

Medical Futility in End-of-Life Care: Exploring Ethical Decision-Making Practices Among Turkish Physicians – A Qualitative Study

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Abstract

Rapid advancements in intensive care medicine and expanding technological capabilities have raised numerous ethical questions about decisions to withhold or withdraw treatment when it is deemed medically futile. This study aims to explore how intensive care physicians in Türkiye approach end-of-life decisions regarding medical futility and to provide an ethical analysis of these practices. A qualitative approach using grounded theory was applied. Semi-structured, in-depth interviews were conducted with eleven intensive care physicians in Türkiye, and the data were analyzed using MAXQDA software. Participants indicated that Turkish physicians' determinations of treatment futility are guided by medical consensus but lack a standardized decision-making framework. Decisions are shaped by legal and societal pressures, limited resources, and occasional conflicts of interest. Professional hierarchy plays a significant role, often limiting the input of nurses and other team members. Consensus processes are informally guided by values such as benefit, age, justice, and conscience, with physicians' personal moral judgments frequently taking precedence over formal ethical principles and guidelines. To support ethically sound decision-making, the dynamics within intensive care teams should be improved by reducing hierarchical barriers and promoting active involvement of all team members. Efforts should also focus on aligning physicians' personal conscience with established ethical frameworks. The implementation of nationwide clinical ethics committees and formal clinical ethics guidelines could provide structured support to address these challenges.

Keywords: Intensive care ethics, End-of-life decisions, Medical futility, Conscience, Culture, Grounded theory

Introduction

The ethical discussion around futile treatment has spanned more than thirty years [1–3]. Early scholarship focused on functional definitions of futility, leading to classifications such as qualitative, quantitative, or physiological futility [4, 5], alongside definitions

emphasizing quality of life [6, 7]. Over time, the concept has evolved, influenced by factors including medical objectives, socio-cultural norms, religious beliefs, and the personal experiences and emotions of physicians and patients [8]. This complexity has made futility difficult to define precisely, prompting ethical research to shift toward examining decision-making processes [9]. Studies have documented the negative consequences of continuing futile treatment, which affect patients, their families, other patients, healthcare providers, and healthcare costs [10–12]. In response, some countries have introduced policies and guidelines aimed at minimizing futile interventions, often highlighting shared decision-making with patients and their families. Recognizing the challenges of defining futility, some

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scholars suggest that the absence of a purposeful clinical indication may guide its assessment [13, 14].

In Türkiye, no official ethical guidelines exist to direct end-of-life decisions. Existing studies have primarily been literature reviews [15–17] or surveys targeting nurses [18–21]. This study seeks to fill the knowledge gap by exploring how physicians in Turkish intensive care units make ethical decisions regarding futile treatment. Researching futility is particularly challenging in countries lacking a standardized term. In Turkish, five distinct words—‘yararsız,’ ‘faydasız,’ ‘nafile,’ ‘boşuna,’ and ‘beyhude tedavi’—are used to describe futile treatment. This multiplicity complicates operationalizing the concept. For the purpose of this study, medical futility is defined as “an intervention that provides no benefit to a patient, where the treatment fails to cure the disease or improve the patient’s quality of life.” The interviews were conducted based on this definition.

Methods

Study design

This study used grounded theory, a qualitative research approach, to examine processes and actions involving multiple individuals [22]. The goal was to develop a theory explaining these observed processes. Grounded theory was selected as the framework because the study focused on physicians’ decision-making in intensive care units. Charmaz’s constructivist approach guided the methodology [23]. Given the qualitative design, the study does not claim to fully represent clinicians’ views on end-of-life futility. The research was conducted following ethical guidelines set by the Istanbul University Social Sciences and Humanities Research Ethics Committee (Ethics Report Number: E-35980450–663.05–1412175).

Participant sampling and data collection

Grounded theory involves purposive sampling, selecting participants likely to provide the most relevant insights to address the research question [22]. This study focused on Turkish intensive care physicians with ethical awareness regarding end-of-life decision-making. Inclusion criteria (meeting any one of the following) were:

- Conducted research on futile treatment or intensive care ethics
- Received formal education in intensive care ethics

- Demonstrated awareness of intensive care ethics (confirmed via pre-interviews)

Participants were anonymized using codes starting with “D” for “doctor,” and interviews were audio-recorded.

Table 1 summarizes the sociodemographic characteristics of the participants.

Table 1. Characteristics of participants ($n = 11$)

Characteristics	n of physicians
Gender	
Female	6
Male	5
Title	
Professors	3
Specialists	5
Assistants	3
Work Experience in ICU	
< 4 Years	5
4 – 10 Years	3
> 10 Years	3
City	
Istanbul	5
Metropolis	4
Little town	2

Data collection

Each participant took part in a single, in-depth interview lasting between one and three hours. Due to COVID-19 quarantine restrictions, interviews were conducted via Zoom. Data collection began following ethics committee approval on April 5, 2021, and concluded with the eleventh interview on October 11, 2021. The interviews continued until data saturation was reached, meaning no new codes or themes emerged. A total of 190 pages of interview transcripts were generated. All interviews were conducted in Turkish, and citations were translated into English by the authors for publication purposes.

Data analysis

Textual data were analyzed using MAXQDA 2022 Analytics Pro, a software designed for computer-assisted qualitative analysis. Coding began concurrently with the first interview, allowing data collection and analysis to proceed in parallel. Throughout the process, a research diary and analytical memos were maintained to document observations and reflections. Data analysis

followed Charmaz's stages of initial coding, focused coding, and theoretical coding [24].

Results

Analysis of Turkish physicians' decision-making regarding medical futility at the end of life in intensive care units revealed three primary themes, illustrated in **Figure 1**. Participants emphasized that end-of-life decisions are rarely made individually; rather, they involve team collaboration. However, the precise structure and procedures of this team-based decision-making remain unclear. Opinions differed regarding the inclusion of nurses and other healthcare staff in these decisions. Although consultations with relevant departments were reported as routine, physicians often perceived these as administrative formalities or as mechanisms to ensure legal protection.

Legal considerations emerged as the most influential factor affecting decision-making. Participants frequently cited "legal pressure," encompassing both the challenges posed by unclear legislation and physicians' fears of litigation or personal liability. Addressing this issue may require legal reform, enhanced psychological support for physicians, and increased awareness of legal frameworks. This theme appeared 122 times in the coding, making it the most frequently referenced.

One participant illustrated the complexity of these decisions:

"A 40-year-old terminal patient presents with complaints, and a tumor is detected. The surgeon deems it advanced and inoperable. The oncologist may or may not offer treatment, indicating that the patient will not benefit from oncological therapy. The patient later deteriorates and is admitted to intensive care. As an intensive care physician in Türkiye, I cannot state that nothing can be done. Neither the patient's relatives nor other physicians are prepared for this, and even most doctors do not accept it." (D9)

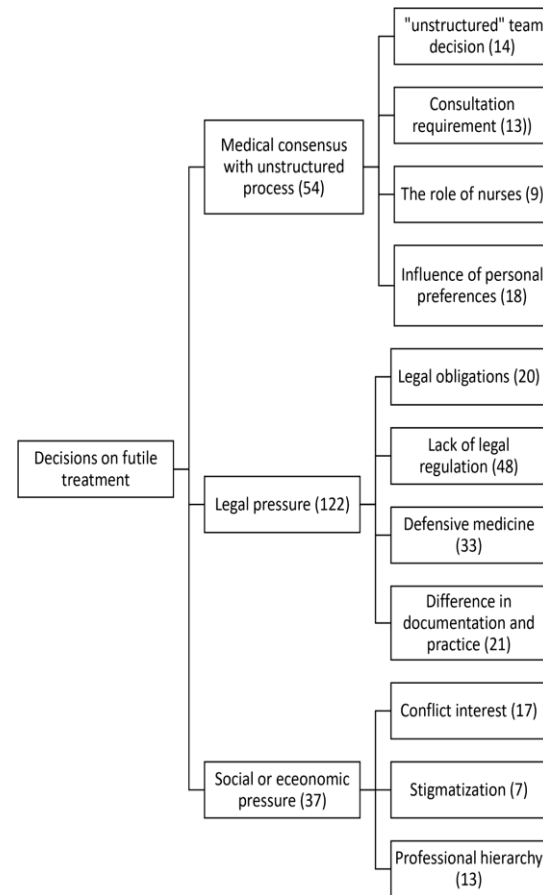


Figure 1. Categories Found in Interviews Regarding Decisions on Futile Treatment at the End of Life in Intensive Care. (Numbers in parentheses indicate the coding frequency for each category in the interview transcripts.)

Physicians may encounter a range of legal pressures depending on the case. They might feel compelled to strictly adhere to existing legal regulations or, conversely, face uncertainty when attempting to establish advance directives for end-of-life care due to the lack of clear legal guidance. In some situations, physicians may adopt defensive medical practices to protect themselves legally. For example, they might document interventions differently in patient records—such as noting that CPR was performed even when it was not—if they believe failing to do so could be legally questioned, particularly in cases considered medically futile.

Beyond legal concerns, physicians also experience social and economic pressures. Social pressure can arise from colleagues or patients' relatives, while hierarchical dynamics within the medical profession can influence decisions, with supervisors exerting authority over junior

staff. Additionally, prominent or influential individuals may attempt to sway decisions to ensure that their relatives receive enhanced or more specialized care.

Decision-making processes regarding futility

When addressing end-of-life futility, physicians' decision-making revolves around three critical "points of no return," as illustrated in **Figure 2**. The figure highlights potential preventive measures, emphasizing that the shortage of palliative care centers represents the

most significant factor influencing these critical junctures. Surpassing these points often depends on individual physician judgment and preferences.

Figure 3 outlines the detailed trajectory of a patient's hospitalization—from presentation in the emergency department to ICU admission. This pathway emphasizes the interplay between physicians' ethical awareness and the preferences expressed by patients' families, demonstrating how these factors directly shape decisions regarding ICU admission in cases where futility is a concern.

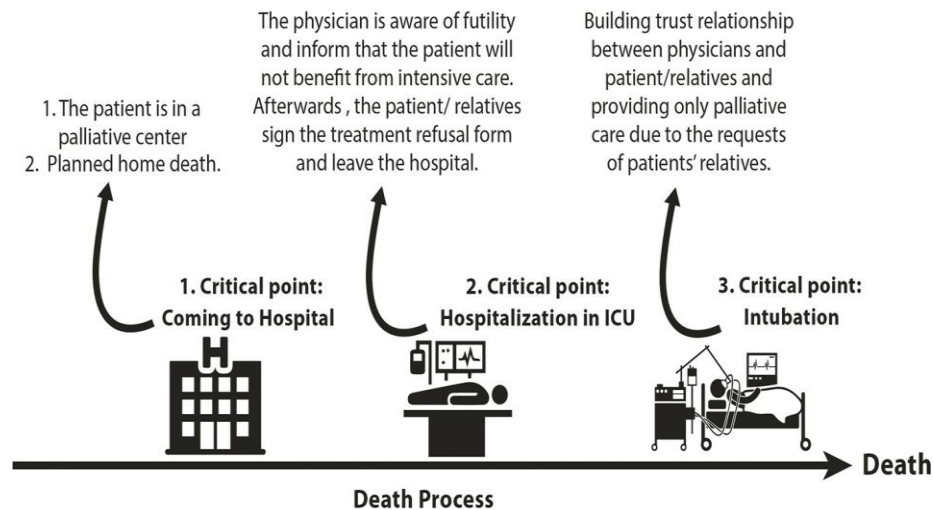


Figure 2. The critical points of no return in physicians' decision-making processes in the context of futility

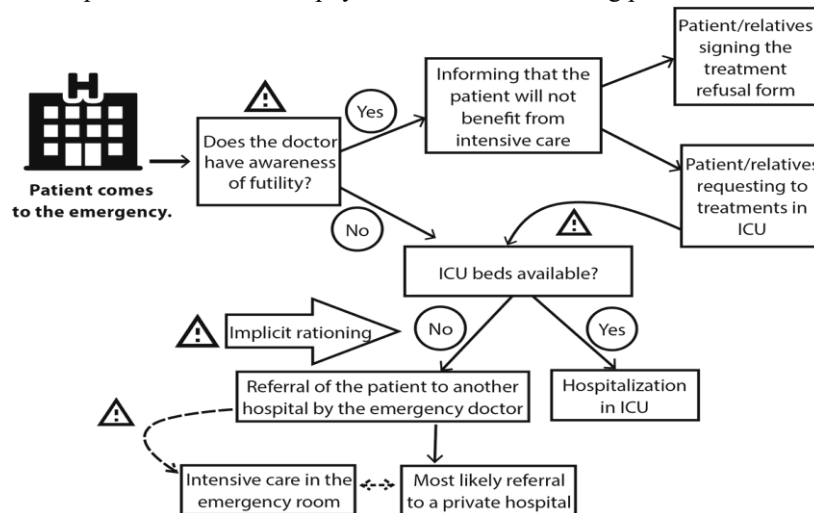


Figure 3. Process of decision-making around ICU admission of patients in the context of futility

Factors influencing decision-making in end-of-life futility

End-of-life decision-making in the context of medical futility is shaped by multiple factors, including the patient's geographic location, the physician's ethical awareness, and the preferences and characteristics of both patients and their relatives. The city in which a

patient resides significantly affects decision-making, as the availability of private hospitals and operational palliative care centers influences treatment options. Physicians reported that in the absence of adequate palliative care facilities, they are often compelled to admit patients to the ICU. Furthermore, patients with limited prospects for recovery may have easier access to ICU beds in private hospitals. These conditions differ between major cities and smaller towns, with large urban centers such as Istanbul facing more pronounced organizational challenges.

Ethical awareness among physicians is critical when discussing futility with patients and their families. While some healthcare professionals advocate for providing all possible interventions regardless of futility, there is often resistance to transferring patients from palliative care to intensive care. Patients are initially triaged based on their medical conditions, and those receiving futile treatment in the ICU are typically categorized as end-of-life patients, long-term care cases, or victims of medical malpractice. In this context, an adequate number of palliative care centers, nursing homes, and hospices is essential. Notably, Türkiye currently has no operational hospices. One participant mentioned that maximal treatment was administered primarily due to concerns about medical malpractice, rather than the futility of care. Building trust between the medical team and patients or their families is a pivotal component of decision-making. The credibility of a patient or relative within the healthcare community can influence treatment decisions; for example, if a patient or their family member is a healthcare professional, especially a physician, their request to avoid intubation may be more readily accepted. Physicians emphasized the absence of legal regulations on advance directives in Türkiye, which leads them to decline patient requests to refuse certain interventions. However, if a patient or relative signs a formal refusal of treatment and chooses to leave the hospital, no legal repercussions occur. The unclear legal framework for advance directives often results in continued treatment for patients, even when care is medically futile, due to physicians' concerns about potential legal consequences.

Normative concepts shaping futility-related decisions

Several normative concepts were identified as influencing end-of-life decision-making: benefit, patient age, justice, and conscience. "Benefit" is frequently

assessed in terms of medical outcomes, though physicians acknowledged that a thorough evaluation of what constitutes benefit is often lacking.

Age also plays a role in decision-making, primarily through its association with comorbidities. Older patients, even those in relatively good health, are perceived as less likely to respond positively to treatment compared with younger individuals. Thus, chronological age serves as an indirect criterion requiring evaluation in relation to medical outcomes and ethical implications. The absence of clear guidelines regarding age or comorbidity raises concerns about potential discrimination against elderly patients.

Justice is another important factor, particularly regarding the fair allocation of limited resources. Physicians expressed a desire to use resources responsibly and distribute care equitably, yet emphasized that ultimate responsibility for resource allocation rests with policymakers and hospital administrators. Legal regulations and health policies largely guide these considerations.

Conscience emerged as a central normative concept in end-of-life decision-making. Physicians often rely on their personal conscience to navigate ethical dilemmas, drawing on religious beliefs, moral reflection, or concerns about future regret. Acting in accordance with conscience is seen as essential when making difficult decisions for terminal patients. One participant illustrated this point, noting the profound ethical weight of reducing life-sustaining interventions and the personal moral responsibility involved (D6).

While conscientious decision-making is universally recognized as a professional virtue, some physicians view reliance on personal conscience as sufficient for resolving ethical conflicts, potentially bypassing formal ethical frameworks or guidelines in clinical practice.

Discussion

Futility has long been considered a persistent challenge in clinical ethics, largely due to the absence of a universally accepted and operational definition [25]. Although medical decisions often rely on statistical evidence, establishing a minimum threshold for defining futility remains ethically and practically difficult [14]. Differences in clinical opinions among physicians across medical specialties further complicate the determination of whether a treatment is necessary [9]. Delays and challenges in decision-making or in communicating with

patients and their families can contribute to the administration of futile care [26]. Additionally, socio-cultural factors, variations in patient expectations, and differences in decision-making practices between countries add layers of complexity to defining and addressing medical futility [27, 28]. Research shows that factors driving futile treatment vary internationally, and purely evidence-based approaches may not suffice to prevent it. ICU settings worldwide report varying prevalence of futile care, shaped by different contributing factors across regions [8, 29, 30]. While this study focuses on Türkiye, its findings and proposed solutions may have broader applicability, especially in countries with comparable social systems, universal health coverage, or similar cultural structures [31]. Therefore, the recommendations could inform strategies beyond Türkiye's context.

This study underscores the multiple influences on ICU physicians' end-of-life decisions. While physicians claim to rely on medical consensus, the process for achieving such consensus remains unclear. Legal and social pressures heavily impact decision-making, and participants often view formal clinical-ethical guidelines as unnecessary. Physicians emphasized the centrality of conscientious decision-making, believing that personal reflection is essential. However, relying solely on individual conscience can introduce ethical challenges, as decisions may be influenced by personal preferences or biases.

A notable concern is the limited understanding among healthcare professionals of the value of clinical-ethical guidelines. Some perceive these guidelines as restrictive, but in reality, they provide frameworks for ethically justifiable and transparent decisions, highlighting potential pitfalls identified in prior studies [32]. Guidelines issued by health authorities or professional organizations are especially important in contexts where legal pressures are significant. Institutional policies, such as Do-Not-Resuscitate (DNR) protocols, have demonstrated improvements in ethical decision-making processes [33].

In Türkiye, conscience plays a particularly prominent role in physicians' end-of-life decision-making, more so than in many Western contexts. Conscience serves as an internal moral compass, guiding judgments about whether actions are ethically required or prohibited. Yet, conscientiousness alone is insufficient to guarantee ethically sound decisions [34]. Socio-cultural and religious influences strongly shape conscience, which is

also informed by individual interpretation and contemporary societal norms [35]. This study found that even when motivated by similar conscientious considerations, physicians made different decisions regarding futile treatments, underscoring the limitations of relying solely on conscience for clinical-ethical guidance.

Currently, Türkiye lacks specific clinical ethical guidelines addressing futile treatment. The Turkish Medical Association's "Ethical Declaration on End of Life" includes a section on futile care [36], providing a discussion framework but lacking the theoretical depth needed for effective guidance. The presence of hospital ethics committees is critical for supporting clinical teams [37]. Evidence suggests that ethical consultations reduce futile treatments [38] and help prevent burnout among healthcare professionals [39]. Nevertheless, the number of operational hospital ethics committees in Türkiye is fewer than five, and their effectiveness remains uncertain [40].

In addition to legal and ethical gaps, structural and organizational limitations significantly affect decision-making in futile care. Despite universal health coverage, Türkiye faces challenges due to insufficient palliative care facilities, nursing homes, and inefficient utilization of existing resources. Palliative care services are particularly important for alleviating ICU overcrowding, preventing unnecessary interventions, and avoiding the initiation of futile treatments.

Conclusion

This study demonstrates that physicians in Türkiye frequently make decisions regarding futile treatments without a standardized framework, often influenced by legal or social pressures. Conscience emerged as a central factor guiding these decisions. To ensure ethically sound practices, it is essential to optimize conditions within the treatment team by reducing hierarchical barriers and promoting the active involvement of all team members in decision-making. Key components of this optimization include the implementation of appropriate legal regulations, the establishment of hospital ethics committees, and the development of comprehensive clinical ethics guidelines. Transparent management of complex decision-making processes and professional team involvement are critical for ethically justified outcomes [32].

The study also highlights that Turkish physicians tend to prioritize conscience over formal ethical principles, treating it as a core operational standard rather than a personal or situational consideration. While conscience is important, it should not be the sole guide for clinical-ethical decisions.

As the first qualitative investigation of this topic in Türkiye, this study provides a foundation for future research aimed at identifying statistical patterns in intensive care physicians' decision-making. Future work should incorporate larger quantitative analyses and normative investigations to address the challenges identified here. Strengthening legal frameworks is vital to prevent unnecessary treatments and reduce defensive medicine practices. Physicians need clear knowledge of their legal rights and responsibilities, making medical law education and ongoing training critical. Equally important is fostering ethical awareness and decision-making skills within the medical team, free from hierarchical pressures.

Based on our findings, we propose a three-tiered action plan:

- **Systemic and Organizational Measures:** Minimize ICU admissions without medical indication. Ensure adequate numbers of functional palliative care centers and nursing homes.
- **Ethical Measures:** Develop and implement end-of-life care guidelines, regularly updated based on emerging evidence. Enhance ethical awareness through training for physicians and healthcare professionals. Establish clinical ethics committees nationwide.
- **Legal Measures:** Formulate regulations governing end-of-life decisions, grounded in the ethical guidelines developed previously.

This action plan aims to address end-of-life care in a coordinated, ethical, and legal manner. All three levels are equally important and should be implemented concurrently where possible, recognizing that legal reforms may require a longer timeline.

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References

1. Youngner SJ. Who Defines Futility? JAMA. 1988;260(14):2094–5.
2. Schneiderman L, Jecker N, Jonsen A. Medical futility: its meaning and ethical implications. 1990. Available from: <https://www.semanticscholar.org/paper/4def673f955fb5c4a99501f2fa85d254d057f944>.
3. Wilkinson DJC, Savulescu J. Knowing when to stop: futility in the intensive care unit. Curr Opin Anaesthesiol. 2011;24(2):160 Available from: / [pmc/articles/PMC3252683/](https://pubmed.ncbi.nlm.nih.gov/21164391/). Cited 2023 Dec 20.
4. Schneiderman LJ. Defining medical futility and improving medical care. J Bioeth Inq. 2011;8(2):123–31.
5. Aghabarary M, Nayeri ND. Medical futility and its challenges: a review study. J Med Ethics Hist Med. 2016;1(9):1–13.
6. Heland M. Fruitful or futile: intensive care nurses' experiences and perceptions of medical futility. Aust Crit Care. 2006;19(1):25–31.
7. Jecker NS, Pearlman RA. Medical futility: who decides? Arch Intern Med. 1992;152(6):1140–4.
8. Cardona-Morrell M, Kim J, Turner R, Anstey M, Mitchell I, Hillman K. Non-beneficial treatments in hospital at the end of life: A systematic review on extent of the problem International Journal for Quality in Health Care Advance Access. Int J Qual Health Care. 2016;28(4):456–69.
9. AlbisserSchleger H, Pargger H, Reiter-Theil S. "Futility"- Übertherapie am Lebensende? Gründe für ausbleibende Therapiebegrenzung in Geriatrie und Intensivmedizin. Zeitschrift für Palliativmedizin. 2008;9(2):67–75.
10. Brockmann H. Why is less money spent on health care for the elderly than for the rest of the population? Health care rationing in German hospitals. Soc Sci Med. 2002;55(4):593–608.
11. Michalsen A, Neitzke G, Dutzmann J, Rogge A, Seidlein AH, Jöbges S, et al. Überversorgung in der Intensivmedizin: erkennen, benennen, vermeiden. Medizinische Klinik-Intensivmedizin und Notfallmedizin. 2021;116(4):281–94.
12. Niederman MS, Berger JT. The delivery of futile care is harmful to other patients. Crit Care Med. 2010;38(10 Suppl). Available from: <https://pubmed.ncbi.nlm.nih.gov/21164391/>. Cited 2022 Sep 18.
13. Schweizerische Akademie der Medizinischen Wissenschaften (SAMW). Wirkungslosigkeit und

- Aussichtslosigkeit – zum Umgang mit dem Konzept der Futility in der Medizin. *Swiss Academies Communications*. 2021;16(6):27–51.
14. ZEKO. Stellungnahme der Zentralen Ethikkommission bei der Bundesärztekammer: Ärztliche Verantwortung an den Grenzen der Sinnhaftigkeit medizinischer Maßnahmen. Zum Umgang mit "Futility". *Dtsch Arztebl*. 2022;119(19):A888-B736. Available from: <http://daebl.de/DB71>. Cited 2022 Sep 17.
 15. Acar HV. Yararsız Tedavi. *Türkiye Biyoetik Dergisi*. 2016;3(2):74–84.
 16. Arda B, Aciduman A. Medical futility in Turkey. In: Bagheri A, Callahan D. editors. *Medical futility: A cross-national study*. London: Imperial College Press; 2013. p. 227–45.
 17. Öztürk Altınayak S, Yağmur Özorhan E, Ejder AS. Yenidoğanda Yararsız Bakım. *Anadolu Hemşirelik ve Sağlık Bilimleri Dergisi*. 2016;19(4):292–7.
 18. İskender MD. Yararsız Tedavi ve Yoğun Bakım Hemşireleri Üzerindeki Etkileri. *Van Tıp Dergisi*. 2018;25(3):437–40.
 19. Orkun N, Eşer İ, Çetin P. Yoğun Bakım Birimlerinde Çalışan Hemşirelerin Yararsız Tedavi ve Uygulamalara İlişkin Görüşleri. *Ege Üniversitesi Hemşirelik Fakültesi Dergisi*. 2018;34(1):79–90. Available from: <https://dergipark.org.tr/tr/pub/egehemsire/issue/36787/391979>. Cited 2022 Sep 15.
 20. Özden D, Karagözoğlu Ş, Yildirim G, Karagözoğlu Ş, Yildirim G, Karagözoğlu Ş, et al. Intensive care nurses' perception of futility: job satisfaction and burnout dimensions. *Nurs Ethics*. 2013;20(4):436–47. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/23411368>. Cited 2019 Dec 9.
 21. Yildirim G, Karagozoglu S, Ozden D, Cinar Z, Ozveren H. A scale-development study: Exploration of intensive-care nurses' attitudes towards futile treatments. *Death Stud*. 2019;43(6):397–405. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/29947583>. Cited 2019 Dec 9.
 22. Creswell JW. Nitel araştırma yöntemleri: Beş yaklaşıma nitel araştırma ve araştırma deseni (Çeviri Ed. M Bütün, SB Demir). Ankara: Siyasal Kitabevi; 2018.
 23. Charmaz K. Constructing grounded theory: A practical guide through qualitative analysis. London: SAGE publication; 2006. Available from: <http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:Theoretical+Sampling,+Saturation,+and+Sorting#0>. Cited 2020 Mar 2.
 24. Charmaz K. Grounded theory: Objectivist and constructivist methods. *Handbook of qualitative research*. 2000;2(1):509–35.
 25. McMillan J. Futility: A perennial issue for medical ethics. *J Med Ethics*. 2021;47(10):649. <https://doi.org/10.1136/medethics-2021-107866>. Cited 2022 Sep 29.
 26. Strätling M, Schmucker P. Entscheidungen am Lebensende in der Intensivmedizin. *AINS-Anästhesiologie Intensivmedizin Notfallmedizin Schmerztherapie*. 2005;40(06):361–75.
 27. Ilkilic I. Cultural aspects of ethical decisions at the end of life and cultural competence. *Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz*. 2008;51(8):857–64. Available from: <https://pubmed.ncbi.nlm.nih.gov/18787863/>. Cited 2023 Dec 20.
 28. Vincent JL. Ethical principles in end-of-life decisions in different European countries. *Swiss Med Wkly*. 2004;134(5–6):65–8.
 29. Palda VA, Bowman KW, McLean RF, Chapman MG. "Futile" care: do we provide it? Why? A semistructured, Canada-wide survey of intensive care unit doctors and nurses. *J Crit Care*. 2005;20(3):207–13.
 30. Kadooka Y, Asai A, Bito S. Can physicians' judgments of futility be accepted by patients? A comparative survey of Japanese physicians and laypeople. *BMC Med Ethics*. 2012;13(1). Available from: <https://pubmed.ncbi.nlm.nih.gov/22520744/>. Cited 2022 Sep 17.
 31. Bagheri A, Callahan D. *Medical futility: A cross-national study*. Medical Futility: A Cross-National Study. Imperial College Press; 2013. p. 1–294.
 32. Albisser Schleger H, Mertz M, Meyer-Zehnder B, Reiter-Theil S. *Klinische Ethik - METAP. Leitlinie für Entscheidungen am Krankenbett*. Berlin: Springer; 2012.
 33. Council on Ethical Judicial Affairs American Medical Association. *Medical Futility in End-of-Life Care Report of the Council on Ethical and Judicial Affairs Council on Ethical and Judicial Affairs, American Medical Association*. JAMA.

- 1999;281:937–41. Available from: <https://www.jama.com>. Cited 2019 Dec 10.
34. Beauchamp TL, Childress JF. Principles of biomedical ethics. 8th edn. Oxford: Oxford University Press; 2019.
 35. Helmchen H. Ärztliches Gewissen und Zeitgeist. *Nervenarzt*. 2015;86(3):340–5.
 36. Turkish Medical Association. Ethical declaration on the end of life. 2019. Available from: <https://www.ttb.org.tr/kutuphane/etikbildirgeler/2020.pdf>. Cited 2023 Dec 20.
 37. ZEKO. Bundesärztekammer, 24. Januar 2006. 2006. Stellungnahme der Zentralen Kommission zur Wahrung ethischer Grundsätze in der Medizin und ihren Grenzgebieten (Zentrale Ethikkommission) bei der Bundesärztekammer zur Ethikberatung in der klinischen Medizin. Available from: https://www.zentrale-ethikkommission.de/fileadmin/user_upload/_old-files/downloads/pdf-Ordner/Zeko/Ethikberatung.pdf Cited 2022 Sep 29.
 38. Schneiderman LJ, Gilmer T, Teetzel HD, Dugan DO, Blustein J, Cranford R, et al. Effect of Ethics Consultations on Nonbeneficial Life-Sustaining Treatments in the Intensive Care Setting: A Randomized Controlled Trial. *J Am Med Assoc*. 2003;290(9):1166–72. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/12952998>. Cited 2020 Feb 29.
 39. Moss M, Good VS, Gozal D, Kleinpell R, Sessler CN. An Official Critical Care Societies Collaborative Statement: Burnout Syndrome in Critical Care Healthcare Professionals: A Call for Action. *Crit Care Med*. 2016;44(7):1414–21. Available from: <https://pubmed.ncbi.nlm.nih.gov/27309157/>. Cited 2022 Sep 18.
 40. Demir M, Büken N. Dünyada ve Türkiye’de hastane/klinik etik kurulları. *Hacettepe Tıp Dergisi*. 2010;41(3):186–94.