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GLOBAL RESEARCH TRENDS ON NURSE BURNOUT WITHIN HEALTHCARE SYSTEMS: A BIBLIOMETRIC ANALYSIS

Mohd Safri Kiprawi^{1*}, Nor Aroma Abu Bakar², Rosman Asmadi Abd Rahman³, Haslinda Ismail⁴


¹Faculty of Technology and Applied Health, Open University Malaysia, Malaysia

 scorchlight_blazer@oum.edu.my


 <https://orcid.org/0009-0006-6501-750X>


²Faculty of Technology and Applied Health, Open University Malaysia, Malaysia

 aroma@oum.edu.my


 <https://orcid.org/0009-0005-2578-7545>


³Faculty Defence Medicine and Health, Universiti Pertahanan Nasional Malaysia

 rosman@upnm.edu.my

 <https://orcid.org/0009-0007-8910-4285>

⁴Faculty of Technology and Applied Health, Open University Malaysia, Malaysia

 haslinda.ismail@pantai.com.my

 <https://orcid.org/0009-0006-4875-0830>

*Corresponding Author

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Abstract:

The growing complexity of healthcare systems has intensified occupational stress among nurses, making burnout a critical global concern with implications for workforce sustainability and patient care quality. Despite increasing scholarly attention, a thorough understanding of the progression, framework, and influence of research concerning nurse burnout across healthcare systems continues to be insufficient. This study seeks to bridge this gap through a bibliometric analysis designed to examine global research patterns, determine influential scholarly contributions, as well as explore collaborative and thematic developments in the field. A total of 830 publications indexed in the Scopus database from 1985 to May 2026 were retrieved using an advanced search strategy based on three primary keywords: "Nurse," "Burnout," and "System." Data were analyzed through Scopus Analyzer to generate descriptive indicators, OpenRefine to perform data cleansing and standardization, and VOSviewer to construct network visualizations encompassing co-citation, co-authorship, as well as keyword co-occurrence analyses. The results indicate a marked escalation in publication productivity, especially following 2015, with a pronounced surge observed throughout the COVID-19 pandemic era, underscoring intensified global attention toward the issue. The United Kingdom, Australia, and the United States were identified as the

predominant contributors with respect to publication output and citation influence, while collaborative networks demonstrated strong inter-country linkages. Keyword analysis highlighted dominant themes such as occupational stress, mental health, resilience, and healthcare system challenges. Highly cited articles predominantly focused on pandemic-related burnout and systemic risk factors. In conclusion, the study demonstrates a rapidly expanding and evolving research landscape on nurse burnout, driven by global health crises and systemic pressures, emphasizing the importance of targeted interventions, interdisciplinary collaboration, as well as policy-oriented approaches to reduce burnout and reinforce healthcare systems across the globe.

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Nurse, Burnout, System



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Introduction

Nurse burnout has become a major worldwide concern affecting both workforce sustainability and patient safety. It is now officially recognised as an occupational phenomenon under the International Classification of Diseases 11th revision (ICD-11) and widely documented across regions, specialties, and health emergencies (Ge et al., 2023; Getie et al., 2025; Woo et al., 2020; Yaoxian et al., 2023). Recent syntheses show not only high and rising prevalence, but also clear links to deteriorating care quality, increased turnover, and significant financial and organizational burdens for healthcare systems (Ge et al., 2023; Jun et al., 2021; Kelly et al., 2020; Li et al., 2024; Shah et al., 2021). Together, this literature traces a trajectory from early prevalence mapping to theory-driven causal models and, more recently, to intervention and policy-focused research (Aiken et al., 2023; Dall'ora et al., 2020; Fekih-Romdhane et al., 2025; Lee & Cha, 2023; Yaoxian et al., 2023).

Large meta-analyses estimate global nursing burnout prevalence around 30%, with substantial heterogeneity by region, specialty, and time period (Ge et al., 2023; Woo et al., 2020). A meta-analysis encompassing 94 studies across more than 30 countries revealed that 30% of nurses experienced moderate to high levels of burnout, with findings indicating a marked increase over the last decade, especially throughout Europe and Africa, and in obstetrics (Ge et al., 2023). Another global review reported a pooled prevalence of burnout symptoms was identified at 11.23%, with the greatest rates observed in Sub-Saharan Africa and the lowest recorded in Europe and Central Asia, while pediatric nurses were found to demonstrate comparatively higher levels of burnout (Woo et al., 2020). More recent umbrella and global reviews focusing on Maslach subscales show high rates of depersonalization (~25–32%), emotional exhaustion (~33–36%), as well as low personal accomplishment (~33–46%), with especially high burden in oncology and intensive care settings and during COVID-19 (Fekih-Romdhane et al., 2025;

Galanis et al., 2020; Getie et al., 2025; López-López et al., 2019; Ramírez-Elvira et al., 2021). Pandemic-specific meta-analyses suggest burnout or high subscale scores in roughly half of nurses, with elevated risk among those in emergency and intensive care and those directly exposed to COVID-19 (Bruyneel et al., 2021; Fekih-Romdhane et al., 2025; Galanis et al., 2020; Liang et al., 2025). These convergent findings frame burnout as a persistent and, in many contexts, worsening global phenomenon.

Across settings, burnout is consistently explained as a response to chronic, adverse work conditions, rather than individual weakness (Dall'ora et al., 2020; Yaoxian et al., 2023). Theoretical and empirical reviews identify high workload, staffing shortages, long shifts, low schedule flexibility, low autonomy, poor leadership, negative team or nurse–physician relationships, value incongruence, job insecurity, and poor safety climate as central predictors (Aiken et al., 2023; Dall'ora et al., 2020; Qtait et al., 2025; Shah et al., 2021; Yaoxian et al., 2023). Specialty-specific reviews in ICU, oncology, and mental health nursing add unit-intensive stressors (high morbidity, ethical dilemmas, aggression at work), younger age, less experience, and work overload as key risk factors (Bruyneel et al., 2021; López-López et al., 2019; Ramírez-Elvira et al., 2021). COVID-19 research further highlights exposure to infected patients, high-risk environments, inadequate personal protective equipment, perceived threat, long hours in quarantine zones, and low social and family support as drivers of increased burnout (Bruyneel et al., 2021; Fekih-Romdhane et al., 2025; Galanis et al., 2020; Liang et al., 2025). Sociodemographic patterns vary, but several large studies and meta-analyses show higher burnout among nurses working in high-income and Western contexts, and among those aged 30 years and above (Bruyneel et al., 2021; Fekih-Romdhane et al., 2025). Together, this body of work underlines the centrality of organizational and system-level factors in shaping burnout risk.

A robust line of research has established a connection between nurse burnout and negative consequences at both the patient and organizational levels. Systematic reviews and meta-analytic findings indicate that elevated levels of burnout are linked with diminished patient safety culture and safety grades, more frequent medication errors, patient falls, infections, adverse events, and missed care (Jun et al., 2021; Li et al., 2024). Burnout also correlates with reduced patient satisfaction as well as lower nurse-reported quality of care, though not consistently with mortality (Jun et al., 2021; Li et al., 2024). For nurses themselves, burnout is tied to worse general health, depression, anxiety, stress, low resilience, sickness absence, as well as decline in perceived professional effectiveness (Liang et al., 2025; Yaoxian et al., 2023). Multiple large studies connect burnout to turnover intentions and actual organizational turnover; for example, each unit increase in emotional exhaustion increases odds of leaving by about 12%, and burnout nearly quadruples turnover intention during COVID-19 (Kelly et al., 2020; Liang et al., 2025; Shah et al., 2021; Zheng et al., 2024). National and multi-hospital surveys identify stressful work environments, inadequate staffing, and excessive hours as common reasons for leaving or considering leaving, threatening workforce stability and system sustainability (Aiken et al., 2023; Shah et al., 2021). These findings have pushed the field toward framing burnout as an occupational hazard with system-level consequences rather than an individual coping failure (Aiken et al., 2023; Jun et al., 2021; Yaoxian et al., 2023).

Intervention research on nurse burnout remains comparatively limited but is expanding. A recent meta-analysis of 30 trials reports that interventions, most commonly face-to-face mindfulness and group-based programs, can significantly reduce overall burnout, emotional exhaustion, and depersonalization. However, they have not yet demonstrated clear

improvements in low personal accomplishment (Lee & Cha, 2023). Mixed-methods and large survey studies emphasize that nurses and physicians prioritize organizational solutions over individual resilience programs: improved staffing ratios, more control over workload and scheduling, better work environments, and responsive leadership are consistently rated as the most desired and potentially impactful strategies (Aiken et al., 2023; Jaber et al., 2025; Shah et al., 2021). Research from Saudi Arabia and other contexts highlights the critical role of supportive occupational environments, participation in decision-making, mental health education, and structured coping supports (Jaber et al., 2025). At the same time, rotating shift work and night duty are increasingly studied as specific organizational risk factors, with evidence linking irregular rotations to emotional exhaustion and depersonalization, and suggesting that organizational support, sleep hygiene promotion, and job autonomy may buffer these effects (Qtait et al., 2025). Recent theoretical and network analyses link core burnout dimensions, especially emotional exhaustion as well as diminished personal accomplishment, to turnover intention and suggest targeting meaningful work, self-efficacy, and recognition as possible leverage points (Yaoxian et al., 2023; Zheng et al., 2024). Overall, the literature is moving from documenting harm toward testing system-level interventions, though high-quality longitudinal and implementation studies are still needed.

In conclusion, over the past decade, research on nurse burnout has evolved from documenting prevalence to mapping determinants, consequences, and intervention strategies across global healthcare systems. Meta-analytic evidence shows that burnout is common, increasing in many regions, and particularly concentrated in high-intensity specialties and crisis contexts such as COVID-19. Findings converge on adverse work conditions, including high workload, inadequate staffing, long and rotating shifts, poor leadership and safety climate, as the primary drivers, with serious repercussions for nurses' mental health, patient safety, quality of care, and workforce retention. Emerging intervention studies indicate that psychosocial programs can reduce emotional exhaustion and depersonalization, but the strongest signals from nurses and empirical models point toward organizational and policy reforms as essential. Future research and system action will need to align around multi-level strategies that improve staffing, work environments, and governance, while integrating evidence-based psychological support, to sustain the nursing workforce and protect healthcare system performance worldwide.

Research Question

1. How has the volume of scholarly publications on nurse burnout within healthcare systems evolved between 1985 and 2026?
2. Which articles on nurse burnout within healthcare systems are the most highly cited?
3. What are the key themes and research hotspots identified through keyword co-occurrence analysis in studies on nurse burnout within healthcare systems?
4. What patterns of collaboration are observed in country-level co-authorship networks in research on nurse burnout within healthcare systems?

Methodology

Bibliometric analysis refers to the structured collection, systematic organization, and critical examination of bibliographic datasets generated from academic and scholarly publications (Alves et al., 2021; Assyakur & Rosa, 2022; Verbeek et al., 2002). In addition to traditional descriptive indicators, including publication outlets, chronological dispersion, and prominent contributors (Wu & Wu, 2017), bibliometric research has progressively incorporated more sophisticated analytical techniques, particularly document co-citation analysis, to uncover and

map the intellectual architecture of a research domain. The execution of a rigorous literature review demands an iterative, methodologically sound procedure that involves carefully defined keyword construction, exhaustive retrieval from relevant databases, and comprehensive analytical evaluation. This systematic methodology supports the development of a robust and extensive bibliographic dataset, ultimately strengthening the credibility, validity, and reproducibility of research outcomes (Fahimnia et al., 2015).

Within this framework, the current investigation places emphasis on high-impact scholarly works, recognizing their fundamental influence in constructing the theoretical and conceptual foundations of the field. To safeguard the integrity and uniformity of the dataset, the Elsevier Scopus database was selected as the principal repository for data retrieval (Al-Khoury et al., 2022; di Stefano et al., 2010; Khiste & Paithankar, 2017). In order to uphold academic rigor, the selection parameters were confined exclusively to peer-reviewed journal articles, thereby excluding non-peer-reviewed sources such as books and lecture notes (Gu et al., 2019). Leveraging the comprehensive breadth of Scopus coverage, all pertinent publications published between 1985 and May 2026 were systematically identified and extracted for further analytical processing.

Data Search Strategy

Table 1 presents the comprehensive search strategy that was implemented to identify and retrieve relevant scholarly publications from the Scopus database. A systematic search approach was utilized through the query TITLE-ABS-KEY (Nurse AND Burnout AND System), which ensured that the core concepts of nursing, burnout, and system-level factors were captured within article titles, abstracts, or keywords. To enhance the relevance and disciplinary focus of the dataset, further filtering criteria were applied, limiting the results to the nursing subject area (SUBJAREA "NURS") as well as restricting publications to those written in the English language. This preliminary search process generated a total of 830 records, constituting a broad and comprehensive collection of academic outputs relevant to the intersection of nurse burnout and system-related dynamics.

Following data retrieval, a rigorous screening process was implemented in accordance with predetermined inclusion and exclusion criteria, as specified in Table 2. Only studies published in English were retained to ensure consistency in data interpretation and to avoid translation bias, whereas publications in other languages were excluded from consideration. The scope of the subject matter was deliberately confined to nursing to maintain thematic relevance, thereby excluding studies from unrelated disciplines. Additionally, a temporal filter was applied, including publications from 1985 to 2026, while excluding those published before 2006 to ensure that the synthesis captures current developments and prevailing trends within the field. Stepwise screening approach enhanced the methodological rigor of the bibliometric analysis by refining the dataset to include only the most relevant and high-quality records for subsequent evaluation.

Table 1: The Search String

Scopus	TITLE-ABS-KEY (Nurse AND Burnout AND System) AND (LIMIT-TO (SUBJAREA , "NURS")) AND (LIMIT-TO (LANGUAGE , "English"))
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Table 2: The Selection Criterion is Searching

Criterion	Inclusion	Exclusion
Language	English	Non-English
Subject	Nursing	Others
Timeline	1985 – 2026	<2006

Data Analysis

VOSviewer is a broadly utilized and intuitive instrument for bibliometric analysis, created by Nees Jan van Eck and Ludo Waltman at Leiden University (van Eck & Waltman, 2010, 2017). It is purpose-built to facilitate the visualization and structured examination of scientific publications, providing sophisticated features for the generation of network maps, the grouping of interconnected entities, and the production of density-based visual outputs. The program supports a wide range of bibliometric linkages, encompassing co-authorship networks, co-citation relationships, and keyword co-occurrence patterns, thus allowing an in-depth investigation of scholarly structures and intellectual domains. Its interactive user environment, together with consistent updates, enables effective management and fluid analysis of extensive bibliometric datasets. In addition, its ability to calculate bibliometric metrics, tailor graphical representations, and combine datasets from various origins highlights its strength as a comprehensive platform for academic research analysis.

A key advantage of VOSviewer is its capacity to convert intricate bibliometric datasets into structured, visually intelligible maps. The software demonstrates particular strength in network-oriented analyses, including the grouping of related entities into clusters, the identification of patterns in keyword co-occurrence, and the generation of density-based visualizations that reflect research activity. Its user-friendly interface enhances accessibility for both early-stage and advanced researchers, enabling clearer interpretation of shifting and emerging scholarly trends. Ongoing development further ensures methodological relevance and adaptability across various data types, including authorship and citation networks.

In the current investigation, bibliographic data encompassing publication year, article title, author details, source journals, citation indicators, and keywords were extracted from the Scopus database in PlainText format, spanning the timeframe from 1985 through May 2026. The analytical procedures were carried out using VOSviewer version 1.6.20, wherein VOS mapping and clustering methodologies were implemented to generate and examine bibliometric networks. In contrast to traditional techniques such as Multidimensional Scaling (MDS), VOS mapping allocates items within a reduced-dimensional configuration so that the spatial separation between elements corresponds to their level of relatedness (van Eck & Waltman, 2010). Although it shares conceptual similarities with MDS (Appio et al., 2014), the VOS framework integrates normalization strategies tailored explicitly for co-occurrence datasets, particularly the Association strength (AS_{ij}), defined as follows (Van Eck & Waltman, 2007);

$$AS_{ij} = \frac{C_{ij}}{W_i W_j}$$

which is described as “proportional to the ratio between on the one hand the observed number of co-occurrences of i and j and on the other hand the expected number of co-occurrences of i and j under the assumption that co-occurrences of i and j are statistically independent” (Van Eck & Waltman, 2007).

Result and Discussion

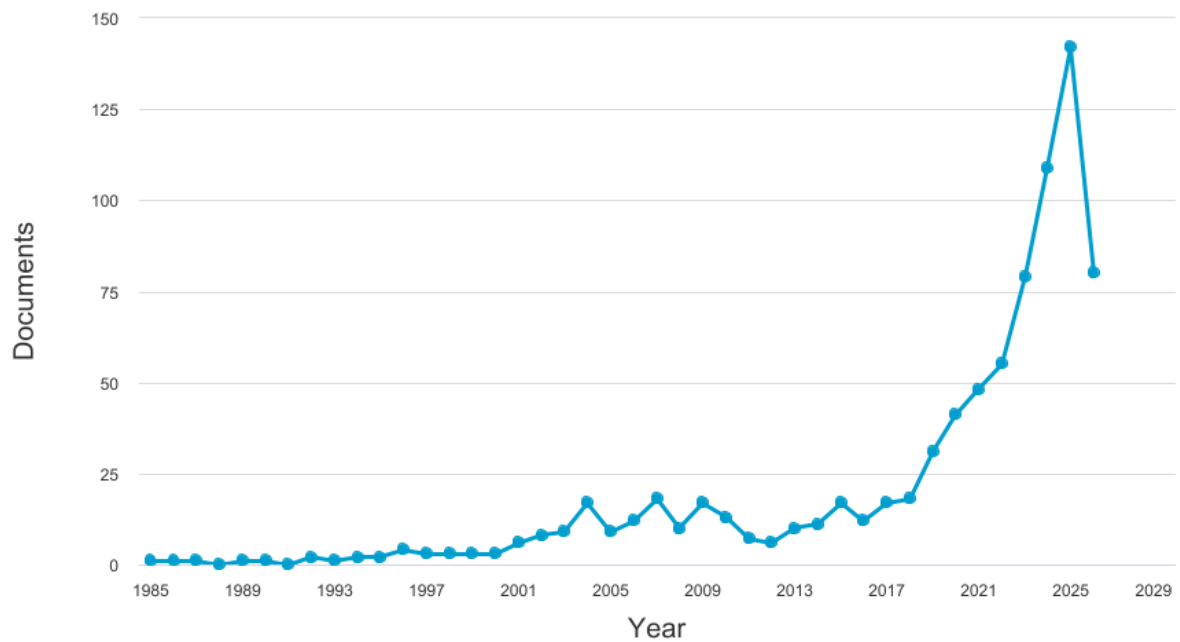
RQ1: How Has The Volume Of Scholarly Publications On Nurse Burnout Within Healthcare Systems Evolved Between 1985 And 2026?

As presented in Figure 1, the longitudinal distribution of publications on nurse burnout within healthcare systems demonstrates a clear evolution from a nascent research area into a rapidly expanding field. Between 1985 and the early 2000s, annual outputs remained extremely low and sporadic, typically below five publications per year, reflecting limited scholarly attention and the relatively underdeveloped conceptualization of burnout within nursing practice. This early phase can be attributed to the dominance of broader occupational stress frameworks, with nurse-specific burnout not yet recognized as a distinct systemic issue. A gradual increase becomes observable from the mid-2000s onward, particularly after 2010, where publication counts begin to stabilize and rise modestly. This shift likely corresponds to growing institutional awareness of workforce sustainability, patient safety, and quality of care, as well as the incorporation of burnout into healthcare management discourse and policy agendas.

A pronounced acceleration is evident from 2018 onwards, culminating in a peak in 2025 (17.11%) and sustained high output into 2026 (9.64% despite partial-year data). This sharp increase is strongly associated with global healthcare pressures, most notably the COVID-19 pandemic, which exposed and intensified systemic stressors affecting nurses, thereby catalyzing urgent research interest. The surge from 2020 to 2025 reflects heightened funding, interdisciplinary collaboration, and policy-driven research priorities focusing on mental health, resilience, and system-level interventions. Additionally, advancements in data analytics and bibliometric tools have facilitated more extensive research production and dissemination. The slight decline in 2026 should not be interpreted as a reduction in interest but rather as an artifact of incomplete annual data. Overall, Table 3 shows the trend underscores a paradigm shift from individual-level burnout perspectives toward comprehensive, system-oriented analyses, positioning nurse burnout as a critical global healthcare challenge.

Documents by year

Scopus



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Figure 1: Trend of Research in Augmented Reality by Years

Table 3: Annual distribution of publications (1985-2026)

YEAR	Number of Publications	Percentages (%)
2026	80	9.64
2025	142	17.11
2024	109	13.13
2023	79	9.52
2022	55	6.63
2021	48	5.78
2020	41	4.94
2019	31	3.73
2018	18	2.17
2017	17	9.64
2016	12	1.45
2015	17	2.05
2014	11	1.33
2013	10	1.20
2012	6	0.72
2011	7	0.84
2010	13	1.57
2009	17	2.05
2008	10	1.20
2007	18	1.45

2006	12	1.45
2005	9	1.08
2004	17	2.05
2003	9	1.08
2002	8	0.96
2001	6	0.72
2000	3	0.36
1999	3	0.36
1998	3	0.36
1997	3	1.45
1996	4	0.48
1995	2	0.24
1994	2	0.24
1993	1	0.12
1992	2	0.24
1990	1	0.12
1989	1	0.12
1987	1	0.12
1986	1	0.12
1985	1	0.48

RQ2: Which Top 10 Articles On Nurse Burnout Within Healthcare Systems Are The Most Highly Cited?

As presented in Table 4, the article authored by Galanis et al. (2021) received the highest number of citations, accumulating 791, and examines burnout among nurses alongside the related risk factors observed during the COVID-19 pandemic. This dominant position reflects the unprecedented global impact of COVID-19, which intensified workload, psychological distress, and occupational hazards among nurses, thereby triggering extensive scholarly attention. The high citation count also indicates that systematic reviews and meta-analyses tend to achieve greater academic influence due to their comprehensive synthesis of evidence, making them foundational references for subsequent research. Similarly, (Jun et al., 2021) with 434 citations reinforces this trend, emphasizing the strong research focus on linking nurse burnout with patient and organizational outcomes, highlighting its relevance for both clinical performance and healthcare system efficiency.

Older foundational studies also demonstrate sustained academic influence, as seen in (Lu et al., 2005) and (Hooper et al., 2010), which explore burnout, job satisfaction, as well as compassion fatigue within nursing populations, receiving 516 and 519 citations, respectively. These works remain highly cited because they establish early conceptual frameworks that later studies continue to reference and build upon. Additionally, articles such as (Caruso, 2014) and (Whitehead et al., 2015) highlight structural and ethical contributors to burnout, including shift work, long working hours, and moral distress, thereby underscoring the inherently multifaceted character of the phenomenon. The inclusion of foundational studies such as (Rosenstein, 2002) and (Jackson et al., 2002) in the top-cited list further indicates that issues related to workplace relationships, violence, and retention have long been central to nurse burnout discourse.

Overall, Table 4 demonstrates that highly cited publications are those that either (1) address urgent global crises such as COVID-19, or (2) establish enduring theoretical and conceptual foundations that continue to shape research trajectories in nurse burnout.

Table 4: Most Cited Author

No	Authors	Title	Year	Source title	Cited by
1	Galanis et al. (2021)	Nurses' burnout and associated risk factors during the COVID-19 pandemic: A systematic review and meta-analysis	2021	Journal of Advanced Nursing	791
2	Hooper et al. (2010)	Compassion Satisfaction, Burnout, and Compassion Fatigue Among Emergency Nurses Compared With Nurses in Other Selected Inpatient Specialties	2010	Journal of Emergency Nursing	519
3	Lu et al. (2005)	Job satisfaction among nurses: A literature review	2005	International Journal of Nursing Studies	516
4	Caruso (2014)	Negative impacts of shiftwork and long work hours	2014	Rehabilitation Nursing	500
5	Jun et al. (2021)	Relationship between nurse burnout, patient and organizational outcomes: Systematic review	2021	International Journal of Nursing Studies	434
6	Whitehead et al. (2015)	Moral Distress Among Healthcare Professionals: Report of an Institution-Wide Survey	2015	Journal of Nursing Scholarship	408
7	Rosenstein (2002)	Nurse-physician relationships: Impact on nurse satisfaction and retention	2002	American Journal of Nursing	341
8	Jenkins & Elliott (2004)	Stressors, burnout and social support: Nurses in acute mental health settings	2004	Journal of Advanced Nursing	292
9	Nantsupawat et al. (2017)	Effects of nurse work environment on job dissatisfaction, burnout, intention to leave	2017	International Nursing Review	290
10	Jackson et al. (2002)	Who would want to be a nurse? Violence in the workplace - A factor in recruitment and retention	2002	Journal of Nursing Management	288

RQ3: What Are The Key Themes And Research Hotspots Identified Through Keyword Co-Occurrence Analysis In Studies On Nurse Burnout Within Healthcare Systems?

Figure 2 reveals a highly centralized keyword network dominated by “burnout,” which exhibits the highest occurrence (237) alongside total link strength (773), thereby underscoring its position as the central conceptual anchor within the research domain. The strong co-occurrence links with “nurses,” “nursing,” and “COVID-19” suggest that burnout research is primarily contextualized within the nursing profession and significantly intensified during the pandemic period. The prominence of terms such as “job satisfaction,” “stress,” “occupational stress,” and “mental health” further demonstrates that burnout is not studied in isolation but rather as part of a broader psychosocial and organizational framework. This clustering reflects the widespread adoption of theoretical models like the Job Demands–Resources framework, where emotional strain, excessive workload, as well as insufficient support function as contributing factors to burnout outcomes. The relatively high link strength of “professional burnout” and “workplace violence” also indicates an increasing recognition of external stressors and systemic challenges within healthcare environments.

In addition, Figure 2 highlights the emergence of more specialized and evolving research directions. Keywords such as “resilience,” “well-being,” “coping strategies,” and “mindfulness” form a secondary cluster that emphasizes intervention-based and preventive approaches, suggesting a shift from problem identification to solution-oriented research. The appearance of “artificial intelligence,” although with lower occurrence (11), signals a nascent but growing interest in technological interventions for mitigating burnout. Furthermore, the presence of context-specific terms like “intensive care unit,” “emergency nursing,” and “critical care” indicates that high-risk clinical settings are key focal points due to their demanding nature. Methodological keywords such as “qualitative research,” “systematic review,” and “structural equation modeling” reflect the field’s increasing methodological diversity and maturity. Collectively, the network structure in Figure 2 suggests a well-developed but evolving research landscape, where foundational themes around stress and mental health are increasingly complemented by innovation, intervention, and system-level considerations.

structure in Figure 3 suggests that while nurse burnout research is becoming more globally distributed, it remains shaped by disparities in research capacity, funding, and access to international collaborative networks, reinforcing the need for more inclusive and cross-regional research partnerships.

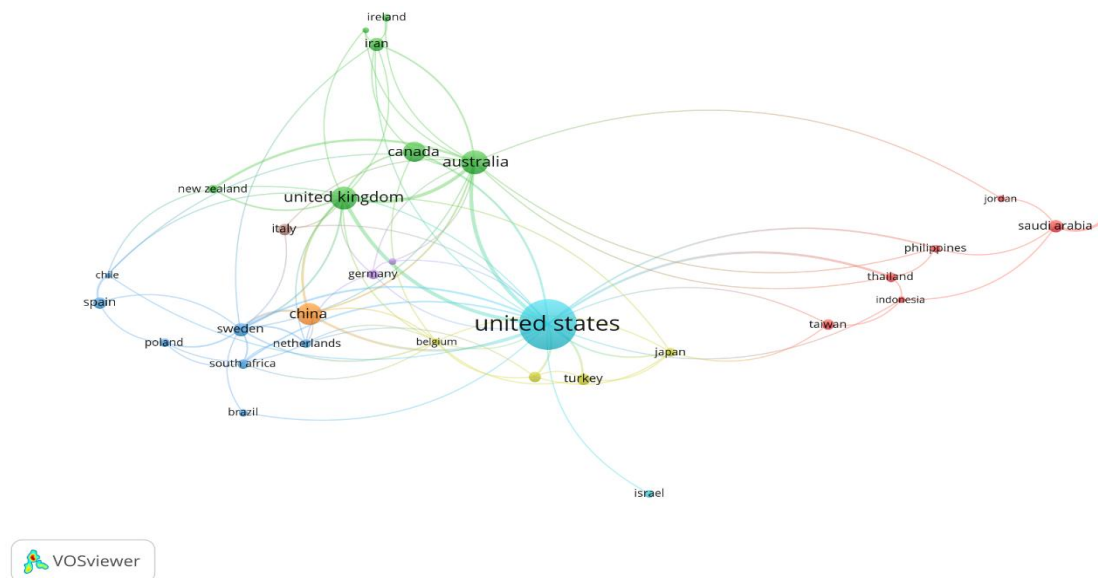


Figure 3: Network Visualization Map Of Country-Level Co-Authorship

Conclusion

This bibliometric investigation aimed to systematically map as well as evaluate global research developments on nurse burnout within healthcare systems, with particular focus on influential contributions, publication patterns, collaborative networks, as well as thematic structures as extracted from the Scopus database. The study further explored central questions regarding the trajectory of scientific output, leading countries and authors, citation impacts, and dominant research themes in the field.

The findings demonstrate a consistent and substantial rise in publication output from 1985 to May 2026, with a marked acceleration in recent years, reflecting increasing global concern regarding occupational stress among nurses. The United Kingdom, Australia, as well as the United States stand out as leading contributors with respect to research productivity and academic impact, whereas patterns of international collaboration showed strengthening connectivity among regions. Keyword mapping revealed that research attention is primarily concentrated on burnout, occupational stress, mental health outcomes, resilience, and systemic healthcare challenges. Highly cited studies were largely associated with pandemic-related workload pressures and structural determinants of burnout, indicating a shift toward crisis-driven research priorities.

This study adds to the existing body of literature by offering an organized mapping of the intellectual terrain surrounding nurse burnout research, while also identifying emerging thematic clusters and collaboration patterns. The findings may support policymakers, healthcare administrators, and academic researchers in understanding priority areas for intervention, particularly in workforce management and mental health support strategies for

nurses. From a pragmatic standpoint, the findings underscore the importance of strengthening institutional policies aimed at reducing workload burden and improving organizational support systems.

Several limitations are acknowledged, including dependence on a single database and the potential omission of studies published in non-English languages, both of which may constrain the overall breadth of global representation. Subsequent research could broaden the range of data sources, incorporate longitudinal comparative approaches, and explore deeper qualitative insights into intervention effectiveness. Overall, bibliometric evidence underscores the rapid expansion and growing relevance of nurse burnout research, reinforcing its critical importance in shaping resilient and sustainable healthcare systems worldwide.

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Author Contribution Statement: All authors contributed significantly to the development of this manuscript. M.S.K was responsible for the conceptualization, methodology, and overall supervision of the study. N.A.A.B and H.I handled data collection, analysis, and interpretation of results. R.A.A.R contributed to the literature review, drafting, and critical revision of the manuscript. All authors read and approved the final version of the manuscript prior to submission.

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