Nurses' Perception of Futile Care: A Systematic Review

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ABSTRACT

Background: Advances in medical technology have improved patient survival; however, the continuation of treatment at the end of life often raises ethical and professional concerns, particularly when such care is perceived as futile. Nurses, due to their continuous bedside presence, are frequently involved in and affected by decisions related to futile care.

Methods: This review aimed to synthesize existing literature on nurses' perceptions of futile care, including how futility is defined, factors influencing these perceptions, and the professional outcomes associated with providing such care. A systematized systematic review was conducted in accordance with PRISMA guidance. PubMed, Medline, ProQuest, and Google Scholar were searched for relevant English-language studies published between 1980 and 2020. Qualitative, quantitative, and mixed-methods studies focusing on nurses' perceptions of futile care were included. Due to methodological diversity among studies, findings were synthesized narratively.

Results: Twenty-two studies met the inclusion criteria. Across settings, nurses' perceptions of futile care ranged from moderate to high. Futile care was commonly described as treatment lacking physiological benefit, prolonging the dying process, or failing to improve quality of life. Factors influencing perception included family insistence on continued treatment, cultural and religious values, interprofessional conflict, and organizational constraints. Perceived futile care was consistently associated with moral distress, emotional exhaustion, burnout, and reduced job satisfaction among nurses.

Conclusion: In conclusion, nurses frequently encounter and perceive futile care in critical care environments, with notable ethical and occupational consequences. Interventions focusing on education, communication, multidisciplinary decision-making, and institutional support may help reduce moral distress and improve the quality of end-of-life care.

Keywords: Futile Care, Medical futility, Nurses' perception, Intensive care, Moral distress, End-of-life care.

INTRODUCTION

Caregiving represents a foundational element of nursing practice, distinct from curative medical treatment. Nursing aims to provide holistic care that addresses the physical, spiritual, and psychosocial needs of patients to promote well-being and dignity across all health states (Taylor et al., 2015). This philosophy underscores a therapeutic relationship that persists irrespective of prognosis (Beckstrand et al., 2006; Zamanzadeh et al., 2014). The sustainability of such care models is influenced by nursing retention and organizational culture (Neuhauser, 2002). The concept of caring and its perception among healthcare workers has been explored in various clinical contexts, including those where technical and psychosocial aspects intersect (Bolderston et al., 2010; DalPezzo, 2009; Rytterström et al., 2009).
The term "medical futility" emerged in ethical discourse in the 1980s and remains a subject of vigorous debate in clinical and policy arenas (Gabbay et al., 2010). In intensive and surgical care contexts, decisions regarding the continuation of aggressive treatments versus the integration of palliative services present persistent challenges (Bradley et al., 2010). Nurses in critical care settings often report experiences where end-of-life care intersects with perceptions of futility and ethical conflict (Espinosa et al., 2010). The delivery of care judged to be futile carries opportunity costs and potential harms for other patients and the healthcare system at large (Niederman & Berger, 2010). National surveys have documented the prevalence of perceived futile care and highlighted its significant resource implications (Palda et al., 2005).

Perceptions of futility vary across professional groups. physicians, nurses and other clinicians frequently divergent views about when life-sustaining treatment should be continued or withdrawn (Sibbald et al., 2007; Wilkinson & Savulescu, 2011). Empirical evidence suggests nurses may report higher frequencies of perceived futile care than physicians and experience greater associated stress (Palda et al., 2005; Rice et al., 2008). Research on moral distress identifies perceptions of futility as a major contributing factor among nursing staff (Vemuri & Playfor, 2006), a phenomenon also observed in pediatric and perioperative environments where definitions of inappropriate care are contested (Vemuri & Playfor, 2006).

Because nurses spend more time at the bedside, their observations and perceptions regarding the appropriateness of interventions are particularly salient to patient-centered care and quality measurement (DalPezzo, 2009). Com(Rice et al., 2008) parative and qualitative research has explored the emotional and professional consequences of providing care perceived as futile, including moral distress, decreased job satisfaction and burnout (Heland, 2006; Kadooka et al., 2014; Mobley et al., 2007; Robinson, 2010; Rostami et al., 2019). Empirical studies and concept analyses further emphasize that futility is shaped by cultural, institutional and personal factors, and the literature calls for contextualized approaches to understanding the construct (Bahramnezhad et al., 2014; Borhani et al., 2015; Meltzer & Huckabay, 2004; Shorideh et al., 2012).

Research from multiple regions indicates variability in nurses' knowledge, attitudes and behaviors related to futile treatment and end-of-life care (ASADI & SHAMS, 2014; Ganske, 2010; Piers et al., 2011; Rady et al., 2006; Wilkinson & Savulescu, 2011). Given this heterogeneity and the critical role nurses play in end-of-life decision-making, a systematic synthesis of the literature is warranted to clarify definitions, determinants and outcomes and to identify potential interventions.
This variability causes confusion in clinical practice and makes it hard to create helpful policies for nurses. Even though many studies show that nurses experience moral distress from futile care, we still do not fully understand what nurses mean by "futile," which factors shape their views the most, or what specific outcomes occur in different countries and cultures.

Objectives of the Review

The objectives of this review were to:

(1) explore how futile care is defined and conceptualized in nursing literature;

(2) examine nurses' perceptions and experiences of futile care;

(3) identify factors influencing these perceptions; and

(4) synthesize reported professional and ethical outcomes associated with perceived futile care.

METHODOLOGY

Design and Reporting

This review was conducted as a systematized systematic review. While it follows key elements of systematic review methodology such as a structured literature search, transparent selection criteria, and systematic data synthesis, but it does not include all components of a full systematic review, such as duplicate independent screening or formal meta-analysis. This approach was chosen due to the heterogeneity of study designs, outcomes, and measurement tools across the included literature.

Search Strategy

A comprehensive literature search was conducted using PubMed, Medline, ProQuest, and Google Scholar. Search terms included combinations of "futile care," "medical futility," "futile treatment," "end-of-life care," "nurses," and "perception." Boolean operators were applied to refine the search strategy. Titles and abstracts were screened for relevance, followed by full-text review of potentially eligible articles. Study Selection Process

Study Selection Process

The first author (HZ) reviewed all titles and abstracts. To check agreement, a second author (NU) independently screened 30% of them. We discussed any disagreements until we reached consensus. For the full-text review, both HZ and AN independently assessed eligibility, and any differences were resolved through discussion with all authors.

Data Extraction

HZ collected data with a standardized form that included authors, year, country, study design, sample, setting, and main findings about definitions, perceptions, factors, and outcomes. NU checked all the extracted data.

Quality Appraisal

A formal risk-of-bias assessment was not done due to the inclusion of various study designs and the absence of a single appraisal tool applicable across qualitative and quantitative methodologies. This limitation is acknowledged and considered when interpreting the findings of the review.

Eligibility Criteria

Studies were eligible if they addressed nurses' perceptions of futile care and used qualitative, quantitative, phenomenological, descriptive, cross-sectional or mixed-methods designs.

Exclusion Criteria

Seminars, presentations, essays; articles not in English without translation; studies with unavailable full text; and abstracts only.

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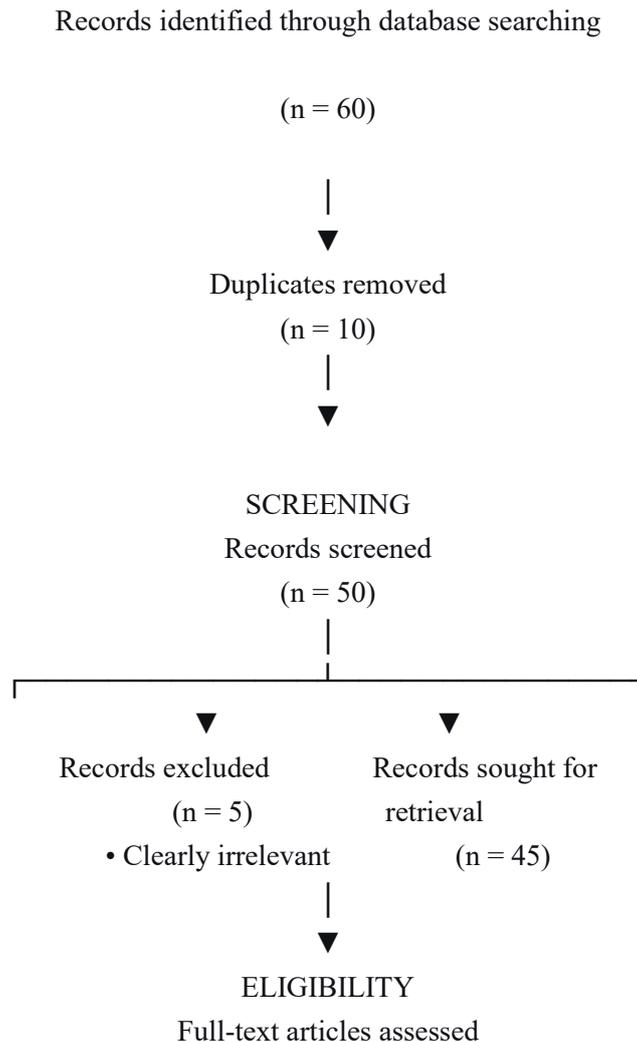
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Data Synthesis

Because studies varied so much, we used narrative synthesis rather than statistical meta-analysis. We grouped findings by our four research questions and looked for patterns across studies.

Study Selection and Data Extraction

Four electronic databases were searched systematically, yielding 60 potentially relevant records. After removing 10 duplicates, 50 unique records remained for title and abstract screening. In the initial screening, five records were excluded as clearly irrelevant to the review aims. The remaining 35 full-text articles were retrieved and evaluated for eligibility against the inclusion criteria. Of these, 13 articles were excluded for the following reasons: duplicate publications (n=3), full text unavailable despite requests (n=4), conference abstracts without full papers (n=3), and not meeting inclusion criteria upon detailed review (n=3). Consequently, 22 studies satisfied all eligibility criteria and were included in the narrative synthesis.

Below is the PRISMA flow diagram,

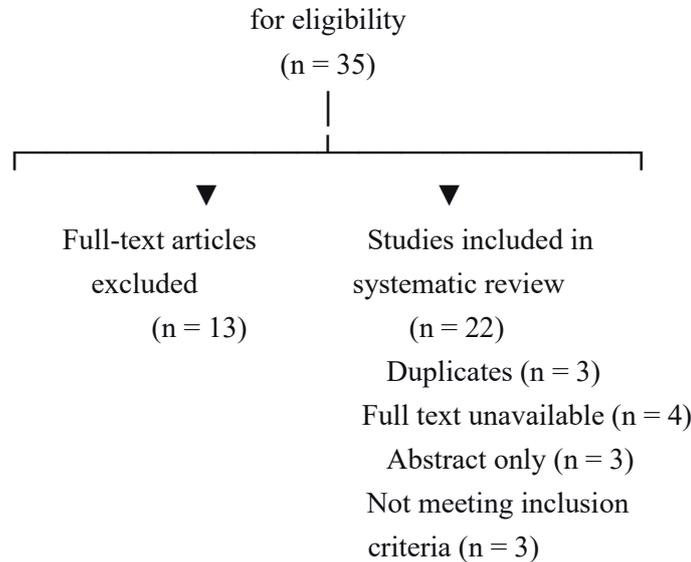Records identified through database searching

(n = 60)

Duplicates removed
(n = 10)

SCREENING
Records screened
(n = 50)

Records excluded
(n = 5)
• Clearly irrelevant

Records sought for
retrieval
(n = 45)

ELIGIBILITY
Full-text articles assessed

for eligibility
(n = 35)

Full-text articles
excluded
(n = 13)

Studies included in
systematic review
(n = 22)

Duplicates (n = 3)

Full text unavailable (n = 4)

Abstract only (n = 3)

Not meeting inclusion
criteria (n = 3)

Figure 1: PRISMA Flow Diagram of Study Selection Process

RESULTS

Study Characteristics

A total of 22 included studies covered diverse geographic contexts (United States, Canada, Europe, Australia, Japan, Iran, Turkey, Iraq, Portugal) and a range of methodological approaches There were 10 quantitative studies (surveys), 10 qualitative studies (interviews, phenomenology), 1 concept analysis, and 1 systematic review. Sample sizes ranged from 7 nurses in qualitative studies to 1,953 clinicians in large surveys.

How nurses define futile care: Instead of one definition, nurses described futile care in three overlapping ways:
Medically pointless: Treatment that won't help the patient survive or recover
Prolonging suffering: Keeping patients alive when death is inevitable, just extending the dying process
Life without quality: Maintaining biological life without meaningful improvement in how the patient experiences life.

Table 1: Studies Defined Futile Care

Author (Year)	Country	Core Definition	Important Context
Beckstrand et al. (2006)	USA	Care that doesn't improve prognosis or quality of life	Focused on nurse suggestions for improvement
Zamanzadeh et al. (2014)	Iran	Treatment without survival benefit	Studied nursing students' perceptions
Young et al. (2009)	UK	Prolonging the dying process	Recommended palliative care approaches
Sibbald et al. (2007)	Canada	Care the clinical team sees as inappropriate	Highlighted team disagreements

Definitions and Conceptualization

Across the included literature, futility was variably defined. Young et al. outlined operational issues related to end-of-life guidance (Young et al., 2005), while other sources discussed attitudes among anesthesiologists and specialty practices related to medically futile care (Saettele & Kras, 2013). Palliative care frameworks were contrasted with futility discussions emphasizing goals of symptom control and quality-of-life (Rome et al., 2011). Perception and cognition literature provided theoretical background on how clinicians interpret complex stimuli and make judgments about appropriateness of care (Kasman, 2004).

Level of perception and prevalence: Several studies reported moderate to high levels of perceived futile care among nurses and clinicians. Historical definitions and dictionary entries illustrated semantic breadth of the term and underlined the need for context-dependent application (Schneiderman & Care, 2011). Empirical studies in oncology and critical care highlighted moral distress among nurses witnessing medically futile care (Ferrell, 2006; Mcmillen, 2008).

Key included study findings: A selection of included studies reported that nurses identified multiple barriers to providing optimal end-of-life care: inadequate involvement in care planning, conflict between medical and nursing models, family expectations and insistence on continued treatment, and lack of communication skills and resources to mediate conflicts (Calvin et al., 2009; Cardoso et al., 2003; Nurs, 2014; Piers et al., 2015; Rafii et al., 2015; Yekefallah et al., 2015). National and regional surveys emphasized the need for training, mediation resources and institutional support (*Nursing Students' Perceptions of the Importance of Caring Behaviors*, 2007; *Reproduced with Permission of the Copyright Owner. Further Reproduction Prohibited without Permission.*).

Table 2: Summary of Studies Included

Authors (Year)	Country	Design	Sample / Setting	Tools	Main findings
1. **Beckstrand et al. (2006)[2]**	USA	Qualitative / Survey	ICU nurses (n = 1409)	Questionnaire	Need for improvement in end-of-life care; suggestions from experienced nurses may increase quality.
2. **Bahramnezhad et al. (2014)[29]**	Iran	Hybrid concept analysis	ICU nurses (n=7)	Semi-structured interviews	Futile care affected by cultural, communication, system factors.
3. **Rezaei et al. (2018)[35]**	Iran	Cross-sectional	Nurses & physicians (n total 171)	Questionnaire	Nurses reported higher perception scores than physicians; nurses experienced greater stress.
4. **Meltzer & Huckabay (2004)[26]**	USA	Descriptive	ICU nurses (n = 60)	Corley's Moral Distress Scale	Significant relationship between futile care perception and burnout.

5.	Ferrell et al. (2006)[47]	USA	Descriptive	Nurses (n = 180)	Moral distress scale	Futile care contributes to moral distress; need to reduce ethical complexity.
6.	Heland et al. (2006)[18]	Australia	Qualitative	ICU nurses (n = 7)	Semi-structured interviews	Nurses' experiences used to overcome challenges of futile care.
7.	McMillen et al. (2008)[48]	UK	Qualitative	ICU nurses (n = 8)	Interviews	Nurses play a key role in end-of-life care; ethical issues need resolution.
8.	Sibbald et al. (2007)[13]	Canada	Qualitative	Physicians, nurses, RTs (n = 44)	Interviews	Family insistence, poor communication, team conflicts drive futile care occurrence.
9.	Mobley et al. (2007)[24]	USA	Cross-sectional	CCU nurses (n = 100)	Corley's Scale	Perception of futile care associated with moral distress; need for planning.
10.	Calvin et al. (2009)[49]	USA	Qualitative	CCU nurses (n = 19)	Interviews	Exhausting treatments; promote family presence; ethical dilemmas.
11.	Ehsan & Reyhane (2014)[31]	Iran	Descriptive-analytic	ICU nurses (n = 140)	Questionnaire	Nurses focused more on technical than psychosocial care.
12.	Piers et al. (2011)[50]	Europe/Israel	Descriptive analysis	ICU clinicians (n = 1953)	Questionnaire	Imbalance between provided care and prognosis; autonomy & workload issues.
13.	Teixeira et al. (2012)[51]	Portugal	Descriptive	ICU clinicians (n = 183)	Questionnaire	Need for education and better communication between nurses and physicians.
14.	Yekefallah et al. (2015)[52]	Iran	Phenomenological	ICU nurses (n = 25)	Interviews	Need to acknowledge nurse role, design programs to decrease waste and discomfort.

15. **Mohammadi et al. (2015)[53]**	Iran	Cross-sectional	ICU/CCU/NICU nurses (n = 170)	Questionnaire	Nurses had moderate knowledge and perception of futile care.
16. **Borhani et al. (2015)[28]**	Iran	Descriptive	ICU nurses (n = 300)	Corley's Scale	Significant relationship between moral distress and perception.
17. **Rafii et al. (2016)[54]**	Iran/Iraq	Phenomenological	ICU nurses (n = 10)	Interviews	Need for psychological support and cross-cultural research.
18. **Wilkinson & Savulescu (2011)[32]**	Review	Systematic review	Multiple studies	Literature review	Decisions to withdraw/withhold are complex and value-laden; criteria for futility remain elusive.
19. **Özden et al. (2013)[36]**	Turkey	Qualitative / Survey	ICU nurses (n = 138)	Questionnaire	Moderate job satisfaction; weak but significant relationship with futile care perception.
20. **Kadooka et al. (2014)[22]**	Japan	Survey	Nurses & laypeople (n = 17,690)	Questionnaire	Historic/cultural practices; ritualistic benefits noted.
21. **Palda et al. (2005)[15]**	Canada	Survey	ICU clinicians (n = 255)	Semi-structured survey	Need for negotiation skills and mediation resources.
22. **Espinosa et al. (2010)**	USA	Qualitative phenomenological	18 ICU nurses	(individual interviews & focus groups)	Nurses experience barriers to optimal terminal care including perception of futile care, lack of involvement in decisions, and internal conflict leading to moral distress.

DISCUSSION

Our review of 22 international studies shows that perceptions of futile care constitute a substantial, multifaceted challenge in nursing practice. Three principal analytical insights emerge from the data. First, definitional variability itself is a central finding nurses assess futility through three distinct perspectives: physiological benefit (or its absence), reduction of suffering, and preservation of quality of life. This tripartite framework helps account for documented interprofessional disagreements; physicians tend to emphasize physiological criteria, while nurses incorporate broader holistic assessments (Sibbald et al., 2007; Wilkinson & Savulescu, 2011).

Secondly, the identified factors family dynamics, team communication, and institutional policies operate in a reinforcing cycle rather than in isolation. For example, when nurses are excluded from decision-making (a team factor), families may receive incomplete prognostic information, prompting them to insist on continuing treatment (a family factor), which then fosters perceptions of futility. This cyclical relationship suggests that interventions targeting a single factor may have limited impact unless the broader interconnected system is addressed (Borhani et al., 2015; Calvin et al., 2009).

Third, the uniform presence of negative outcomes across varied cultural and healthcare settings is especially striking. Moral distress functions not only as a consequence but as a mediating mechanism that links perceptions of futile care to burnout, reduced job satisfaction, and potentially diminished patient care quality (Meltzer & Huckabay, 2004; Rostami et al., 2019). This pattern endures despite differences in prevalence, suggesting universal aspects of the nursing role in end-of-life care that transcend specific healthcare systems. Various levels of nurses' perceptions of futile care in previous studies might be due to different methods of service provision because of different treatment protocols and cultural differences in various countries, and also hospitals of the same country, as well as the application of different data collection tools in designing and subjects of studies (Piers et al., 2011).

These results correspond to well-established models of moral distress in healthcare. Jameton's 1984 foundational idea of moral distress the mental discomfort that arises when one knows the right action but cannot carry it out offers a helpful lens for interpreting nurses' experiences. Similarly, the tension between the principles of beneficence (doing good) and non-maleficence (avoiding harm) becomes more pronounced when treatments extend life biologically without providing meaningful benefit (Beauchamp & Childress, 2019). Earlier systematic reviews of futile care largely concentrated on ethical frameworks or physician viewpoints (Wilkinson & Savulescu, 2011).

Our review broadens this literature by showing how these ethical dilemmas arise in nursing practice across various countries. The association between perceiving care as futile and a decline in caring behaviors (Rostami et al., 2019) stands out as a particularly important finding, since it implies effects that extend beyond nurses' own well-being and may threaten fundamental aspects of patient care quality.

Implications for Clinical Practice

Hospitals need clear policies that include nurses in end-of-life decisions. Regular team meetings with structured communication could reduce conflicts. Ethics committees should be accessible to nurses, not just doctors. Training in difficult conversations might help nurses communicate better with families include the need for clearer institutional policies on end-of-life decision-making that explicitly include nursing perspectives and promote multidisciplinary deliberation. Training programs to improve

communication and negotiation skills for nurses, physicians and families may reduce conflicts and perceived futility. Establishing ethics consultation and mediation services, as well as offering psychosocial support and debriefings, can mitigate moral distress and reduce burnout.

Limitations of this review include the systematized approach without a formal risk-of-bias assessment across all included studies, potential publication bias due to database selection, and the reliance on studies with heterogeneous designs and instruments. Nevertheless, the review provides a broad synthesis across regions and methodologies and highlights consistent themes warranting action and further research.

Future research should aim to develop standardized operational definitions of futile care to enable empirical measurement and to evaluate interventions educational, policy-based, and psychosocial—that address perceptions and outcomes related to futile care.

CONCLUSION AND RECOMMENDATIONS

Conclusion

Based on 22 studies from nine countries, we conclude that nurses frequently encounter care they perceive as futile, especially in intensive care. They define futility in terms of medical benefit, suffering reduction, and life quality. Family pressures, team communication problems, and inadequate hospital policies contribute to these perceptions. The consistent consequence is moral distress, which contributes to burnout and may affect how nurses care for patients. These findings suggest hospitals should actively involve nurses in end-of-life decisions and provide better ethics support.

Practical Recommendations

• Adopt institutional policies that include nursing representation in end-of-life decision-making.
• Provide regular training workshops on communication, ethics, and palliative care for ICU staff.
• Establish mediation and ethics consultation services to manage family–clinician disputes.
• Offer psychosocial support and structured debriefing sessions for staff exposed to morally distressing situations.

DATA AVAILABILITY

The data extracted and analyzed during this systematic review are available from the corresponding author upon reasonable request. All source data are from publicly available published studies.

CONFLICT OF INTEREST

All authors declare no conflicts of interest.

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No external funding was received for this review.

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APPENDICES

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