

# Mapping the Ethical Landscape of Euthanasia: A Bibliometric Analysis of Global Research

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## Abstract

Euthanasia remains one of the most debated issues in contemporary bioethics, raising complex questions about patient autonomy, professional responsibility, and legal regulation. This study applies a bibliometric and scientometric approach to map the global research landscape on euthanasia and ethics. Publications indexed in Scopus from 2000 to 2025 were retrieved and analyzed using co-citation, keyword co-occurrence, and cluster network visualization. The results reveal three major thematic domains: (1) Institutional controversies and ethical pluralism - legal, professional, and cultural perspectives on euthanasia, (2) Autonomy and psychological suffering - ethical reflections on euthanasia in mental and vulnerable populations, (3) Clinical ethics and end-of-life decision-making - professional attitudes, institutional practices, and medical guidelines. Temporal analysis indicates a growing focus on patient-centered ethical debates and legislative controversies in the past decade. Highly cited studies and influential co-cited works form the intellectual foundation of this field, while emerging clusters highlight debates around palliative care integration and moral distress among healthcare professionals. This study provides a comprehensive overview of research trends and thematic evolutions, offering valuable insights for scholars, policymakers, and practitioners engaged in end-of-life ethics.

## Keywords

Euthanasia, Medical Ethics, Bioethics, End-of-life Decisions, Assisted Dying

## 1. Introduction

Euthanasia remains one of the most ethically contested topics within contemporary bioethics, raising profound questions about autonomy, dignity, the role of medical professionals, and societal values surrounding life and death [1]. As advances in medical technology have extended the possibilities of life prolongation, debates over the moral permissibility and legal regulation of euthanasia have intensified worldwide. These discussions are intricately linked to broader concerns about patient rights, end-of-life care, and the evolving role of ethics in shaping health policies [2,3].

Over the past two decades, scholarly interest in euthanasia ethics has grown substantially, reflecting shifts in cultural attitudes, legal frameworks, and clinical practices. Countries vary widely in their legislative approaches, ranging from full legalization and regulation to strict prohibition, which in turn influences academic inquiry and public discourse [2,4]. Moreover, emerging issues such as physician-assisted death, advance directives, and palliative sedation have expanded the scope of ethical debates beyond traditional definitions of euthanasia, underscoring the complexity of this field [5,6].

While numerous qualitative and narrative reviews have explored specific ethical arguments and regional case studies, a comprehensive quantitative assessment of the global research landscape on euthanasia ethics is lacking. This study aims to fill this gap by conducting a bibliometric analysis of euthanasia ethics research published between 2000 and 2025. Utilizing major academic databases, we analyze temporal publication patterns, geographical contributions, collaborative networks, and keyword co-occurrence to map the development and diversification of ethical discourse on euthanasia. By doing so, we seek to elucidate the dynamic contours of the field, highlight influential research clusters, and reveal shifts in thematic focus over time. This work contributes to a clearer understanding of how ethical considerations surrounding euthanasia have evolved in response to social, legal, and medical changes globally. Such knowledge is essential to inform ongoing debates and guide ethically sound policies that respect patient autonomy while safeguarding societal values.

## 2. Materials and Methods

In this study, we retrieved data from the SCOPUS database from January 1, 2020 to June 30, 2025. The key focuses include: (1) Terms related to euthanasia (search terms include euthanasia, physician-assisted suicide, assisted suicide, medical aid in dying, doctor-assisted death, voluntary euthanasia, involuntary euthanasia), (2) Ethics-related terms (search terms include ethics, ethical, bioethics, clinical ethics, moral, morality, moral dilemma, ethical decision-making). We search in the "Title, Abstract or Keywords" section. The Article type is limited to "Article" and "Review", and the language is restricted to English. The retrieval at this stage generated 3,477 documents.

To ensure the validity of the included literature, we adopted a two-person manual screening process. This step is of vital importance. For instance, some literature is about the research on euthanasia of experimental animals, or the research topic has nothing to do with euthanasia, etc., which causes confusion in the search. These cases were resolved through manual review. After a double-blind screening process, the two researchers discussed and finally determined the list of papers to be included. The Kappa value of the screening results is 0.809, indicating that the codes are reliable. The Kappa value is used to measure the consistency among reviewers and to assess the accuracy of screening. Ultimately, 769 documents were included in the final analysis.

For the bibliometric analysis in this study, we used VOSviewer software for quantitative analysis, including keyword co-occurrence and citation coupling. To supplement the quantitative analysis, we conducted a content analysis on the three clusters identified in the co-occurrence keyword analysis.

### 3. Study the Main Distribution Characteristics

#### 3.1 Research Time Distribution Characteristics

The temporal distribution of publications in this field since 2000 demonstrates a clear pattern of progressive growth and thematic evolution (Figure 1). During the initial phase (2000-2010), the annual number of publications remained relatively low, generally ranging between 10 and 20 papers per year. Research during this period primarily focused on foundational ethical issues related to end-of-life care, such as active euthanasia, life-sustaining treatment, and clinical decision-making, reflecting an emphasis on core clinical ethics and moral dilemmas.

From 2011 to 2018, the field experienced steady growth in publication volume, with a noticeable increase post-2015. This phase marks an expansion of research foci to encompass legal frameworks, qualitative methodologies, and broader bioethical concerns. Keywords with average publication years clustered around 2016 to 2018—such as “physician assisted death,” “medical ethics,” and “law”—indicate an interdisciplinary integration of ethical, legal, and social perspectives. Correspondingly, leading contributions emerged from established research hubs in Canada, the United Kingdom, and Germany, underscoring the maturation of the field.

Since 2019, the volume of research outputs has sharply increased, peaking at over 80 publications annually in recent years. This surge corresponds with a shift toward emerging topics including medical assistance in dying, clinical ethics in practice, mental health considerations, and evidence-based guidelines. Notably, the average publication year for terms like “medical assistance in dying” is as recent as 2022, highlighting the rapid emergence of new ethical challenges linked to technological and societal developments. Concurrently, the geographic distribution of research is diversifying, with rising contributions from countries such as China and India, indicating the globalization and broadening relevance of the field.

Overall, the research timeline reveals a trajectory from foundational clinical ethics toward more complex, interdisciplinary, and practice-oriented topics, reflecting ongoing responsiveness to evolving medical technologies, legal contexts, and societal values.

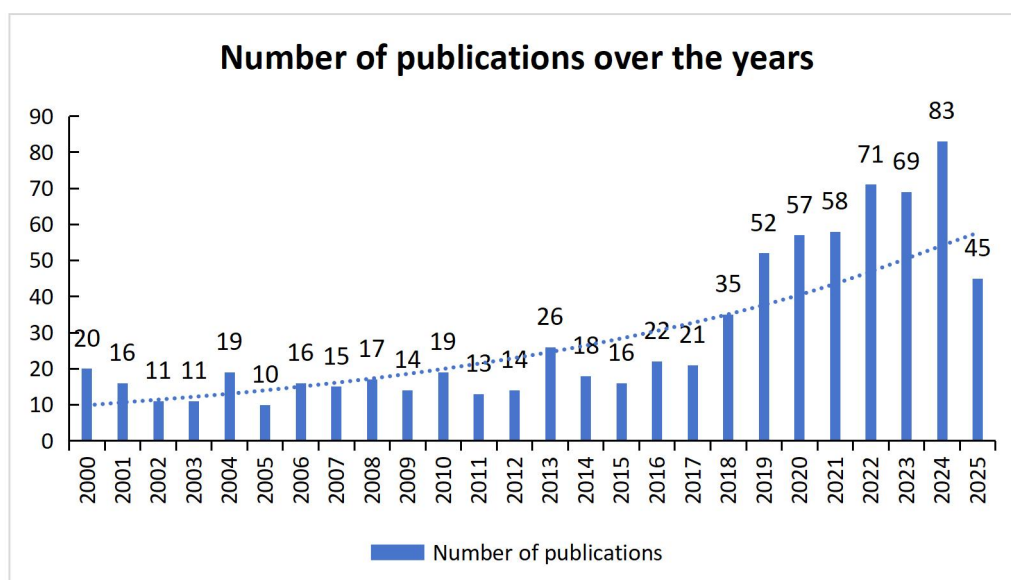


Figure 1. Number of publications over the years

#### 3.2 Distribution Characteristics of Authors

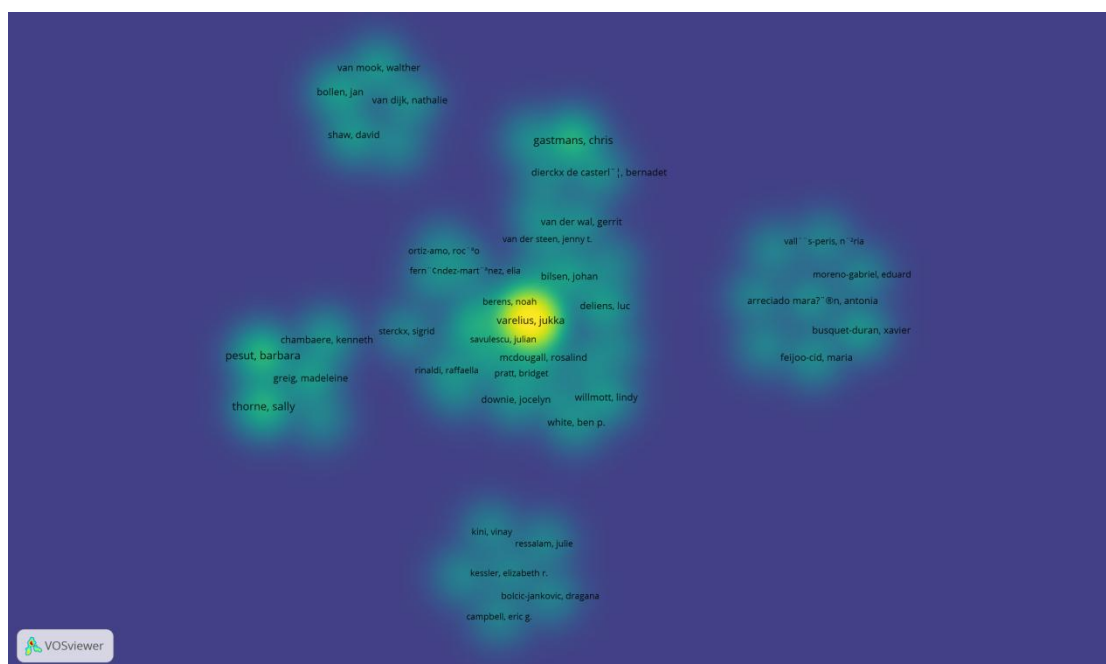
The distribution of authors in the field of euthanasia and ethics reflects a diverse and evolving scholarly landscape characterized by both established thought leaders and emerging voices (Figure 2). From a temporal perspective, the majority of high-impact contributions have appeared within the past decade, with a marked concentration in the years

following 2020. Notably, several recently active authors—such as Antonia Arreciado Marañón, Xavier Busquet-Duran, and Núria Vallès-Peris—have published predominantly after 2023 and already demonstrate above-average normalized citation scores (often >1.4), indicating early academic recognition and relevance.

Long-standing contributors continue to anchor the field through sustained influence. Scholars such as Luc Deliens (321 citations), Johan Bilsen (267), and Joachim Cohen (232) have played central roles in shaping empirical and policy discussions surrounding euthanasia, particularly within European healthcare systems. In parallel, bioethicists like Udo Schuklenk and Julian Savulescu have achieved high normalized citation scores (4.60 and 3.31, respectively), highlighting their enduring impact on theoretical debates concerning autonomy, moral permissibility, and professional responsibility.

Patterns of co-authorship and total link strength reveal a collaborative ethos, with tightly connected author networks frequently emerging around institutional centers in Belgium, Canada, and Australia. Figures such as Sally Thorne and Barbara Pesut exemplify this dynamic, showing both high publication output and integration into influential research teams.

Overall, the author landscape in this domain demonstrates a robust interplay between empirical inquiry and ethical reflection, supported by international collaboration and a steady influx of new researchers. These dynamics collectively suggest a maturing field that continues to respond to evolving societal, legal, and clinical challenges related to end-of-life decision-making.



**Figure 2.** The Density Visualization of Co-authorship

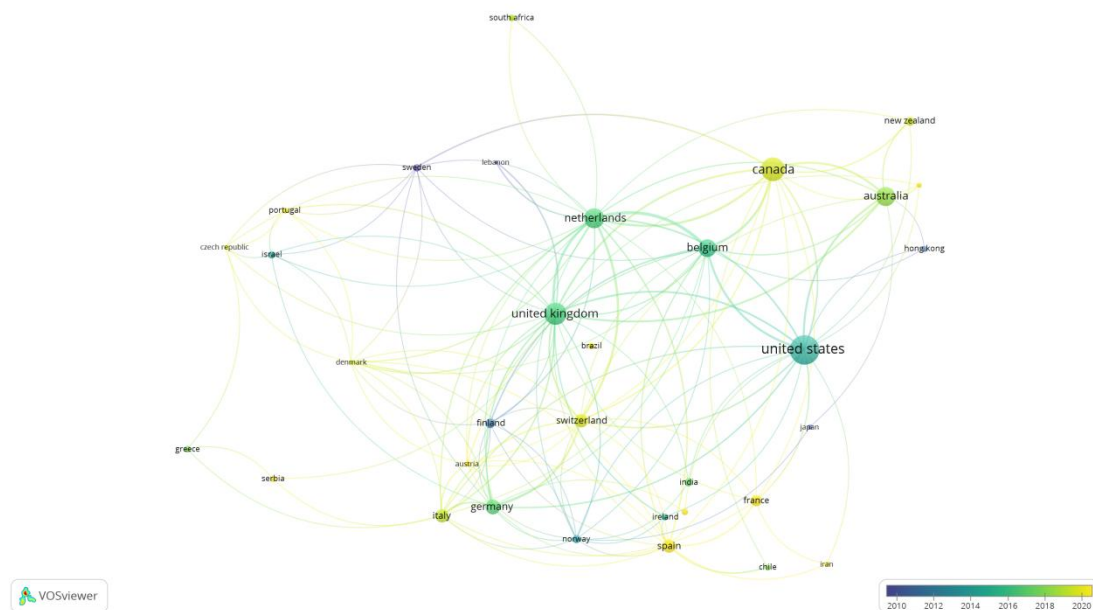
### 3.3 Study the Distribution Characteristics of Countries and Regions

The geographical distribution of research on euthanasia and ethics reveals a concentration of scholarly activity in Western countries, with notable contributions from Belgium, Canada, the Netherlands, the United Kingdom, and the United States (Figure 3). Belgium stands out as a major hub, with 55 publications, 1297 citations, and a high normalized citation score (1.56), reflecting its central role in both empirical and normative debates on end-of-life decision-making. Similarly, Canada (97 publications) and the Netherlands (73) demonstrate strong academic output and influence, each exhibiting high total link strengths (41 and 67 respectively) and robust citation metrics.

The United States, despite having the largest number of documents (159) and total citations (1946), shows a relatively moderate normalized citation score (0.89), suggesting broader but less concentrated scholarly impact. Australia and the United Kingdom also emerge as significant contributors, with high document counts (68 and 88, respectively) and balanced citation profiles. In contrast, countries such as Denmark, Sweden, and Norway—despite lower publication volumes—achieve high average citation rates and normalized citation scores, indicating the quality and influence of their limited output.

Emerging participation from non-Western countries is observed, including China, India, Brazil, and South Africa; however, their contributions remain limited in both volume and citation impact. Notably, countries like Indonesia and Lebanon, although publishing fewer papers, report above-average normalized citation scores (>1.4), signaling the relevance and timeliness of their contributions.

Overall, the geographical analysis reflects a Euro-American dominance in the field, supported by regional hubs with strong collaborative networks. While emerging countries are beginning to engage in the discourse, the field remains anchored in high-income, policy-active nations with well-established bioethical and palliative care frameworks.



**Figure 3.** The Overlay Visualization of Co-authorship Countries

## 4. Thematic Analysis

### 4.1 Keywords Co-occurrence Network

This study analyzed 1,717 author keywords extracted from the collected papers. After data cleaning and synonym merging, it focused on keywords with a frequency greater than 5. To enhance the clarity of clustering and emphasize the main research topics, five minimum clustering scales were adopted. This process generated 83 keywords that appeared more than five times, forming three different clusters with a total link strength of 2,634.

#### 4.1.1 Keywords Frequency Analysis

Content analysis shows that among these keywords, 43 appeared more than 10 times (Figure 4), 9 appeared more than 50 times, and 4 appeared more than 100 times (respectively euthanasia, assisted death, physician assisted death)

ethics. These findings indicate that researchers generally focus on euthanasia and its various forms of naming and ethical controversies, highlighting the field's ongoing concern over conceptual definitions and value conflicts. Among them, "euthanasia" appears frequently as a core term, reflecting its fundamental position in policy discussion, medical practice and moral judgment; The frequent coexistence of "assisted death" and "physician assisted death" reveals the subtle differences in the use of terms in the academic circle, which may be related to the legislative context, cultural background or research position of different countries. The frequent appearance of "ethics" emphasizes that research in this field is centered on ethical review and involves issues such as the value of life, dignity, and autonomy.

The distribution of key words also indicates that the research topics in this field are relatively concentrated, but there is a trend of cross-use and evolution among different key words, suggesting that future research should pay more attention to the standardization of term selection and the value framework it reflects. In addition, the aggregation of such high-frequency keywords also provides a solid foundation for subsequent co-word analysis and topic evolution research, which is conducive to further clarifying the knowledge structure and development trajectory of this field.

#### 4.1.2 Average year of Keyword Co-occurrence

The analysis of the average publication year of keyword co-occurrence provides valuable insights into the temporal evolution of research themes within the field. The keywords exhibit a distribution of average publication years spanning roughly from 2007 to 2022, indicating both foundational and emerging areas of inquiry. For instance, terms such as "euthanasia" (2017.54), "assisted death" (2018.58), and "medical assistance in dying" (2022.19) suggest a shift in research focus from traditional debates on euthanasia towards more recent and specific issues concerning assisted dying practices. The relatively recent average year for "medical assistance in dying" highlights its status as an emerging and rapidly developing topic.

Keywords related to the physician's role, including "physician assisted death" (2015.88) and "physician aid in dying" (2016.00), reflect sustained scholarly attention on the ethical and practical implications of medical professionals in

end-of-life care. Ethical concepts such as “bioethics” (2018.14), “medical ethics” (2018.20), and “clinical ethics” (2019.73) underscore the central role of ethical considerations throughout the research timeline, with consistent activity in recent years.

Earlier keywords like “active euthanasia” (2007.33), “end-of-life decisions” (2010.27), “withdrawing treatment” (2010.42), and “terminal care” (2010.50) represent foundational topics that laid the groundwork for subsequent developments in the field, reflecting a focus on core issues surrounding end-of-life care decisions.

Overall, the temporal distribution of keyword usage reveals a dynamic research landscape transitioning from early foundational studies toward diverse, multidisciplinary, and policy-relevant themes. The rise of newer terms such as “medical assistance in dying” and “students” (circa 2022) signals the advent of emerging research foci and the involvement of new scholarly actors. This chronological pattern not only maps the progression of academic inquiry but also provides a predictive framework for identifying future directions in this evolving domain.

## 4.2 Content Analysis Based on Keyword Clustering

Based on the clustering results and content analysis methods, the following six core research themes in the field of artificial intelligence applications in medical education can be summarized (Table 1).

**Table 1.** Keywords Content Analysis Based on Clustering

Cluster	Topics	Keywords
1	Institutional Controversies and Ethical Pluralism - Legal, Professional, and Cultural Perspectives on Euthanasia	euthanasia, assisted death, medical assistance in dying, bioethics, medical ethics, dementia, law, nursing, qualitative, advance directive, canada, religion, conscientious objection, human rights, abortion, terminal illness, medical students, organ donation, physician aid in dying, slippery slope, belgium, healthcare, medical law, policy, australia, morality, death and dying, physicians, right to life, spirituality, students, transplantation
2	Autonomy and Psychological Suffering - Ethical Reflections on Euthanasia in Mental and Vulnerable Populations	physician assisted death, suicide, autonomy, death, voluntary euthanasia, right to die, medical aid in dying, mental disorder, suffering, disability, dignity, death with dignity, depression, double effect, mercy killing, passive euthanasia, patient autonomy, eugenics, quality of life, rights, assisted, compassion, family, human dignity, kant, switzerland, vulnerability
3	Clinical Ethics and End-of-Life Decision-Making - Professional Attitudes, Institutional Practices, and Medical Guidelines	ethics, end of life, attitude, decision making, psychiatry, clinical ethics, end-of-life decisions, legislation, nurses, withdrawing treatment, mental health, terminal care, professional ethics, survey, active euthanasia, intention, medical, critical care, guidelines, hospitals, intensive care, life-sustaining treatment, nursing ethics, responsibility

**Cluster 1: Institutional Controversies and Ethical Pluralism - Legal, Professional, and Cultural Perspectives on Euthanasia**

This cluster is centered around institutional and normative aspects of euthanasia, as reflected by high-frequency keywords such as euthanasia, assisted death, bioethics, medical ethics, law, and nursing. These terms indicate that research in this group primarily focuses on the legal frameworks, healthcare policies, and ethical obligations surrounding euthanasia practices. The inclusion of terms like dementia, conscientious objection, and advance directive points to debates over decision-making capacity and moral dissent within clinical settings. This cluster exhibits a balanced distribution of average and normalized citation scores, indicating consistent scholarly engagement across multiple disciplines.

**Cluster 2: Autonomy and Psychological Suffering - Ethical Reflections on Euthanasia in Mental and Vulnerable Populations**

The second cluster emphasizes the moral and psychological dimensions of euthanasia, particularly issues of individual autonomy, subjective suffering, and mental health. Central keywords include autonomy, right to die, mental disorder, suffering, and dignity. Several terms such as depression, disability, and vulnerability suggest an ongoing ethical discourse around euthanasia requests in non-terminal or psychiatric contexts. Ethically contentious terms like eugenics, double effect, and mercy killing further highlight the moral complexity associated with this domain. Although some keywords show modest average citation counts, others—such as quality of life, depression, and family—demonstrate higher normalized citation scores, reflecting increasing academic interest in the intersection of end-of-life decisions and psychological suffering.

**Cluster 3: Clinical Ethics and End-of-Life Decision-Making - Professional Attitudes, Institutional Practices, and Medical Guidelines**

This cluster focuses on clinical decision-making processes and ethical reasoning at the end of life. Prominent keywords include end of life, decision making, clinical ethics, withdrawing treatment, and nurses. These terms reflect the centrality of institutional roles and clinical practices in shaping ethical outcomes related to euthanasia and life-sustaining treatment. Keywords such as guidelines, intensive care, and nursing ethics exhibit high average and normalized citation scores, indicating sustained scholarly interest and practical relevance. The inclusion of terms like



survey, attitude, and responsibility suggests a focus on empirical studies investigating healthcare professionals' ethical views, as well as the tensions between moral responsibility and medical protocols.

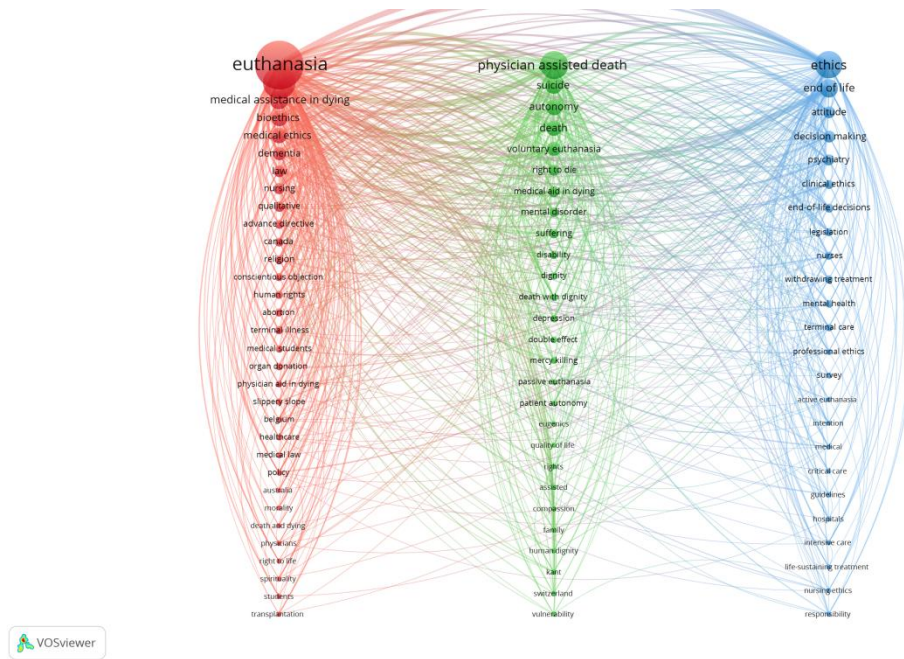


Figure 4. The Network Visualization of Co-occurrence-Author keywords

### 5. Knowledge Base of the Research Field

A citation analysis was conducted on 769 papers, of which 284 were cited more than 10 times (Figure 5). Among them, only 29 articles have been cited more than 50 times, and only 9 articles have been cited more than 100 times. We analyzed the three most frequently cited papers and the three papers with the highest total link strength (TLS) to determine the knowledge base for this research field. Highly cited legal or policy documents (e.g., national legislation, governmental reports) were excluded from the core co-citation analysis, as they primarily serve as normative or contextual references rather than contributing to the intellectual structure of the academic discourse.

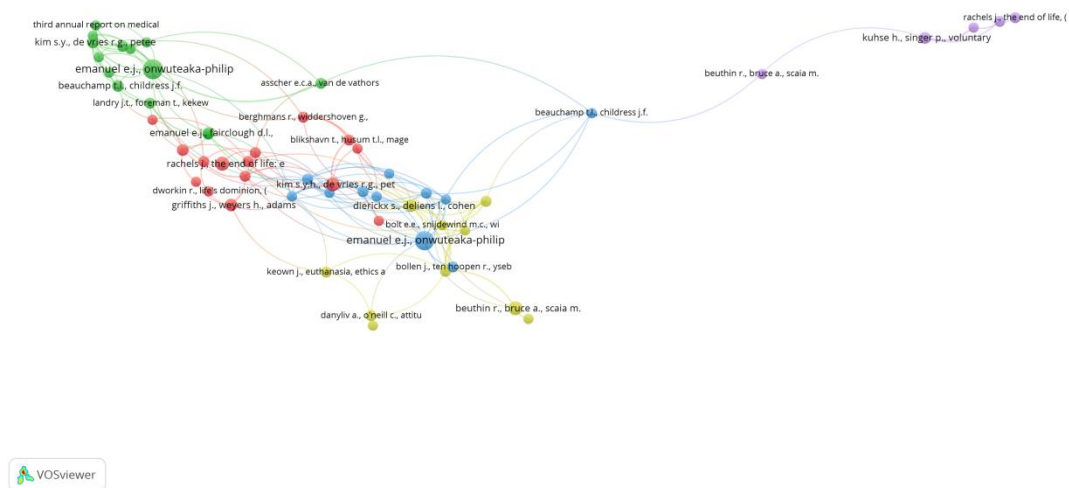


Figure 5. The Network Visualization of citation Cited References

#### 5.1 Highly Cited Literature

One of the most highly cited publications in the field of euthanasia ethics is the seminal study by Janssens et al. (2001), titled *"Doctors' and nurses' perceptions of ethical problems in end-of-life decisions"*, published in the *Journal of Advanced Nursing* [7]. This work offers a foundational empirical account of the ethical tensions encountered by healthcare professionals during end-of-life care. Drawing on interviews and surveys, it reveals how physicians and

nurses grapple with conflicting demands of patient autonomy, legal compliance, and professional duty. Crucially, it exposes disparities between professional groups in ethical reasoning and emotional response, emphasizing the need for clearer institutional support. By centering the lived experiences of clinicians, the study reframed euthanasia as an embedded clinical challenge rather than a purely theoretical or legal issue, thereby reshaping ethical discourse toward practice-based deliberation. It helped catalyze more nuanced, context-sensitive approaches to euthanasia ethics, which remain relevant in contemporary debates and healthcare policy formation.

Another highly cited and influential study in the field is the 2006 article by Van Wijngaarden, Leget, and Goossensen, titled *"European public acceptance of euthanasia: Socio-demographic and cultural factors associated with the acceptance of euthanasia in 33 European countries,"* published in *Social Science and Medicine* [8]. This comparative study systematically analyzes public attitudes across Europe, revealing how variables such as religiosity, education, and cultural orientation shape euthanasia acceptance. The authors demonstrate that more secular, individualistic societies report higher approval rates, while traditional, collectivist contexts tend toward resistance. The inclusion of generational and educational predictors further illuminates shifting moral norms. By transcending national boundaries, the study expands bioethical inquiry into a broader sociocultural domain, establishing a framework for understanding euthanasia as both an ethical and sociopolitical phenomenon. Its impact lies in legitimizing cultural sensitivity in policy development and advancing comparative bioethics as a key research agenda.

The 2004 article titled *"End-of-life after birth: Death and dying in a neonatal intensive care unit"* published in *Pediatrics* stands as a seminal contribution to the bioethical and clinical discourse surrounding neonatal end-of-life care [9]. Investigating the moral and emotional dilemmas in NICU settings, the study explores decision-making regarding non-viable infants, emphasizing the tensions between technological intervention and humane limits of care. It brings to light the psychosocial burden on parents and staff, and underscores the ethical distinctiveness of neonatal care—where questions of best interest, personhood, and parental agency intersect. The article's integration of empirical data with normative reflection has profoundly shaped ethical guidance and institutional practices. Its enduring relevance stems from its capacity to bridge clinical reality with ethical theory, informing both neonatal palliative care policies and broader discussions on vulnerable populations in end-of-life ethics.

## 5.2 High Link Strength Literature

The literature with the highest link strength is the study by Ho et al. (2021), titled "How does medical assistance in dying affect end-of-life care planning discussions? ", published in *Palliative Care and Social Practice* [10]. This qualitative research offers critical insight into the ethical dilemmas experienced by Canadian palliative care providers navigating the legal availability of MAiD. The authors highlight the emotional and moral tensions arising when professional duties intersect with patients' right to die, including fears of coercion, compromised care values, and altered communication dynamics. By situating ethical decision-making within team-based practice, the study foregrounds the relational and institutional complexities of autonomy at the end of life. Its high link strength in the network suggests its foundational role in shaping how ethics is understood not just as individual judgment, but as an ongoing, multidisciplinary negotiation within real-world care contexts.

Another key contribution to the ethics of euthanasia is the article by Downie and Schuklenk (2021), "Social determinants of health and slippery slopes in assisted dying debates", published in the *Journal of Medical Ethics* [11]. This paper critically interrogates the often-cited slippery slope argument by reframing it through the lens of structural inequality. The authors argue that focusing narrowly on potential overreach in MAiD policy ignores more pressing ethical concerns—namely, that denying access to assisted dying can perpetuate systemic injustice for marginalized populations. Their analysis exposes how concerns for vulnerability are often selectively applied, masking deeper failures in healthcare equity. Ethically, the article challenges traditional paternalistic approaches and reorients the debate toward justice, autonomy, and harm reduction. Its prominence within the network highlights its significant role in shifting euthanasia discourse from abstract moral risk to concrete socio-ethical responsibility.

An ethically pivotal case-based study is the article by Asscher and van de Vathorst (2020), "First prosecution of a Dutch doctor since the euthanasia act of 2002: What does the verdict mean?", published in the *Journal of Medical Ethics* [12]. The paper analyzes the legal and ethical implications of a landmark prosecution under the Dutch euthanasia law, questioning how legal criteria interface with physicians' moral judgment. By scrutinizing the legal reasoning and its potential chilling effects on medical practice, the authors highlight tensions between legal safeguards and ethical uncertainty in clinical settings. The case reveals how state oversight can both legitimize and constrain end-of-life decisions, raising concerns about trust, moral agency, and fear of litigation. This work's strong link strength reflects its relevance to ethical debates about professional autonomy, rule-based ethics, and the practical consequences of regulating morally fraught medical practices.

## 6. Discussion

The research on euthanasia has undergone a profound transformation over the past two decades, evolving from a narrowly clinical and legalistic focus into a broader ethical and sociocultural inquiry. This shift parallels the growing complexity of end-of-life decision-making, where the boundaries between autonomy, suffering, and medical responsibility are increasingly contested. While the early literature was largely anchored in debates over legalization and procedural safeguards—primarily in Western Europe—the accelerating publication trend since 2015 reflects not only

rising academic interest but also intensifying societal, clinical, and legal dilemmas associated with expanding euthanasia practices, especially into non-terminal and psychiatric domains.

Across the temporal trajectory, keyword evolution reveals a clear thematic progression. Earlier publications (2000-2010) predominantly focused on concepts such as "physician-assisted suicide", "terminal illness", "palliative care", and "legislation", reflecting the consolidation of euthanasia practices in jurisdictions like the Netherlands and Belgium [13,14]. From around 2015 onwards, the emergence of terms such as "mental illness", "decision-making capacity", "ethical dilemma", and "treatment-resistant depression" suggests a notable thematic expansion into the psychiatric domain, raising new questions regarding patient competence, the nature of psychological suffering, and the role of medical judgment [15,16]. This thematic shift is reinforced by co-citation analysis, where influential publications begin to address not only legal frameworks but also conceptual uncertainties, such as the subjective experience of suffering and the epistemic limits of capacity assessment [17,18]. Concurrently, the knowledge base has diversified, as seen in the rise of interdisciplinary contributions from psychiatry, law, and philosophy [19]. Together, these changes suggest a shift in the field's center of gravity—from codifying euthanasia's legality to interrogating its boundaries and implications in ethically ambiguous contexts.

At the heart of this evolving discourse lies a fundamental tension: the broadening of euthanasia's scope from clearly terminal somatic illnesses to complex, non-terminal psychiatric conditions. This expansion has prompted intense debate over whether mental suffering—especially when potentially remediable or fluctuating—can warrant the same ethical and legal recognition as physical pain in end-stage disease [20,21]. Increasingly, studies have explored the challenges inherent in assessing decision-making capacity among individuals with severe mental illness [14,18]. Here, clinical judgment intersects uncomfortably with existential subjectivity, as patients may simultaneously express a consistent wish to die and meet diagnostic criteria for impaired cognition or emotional regulation. The difficulty of distinguishing authentic autonomy from pathology has thus emerged as a central research concern [22]. Rather than drawing sharp lines, scholars increasingly argue for nuanced evaluations that incorporate both psychiatric assessment tools and contextual understanding of the patient's psychosocial environment [15,23]. This discourse is further complicated by the lack of empirical consensus on diagnostic thresholds and long-term prognoses in psychiatric conditions, which raises concerns over potential inconsistencies and value-laden biases in clinical determinations.

Moreover, the institutional and cultural contexts in which euthanasia occurs have become critical to understanding its ethical dimensions. Research has highlighted stark differences in practice and justification across countries, with Belgium and the Netherlands embracing broader eligibility criteria—including cases of chronic psychiatric disorders—while others remain more cautious or oppositional [2,24]. This divergence is mirrored in the literature, where empirical studies document the practice's expansion, and normative analyses raise alarms over potential "slippery slopes", particularly regarding vulnerable populations [25]. Although citation networks reveal a core group of influential authors contributing to both sides of this debate, the field remains polarized. On one hand, proponents emphasize patient autonomy and equality of access [26]; on the other, critics warn of normalization and epistemic overreach, especially when suffering lacks clear biomedical correlates [27]. Such polarization signals not only ethical disagreement but also divergent sociopolitical assumptions about the role of medicine, the nature of suffering, and the boundaries of individual rights—issues that demand sustained cross-cultural and interdisciplinary investigation.

A final area of inquiry that has gained prominence is the moral and epistemic legitimacy of clinical decision-making in the absence of terminal prognosis [28,29]. While traditional medical ethics places considerable weight on the predictability of decline and inevitability of death, psychiatric and neurodegenerative cases defy such prognostic clarity [30]. This has given rise to debates over what constitutes "unbearable suffering", and whether its validation should rest on clinical observation, patient testimony, or societal norms [31,32]. The rise of keywords such as "value pluralism", "medical authority", and "contested autonomy" in recent years illustrates the field's growing recognition that euthanasia decisions are not purely clinical judgments but deeply value-laden acts, shaped by cultural scripts, institutional pressures, and normative assumptions [33,34]. Consequently, emerging research urges caution against over-medicalization of existential suffering, advocating instead for shared decision-making frameworks that integrate ethical reasoning, patient narratives, and societal dialogue.

In conclusion, the research landscape on euthanasia has moved decisively beyond legal and procedural formalities toward deeper engagement with its epistemic, ethical, and cultural underpinnings. The shifting focus from terminal somatic conditions to psychiatric and ambiguous cases challenges long-standing definitions of suffering, autonomy, and clinical legitimacy. As the field continues to diversify in both disciplinary and geographical terms, future research must grapple with the fundamental question of not just whether euthanasia is permitted, but how societies determine who qualifies for it, under what justificatory frameworks, and with what long-term consequences. This will require not only empirical rigor but also ethical sensitivity to plural worldviews, institutional asymmetries, and the lived realities of those whose suffering resists simple categorization.

## 7. Conclusion

This study provides a comprehensive scientometric overview of the evolving scholarly landscape on euthanasia and end-of-life decisions involving psychiatric disorders and dementia. Over the past two decades, research has transitioned from early legal and clinical considerations toward increasingly complex ethical debates concerning autonomy, mental



competence, and non-terminal suffering. The surge in publications since 2018 highlights growing academic and societal interest in these contentious cases. Thematic analyses suggest that scholarly attention has shifted from institutional frameworks and palliative models toward contested questions around eligibility criteria, professional responsibilities, and sociocultural variability in ethical judgments. While the literature reflects increasing normalization of medical assistance in dying in some contexts, concerns persist regarding slippery slopes, vulnerable populations, and the adequacy of safeguards. Future research should prioritize empirical investigation into clinical decision-making processes, cross-national policy impacts, and stakeholder perspectives. These insights will be essential to inform ethically robust and context-sensitive practices in end-of-life care for mentally ill and cognitively impaired populations.

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