islamic point of view.	Sayyed Hasan Eslami	2006	Journal of Philosophy and Theory Research	Iran	Review	Persian	Comparative analysis	Various theological and philosophical circles within Christianity and Islam	Not applicable	Ensured through rigorous analysis of religious texts and ethical arguments.	Provides insights into the differing views on euthanasia within Christianity and Islam.

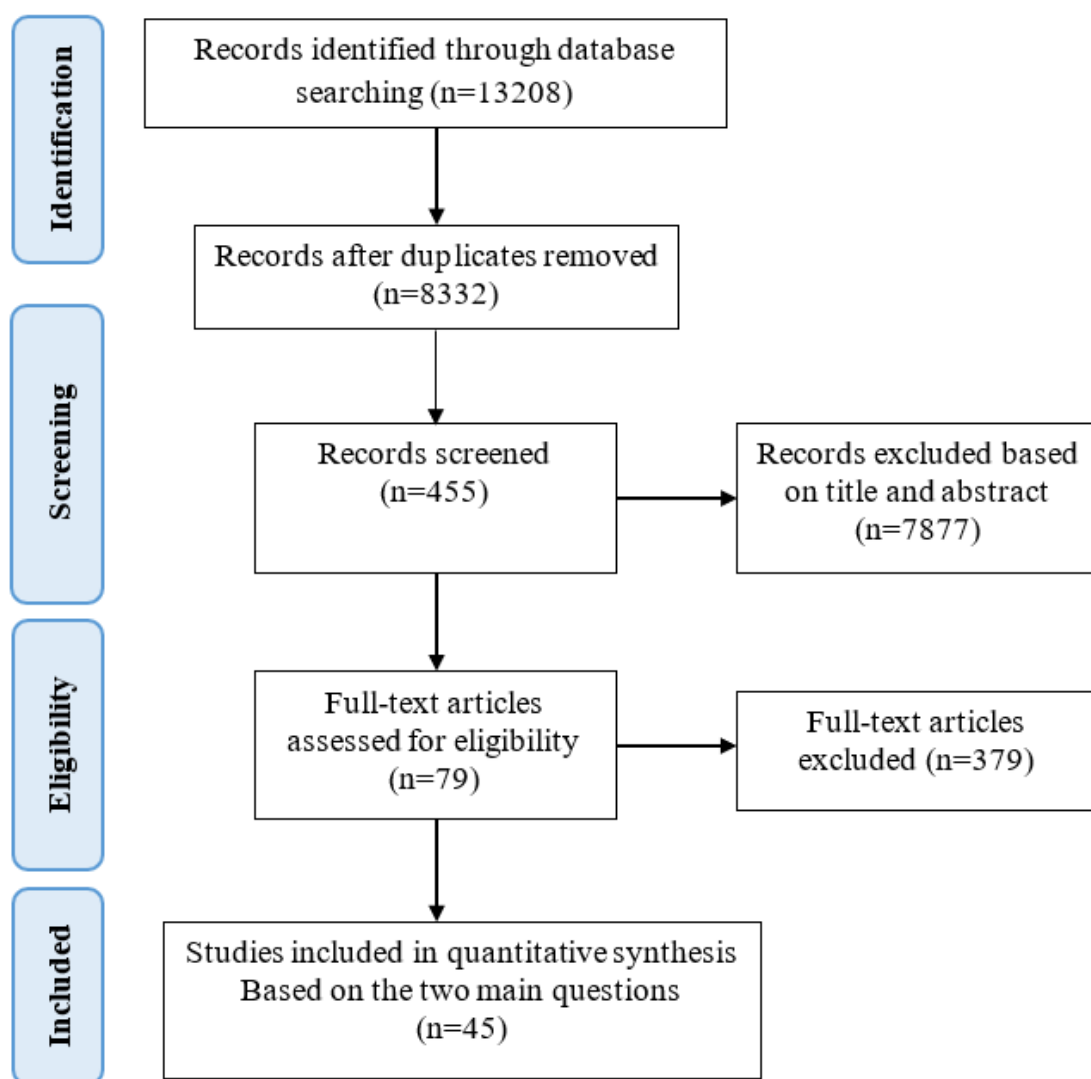
Table 1: Bibliographic profile of final included studies (continued)

Title	First Author	Publication Year	Journal	Country	Method	Language	Study design	Population	Data gathering instrument	Reliability and Validity	Outcome
Decisions relating to cardiopulmonary resuscitation. Guidance from the British Medical Association, the Resuscitation Council (UK) and the Royal College of Nursing	Guidance from the British Medical Association, the Resuscitation Council (UK) and the Royal College of Nursing	2016	Guideline	UK	Guideline	English	A review of current evidence, clinical practices, and ethical considerations regarding CPR decision-making	Healthcare professionals	Not applicable	Ensured through the involvement of reputable organizations (British Medical Association, Resuscitation Council UK, and Royal College of Nursing).	A framework for making informed decisions about CPR
Do not attempt resuscitation decisions in a cancer center: Addressing difficult ethical and communication issues	C Reid	2002	British Journal of Cancer	UK	Original	English	Qualitative analysis	Patients with cancer receiving care in a cancer center, as well as healthcare professionals involved in making resuscitation decisions	Case studies or interviews	A systematic discussion of cases and experiences	Discusses the ethical and communication issues related to DNR decisions in cancer patients.
Ethical issues of resuscitation: An American perspective	C A Marco	2005	Postgraduate Medical Journal	USA	Review	English	A philosophical and ethical approach	Healthcare professionals	Not applicable	Is ensured through the author's expertise and thorough analysis of relevant literature.	Provides insights into the ethical dilemmas surrounding resuscitation practices.
Making end-of-life care decisions for older adults subject to guardianship	Zachary Sager	2019	Elder Law Journal	USA	Original	English	Qualitative analysis	Older adults	Structured interviews	Systematic analysis of qualitative data	Challenges and considerations in making end-of-life care decisions for older adults under guardianship

CPR: cardiopulmonary resuscitation; DNR: do not resuscitate.

Table 2: Comparison between the Secular and Islamic perspectives regarding end-of-life care

Perspective	Secular	Islamic
Sanctity of Life	The focus is not on the value of human life, but rather on indications of the treatments. This does not, however, negate the value of man's existence and life.	It is emphasized that human life is valuable, and man must not be allowed to end it. It is very important to note that God alone has authority over life, and therefore everyone is obligated to save the patient's life.
Benefits of Treatment	The focus is on the indication and justification of treatment. Every treatment must be justifiable based on correct clinical judgment.	In addition to medical indications and patient's prognosis, it is important to note the value of human life and appreciate this divine gift. Futility of treatment should, nevertheless, be considered in the light of medical knowledge, and principles of Fiqh such as illegitimacy of harm (la- d.arar wa la- dira-r) and financial hardship (al-'usr wa al-h.araj) must be taken into account.
Authority of the Physician and the Patient's Family	Patients' wishes regarding treatments and prolongation of life are respected, and health care providers are obligated to speak with patients and their families to determine the patients' wishes and preferences, and to apply an active and collaborative decision-making process.	Patients, their families, or physicians cannot make the decision to prolong or end the patient's life. The final decision must be made by a committee of treating physicians, philosophy, ethics, jurisprudence, and law experts. It is an obligation, not to prolong the process of dying, and therefore the patient can request it.

**Figure 1:** The flowchart of the extracted articles.