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REVIEW ARTICLE

Navigating the storm of healthcare workers burnout in the COVID-19 era: a bibliometric analysis

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ABSTRACT

The COVID-19 pandemic has imposed unprecedented challenges on healthcare systems globally, significantly impacting healthcare workers (HCWs) and intensifying the incidence of occupational burnout. Characterized by emotional exhaustion, depersonalization, and diminished personal accomplishment, burnout has been further exacerbated by pandemic-specific stressors such as resource limitations, fear of contagion, overwhelming workloads, and emotional fatigue. This bibliometric analysis systematically evaluated 2,043 peer-reviewed publications from 2019 onwards, retrieved from major databases including Web of Science, Scopus, and PubMed. Using tools such as VOS viewer, the study analysed keyword trends, author collaborations, citation metrics, and thematic clusters to map the evolving academic landscape surrounding HCWs burnout during COVID-19. The results revealed significant research diversity, with contributions from 11,156 unique authors and a collaboration index of 6.65, indicating robust interdisciplinary engagement. High research output and citation impact were observed in countries such as the United States, China, Italy, and the United Kingdom. Prominent themes included "COVID-19," "burnout," "mental health," and "nurses," highlighting the psychological toll on frontline professionals. Keyword co-occurrence and heatmap analyses demonstrated a shift in scholarly focus from the immediate crisis to long-term strategies for resilience and recovery. Despite these insights, notable disparities in research output persist, particularly in underrepresented regions such as France and several low- and middle-income countries. These imbalances may hinder the development of globally relevant, context-specific interventions. The study underscores the urgent need for inclusive, multidisciplinary collaboration to inform policy, guide mental health interventions, and enhance support systems for HCWs in current and future healthcare emergencies.

Keywords: Burnout, COVID-19, pandemic resilience, bibliometric, healthcare workers

INTRODUCTION

In late 2019, a novel coronavirus known as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) emerged in Wuhan, China, and rapidly escalated into a global public health crisis, leading the World Health Organization (WHO) to declare it a pandemic by March 2020.(1) Over a year after its emergence, the global death toll had surpassed 3.5 million, including over 450,000

fatalities in Brazil alone.[2] The COVID-19 pandemic led to a higher death toll compared to other viral outbreaks in the last forty years.[3–5] Healthcare workers (HCWs) were at the forefront, handling the crisis by both identifying and treating patients, regardless of the severity of their conditions. The unpredictability of a safe work environment has been linked to psychological distress.[6] In response to the escalating psychological burden faced by HCWs amid the COVID-19 crisis, WHO underscored the urgent necessity of strengthening mental health and psychosocial support systems to safeguard the HCWs well-being and sustain healthcare delivery.[7] Burnout, characterized by emotional exhaustion, depersonalization, and a sense of reduced personal accomplishment, arises from ongoing work-related stress.[8] The 11th edition of the International Classification of Diseases (ICD-11) classifies burnout as an occupational condition characterized by prolonged workplace stress.[9] The traditional view of burnout emphasized personal vulnerabilities or mental health factors, whereas it is now widely accepted as a syndrome triggered by ongoing stress at work.[10]

Burnout prevalence among HCWs has been reported to vary significantly across different settings and populations. Hospital-based studies have documented burnout rates ranging from approximately 26% to 55%.[11,12] For instance, a study from a tertiary care facility in Tokyo found that 31.4% of staff across various departments exhibited symptoms of burnout.[13] Comparable findings were observed in major tertiary hospitals in Melbourne, Australia, where about one-third (33%) of participants—including physicians, nurses, allied health professionals, and administrative personnel—reported experiencing burnout during the early months of the COVID-19 pandemic.[14] In Iran's western region, Zarei identified a 52.9% burnout rate among primary care workers, with physicians found to be at double the risk compared to other HCWs.[15] In the United States, healthcare workers during the COVID-19 pandemic were estimated to experience burnout at rates 1.5 to 2.5 times higher than professionals in other sectors, a pattern that contrasts with the usual correlation between higher levels of education and reduced risk of burnout.[16] Nurses also faced high levels of burnout during the pandemic, with rates fluctuating based on factors such as clinical specialty, work setting, and the intensity of COVID-19 exposure. Although generally slightly lower than physician burnout rates, nurse burnout has been estimated between 35% and 45% across various international studies.[17–19]

Besides that, the incidence and contributing factors of burnout varied depending on the country's socioeconomic status and the healthcare culture.[20] Prior to the COVID-19 pandemic, extensive research had been conducted on the factors leading to burnout among healthcare workers.[21] Common causes included heavy administrative duties, long work hours, and a lack of respect from peers.[22] Notably, burnout varied between Western and Asian countries. In Ethiopia, factors such as job and career prospects, physical health, interactions with superiors, and exposure to physical or verbal abuse contributed to burnout.[23] In contrast, for Asian healthcare workers, factors linked to burnout included religious beliefs, tenure in the current department, frequency of night shifts, and the number of workdays per month, possessing a bachelor's degree, and an imbalance between work and life.[24] The pandemic brought additional stressors, such as the fear of resource shortages, the risk of contracting and spreading the infection to family, stigma, unfamiliar procedures, an overwhelming workload, and the distress of not being able to save critically ill patients.[25]

Further studies identified additional risk factors for burnout during the COVID-19 crisis. These included being a nurse, female, of younger age, having certain personal characteristics, the grief from multiple losses, and limited resources to manage the workload.[26] Burnout poses a significant concern for the healthcare community, potentially incurring substantial costs to providers, patients, and the healthcare system as a whole.[27] Numerous studies have been published on burnout among healthcare workers since the emergence of COVID-19.[28]The purpose of this review is to evaluate the impact of the COVID-19 pandemic on HCWs burnout, focusing on key stressors and challenges, including the psychological and physical strains that have been heightened during the pandemic.

This study aims to address the research gap regarding global variations in burnout rates and mental health issues among HCWs, offering a comprehensive analysis of these differences across various regions. It examines prevailing themes in current literature and explores interdisciplinary approaches to alleviating HCWs burnout and improving well-being, with a focus on practical, context-specific interventions that

address both mental and physical health needs. Additionally, the study investigates the level of global collaboration in research efforts, highlighting how diverse perspectives contribute to a thorough understanding of HCWs burnout and the creation of effective interventions. By tackling these questions, the study aims to provide a detailed bibliometric analysis, illustrating the multifaceted effects of the COVID-19 pandemic on healthcare workers and identifying critical areas needing focused attention in healthcare settings globally. This structured approach helps readers follow the analysis and findings, offering valuable insights into the challenges faced by HCWs during the pandemic and emphasising the urgent need for tailored interventions to support their well-being.

Key questions identified for this review:

1. What are the primary factors contributing to burnout among healthcare workers (HCWs) during the COVID-19 pandemic?
2. Which populations and professional roles within healthcare are most affected by pandemic-related burnout?
3. How has global academic research evolved in response to HCWs burnout since the onset of COVID-19?
4. What are the major thematic trends, collaborative networks, and geographic disparities in published research on this topic?

METHODS

This study employed a comprehensive bibliometric analysis to evaluate the global research landscape on HCWs burnout during the COVID-19 pandemic. Bibliometric methods are widely recognized for their ability to map the conceptual, intellectual, and social structure of research fields through quantitative analysis of published literature. Following established protocols in the field,[29–32] this study was designed to systematically identify, extract, and analyse relevant literature, with particular focus on publication trends, collaboration patterns, thematic clusters, and geographical distribution.

The methodological framework was structured around five key stages: (1) definition of search criteria, (2) database selection, (3) refinement of search parameters, (4) data extraction, and (5) analysis and interpretation using bibliometric tools. Each stage was carefully planned and executed to ensure rigor, transparency, and reproducibility of results.

In Stage 1, a detailed search strategy was developed to capture literature explicitly addressing burnout among healthcare workers in the context of the COVID-19 pandemic. The following Boolean string was used: “burnout” AND (“healthcare workers” OR “health care workers” OR “medical staff” OR nurses OR physicians) AND (“COVID-19” OR “SARS-CoV-2” OR “coronavirus pandemic” OR pandemic) AND PUBYEAR >2019. This formulation was designed to ensure thematic precision and to retrieve studies published from 2020 onwards, thereby focusing on pandemic-era literature.

In Stage 2, database selection, three databases—Web of Science (WoS), Scopus, and PubMed—were selected due to their complementary strengths and reputations in indexing high-quality scientific and medical literature. PubMed is widely regarded for its comprehensive coverage of biomedical and health sciences literature, making it essential for capturing clinically focused studies. Scopus offers a broad interdisciplinary scope and robust citation tracking, supporting bibliometric mapping and trend analysis. Web of Science, known for its stringent indexing standards, adds further reliability and enhances citation-based evaluations. The use of these three databases ensures a diverse yet methodologically consistent data set for comprehensive bibliographic analysis. The inclusion criteria focused on documents addressing healthcare workers (HCWs) burnout during the COVID-19 pandemic, with publication dates post-2019. Studies were excluded if they were not directly related to HCW burnout amid the COVID-19 pandemic, were published prior to 2019, originated from non-peer-reviewed sources, or focused exclusively on patient outcomes or unrelated health issues. Additionally, articles lacking sufficient bibliographic metadata, abstracts, or citation metrics were excluded. These criteria ensured a focused, high-quality dataset for evaluating the global research response to HCWs burnout during the pandemic.

In Stage 3, an iterative refinement process was conducted to enhance the quality and relevance of the dataset. Based on preliminary screenings, search terms and filters were adjusted to eliminate false positives and duplicate entries. This stage ensured that only the most relevant and high-quality records were retained for analysis.

Stage 4 involved the exportation and compilation of the final dataset. Key bibliographic elements, including article titles, author names, institutional affiliations, publication years, abstracts, keywords, and citation counts, were extracted. The resulting data were formatted for compatibility with bibliometric software tools.

In Stage 5, the dataset was subjected to detailed bibliometric analysis using VOS viewer (version 1.6.19), a widely used tool for science mapping. The analysis focused on co-authorship networks, co-citation patterns, bibliographic coupling, and keyword co-occurrence. These analyses enabled the identification of dominant research themes, patterns of scholarly collaboration, institutional productivity, and geographic disparities in research output. The visualizations generated offered insights into the structural and thematic evolution of the field, shedding light on how the academic community has responded to HCWs burnout during the COVID-19 crisis (Figure 1).

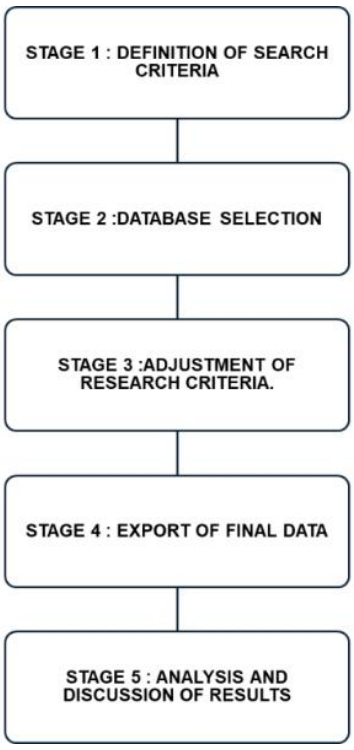

Figure 1. Methodology of research

RESULTS

The bibliometric analysis reveals significant collaboration and diversity in research (Table 1). The dataset encompasses 2,043 documents, reflecting a substantial body of work. A notable diversity in research perspectives is evident from the 4,366 unique 'Keywords Plus', indicating a wide range of topics and subthemes explored within this field. The dataset includes contributions from 11,156 unique authors, with the most prolific author contributing to 15 publications, illustrating both individual and collective scholarly efforts. Remarkably, every document in the dataset is a product of collaboration, as indicated by the 12,246 authors of co-authored documents, which aligns with the complex and interdisciplinary nature of the subject. The average of 0.18 documents per author suggests a broad author base, while an average of 6.65 authors per document highlights extensive collaborative efforts. Similarly, the high collaboration index of 6.65 underscores the multidisciplinary approach in addressing the challenges faced by healthcare workers during the pandemic (Table 1).

Table 1. Overview of bibliometric data

Description	Frequency
Total documents	2,043
Unique 'keywords plus' (Index keywords)	4,366
Unique authors	11,156
Top author appearances	15
Authors of co-authored documents	12,246
Documents per author	0.18
Authors per document	6.65
Co-authors per document	8.35
Collaboration index	6.65

The bibliometric study highlights the worldwide research efforts in this area (Table 2). The United States has an impressive level of productivity, as evidenced by its remarkable total of 8,528 citations. China is notable for its influential research, as evidenced by its high average of 56.76 citations per article, with a total of 6,073 citations. Italy, the United Kingdom, and Spain are notable European nations that have made considerable contributions in terms of citations. Italy, in particular, stands out with an impressive average of 25.68 citations per article. Iran, Singapore, and Turkey have each amassed over 900 citations, indicating a significant global interest in this crucial healthcare matter during the epidemic. This underscores the diverse study viewpoints from other continents, alongside Canada and Australia, which have over 900 citations apiece.

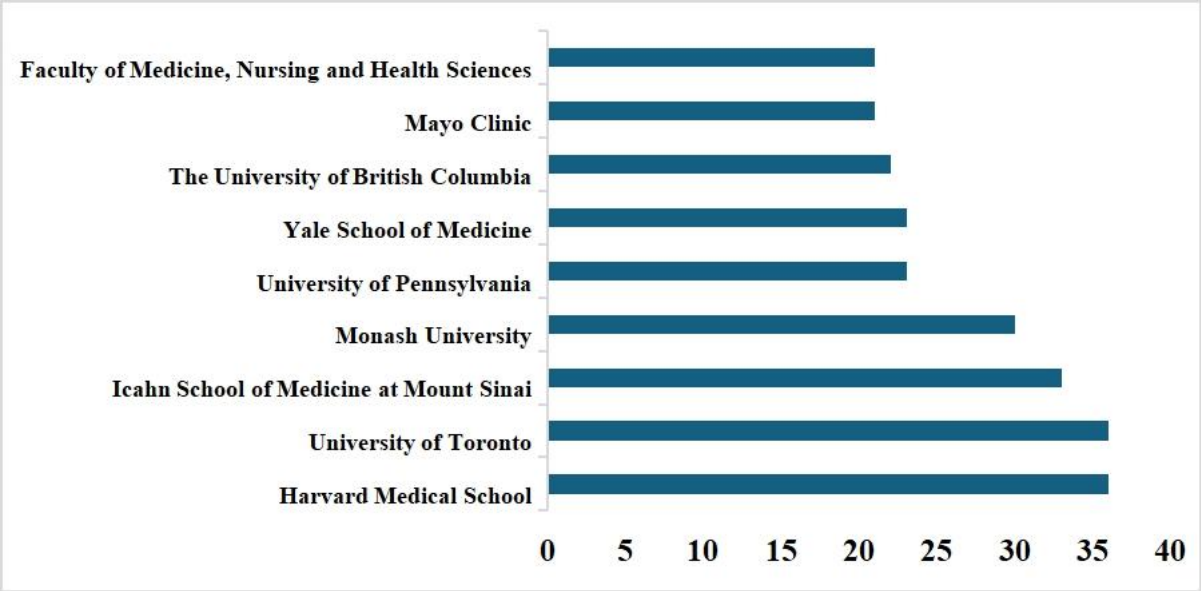

Figure 2. Top 10 institutions in publication

Figure 2 shows the graph of ten leading institutions by publication volume on healthcare workers burnout during COVID-19, with Harvard Medical School and the University of Toronto at the forefront, each contributing 36 scholarly articles.

Table 3 contrasts the top 10 authors' keywords with 'Keywords Plus', emphasizing key research themes. The keyword 'COVID-19' leads in both categories, indicating its central role in current studies. 'Burnout' is notably prevalent, highlighting its significance in the healthcare context during the pandemic. Mental health issues such a 'depression', 'anxiety', and 'stress' feature prominently, reflecting the psychological impact of the pandemic. 'Nurses' and 'healthcare workers' are frequently mentioned, focusing on frontline professionals. Demographic terms such as 'female', 'male', and 'adult' suggest a diverse research scope. The presence of 'resilience' points to increasing interest in coping strategies during these challenging times.

Figure 3 presents a network graph generated using VOS viewer software, which maps the co-occurrence of authors' keywords extracted from the dataset of 2,043 peer-reviewed articles on healthcare workers (HCWs) burnout during the COVID-19 pandemic. This visual representation illustrates the frequency and strength of associations between keywords, offering insights into the thematic structure of the literature. Larger nodes represent keywords with higher frequency, while the thickness of connecting lines indicates the strength of co-occurrence relationships.

Table 3. Top 10 research keywords

Ranking	Keywords	Frequency	Ranking	Keywords plus	Frequency
1	Covid-19	1009	1	Human	1560
2	Burnout	811	2	Pandemic	1549
3	Mental health	263	3	Covid-19	1303
4	Nurses	210	4	Female	1289
5	Healthcare workers	188	5	Humans	1282
6	Pandemic	178	6	Male	1161
7	Depression	164	7	Coronavirus Disease	1100
8	Anxiety	160	8	Burnout	1096
9	Stress	156	9	Adult	1050
10	Resilience	118	10	Article	1009

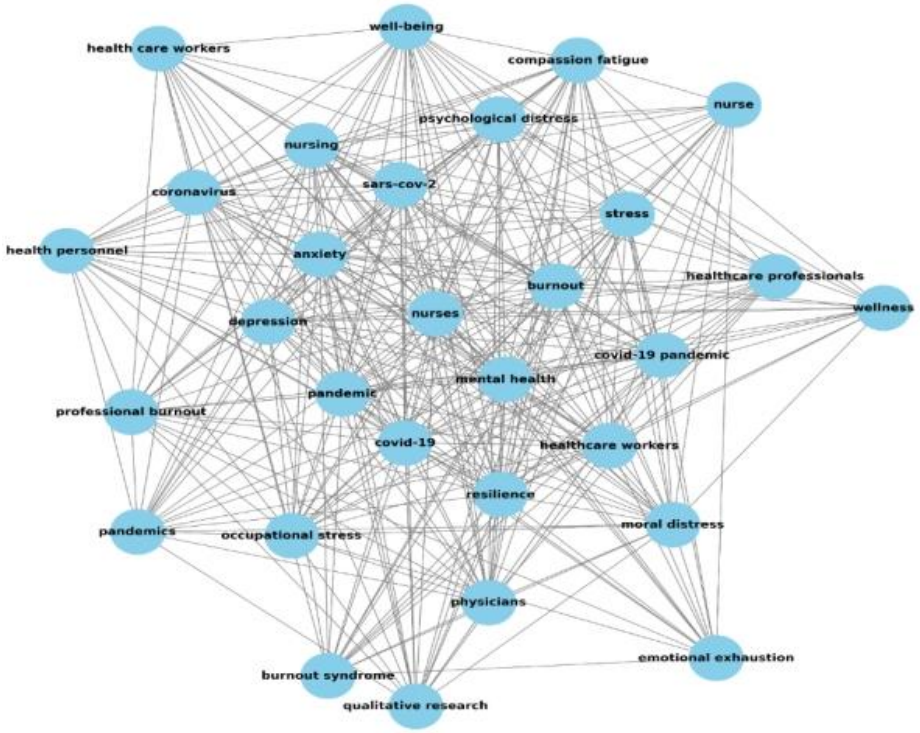

Figure 3. Network graph of research keywords

The graph prominently features "COVID-19", emphasizing its centrality in the literature. "Burnout" and "healthcare workers" appear closely linked, reflecting the core focus of the studies. Other keywords such as "mental health," "stress," "resilience," and "depression" form dense clusters around the central theme, indicating their frequent association and highlighting the psychological toll on healthcare personnel. The term "nurses" also emerges as a key node, underscoring the particular vulnerability of this professional group during the pandemic. Furthermore, the connections among "anxiety," "emotional exhaustion," "moral distress," and "occupational stress" suggest a broad spectrum of mental health challenges explored in the literature. The presence of terms like "qualitative research," "telemedicine," and "public health" reveals methodological diversity and evolving healthcare delivery models. Overall, the graph effectively demonstrates the interconnected nature of research themes and helps identify emerging focal points within the pandemic-era burnout literature.

Table 4. Association between burnout and study topic

Code A (Burnout)	Code B (Study topics)	Association (Based on frequency)
Burnout	COVID-19	1009
Burnout	Mental Health	263
Burnout	Nurses	210
Burnout	Healthcare Workers	188
Burnout	Pandemic	178
Burnout	Depression	164
Burnout	Anxiety	160
Burnout	Stress	156
Burnout	Resilience	118
Burnout	COVID-19 Pandemic	109

Table 4 presents a structured correlation matrix using Code A and Code B, where Code A consistently represents the central concept of "burnout", and Code B includes associated study topics frequently appearing alongside burnout in the literature. This coding approach helps to systematically illustrate the co-occurrence frequency of keywords across the reviewed dataset, highlighting the thematic relationships explored by researchers. The table reveals a strong association between "burnout" and "COVID-19" (1,009 instances), underscoring the centrality of the pandemic in exacerbating burnout among healthcare workers. Other frequently co-occurring terms include "mental health" (263), "nurses" (210), and "healthcare workers" (188), which reflect the recurring focus on frontline staff and the psychological toll of the crisis. Psychological conditions such as "depression" (164), "anxiety" (160), and "stress" (156) also show high levels of co-occurrence, indicating a significant overlap between burnout and broader mental health outcomes. The appearance of "resilience" (118) suggests a growing interest in protective factors and coping mechanisms, while "COVID-19 pandemic" (109) further situates these findings within the specific historical context. Overall, the use of Code A and Code B in this table enables a clear, comparative view of how frequently burnout is studied in relation to other critical healthcare themes, offering insights into the literature's primary areas of concern during the pandemic.

Figure 4 presents a heatmap generated using bibliometric frequency analysis, visualized with Python's Seaborn library. The heatmap captures the temporal evolution of thematic keywords from 2020 to 2023, based on their relative normalized frequency of occurrence within the literature on healthcare workers burnout during the COVID-19 pandemic. The numerical values in each cell represent the proportion of keyword mentions relative to the total keywords used in publications for a given year—not correlation coefficients. This enables a year-over-year comparison of thematic prominence. For instance, keywords such as "healthcare," "workers," and "physicians" show a steady increase in prominence over time, culminating in peak frequency values in 2023 (e.g., 0.053 for "healthcare"). This indicates growing scholarly focus on system-level and occupational perspectives. Conversely, terms like "patients" and "anxiety" maintain lower and relatively stable values, suggesting consistent but less central attention in the burnout literature. This visualization helps track how academic discourse has shifted during the pandemic—moving from early psychological distress (e.g., "anxiety," "stress") to broader occupational and systemic challenges (e.g., "workers," "care," "healthcare"). By quantifying keyword trends, the heatmap illustrates how research emphasis has evolved in response to the pandemic's unfolding phases and emerging healthcare priorities.

Utilising the rankings of the ten most often referenced individual journals, spanning from China to the United States, this study highlights the widespread influence of the pandemic on the mental well-being of healthcare workers (HCWs) (Table 5). The research emphasises the need of dealing with mental health problems in healthcare environments, especially when faced with exceptional obstacles such as a worldwide health catastrophe.

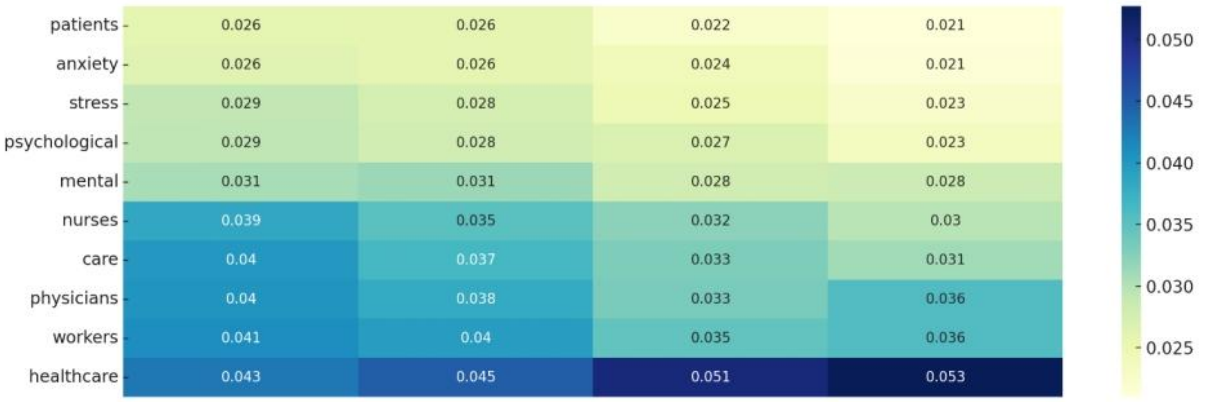

Figure 4. Heatmap of thematic evaluation

The key findings highlight the significance of providing psychological care, identifying and analysing risk factors that contribute to mental health outcomes, and implementing tailored interventions. This compilation functions as a great resource for comprehending the diverse effects of COVID-19 on the well-being of HCWs and emphasises the areas that need to be addressed in future healthcare emergencies.

Table 5. Characteristics of top 10 most-cited articles

Title	Authors	Year	Cited by	Country	Key points
Factors associated with mental health outcomes among health care workers exposed to coronavirus disease 2019	Lai et al.[33]	2020	4720	China	• Mental health care importance for healthcare workers in COVID-19 context. • Analysis of factors influencing mental health outcomes. • Assessment of psychological impact and mitigation strategies.
Psychosocial impact of COVID-19	Dubey et al.[34]	2020	1100	United States	• Investigation of COVID-19's high infectivity and mortality on psychosocial aspects. • Exploration of mental health challenges and strategies. • Focus on psychosocial interventions at community and individual levels.
Frontline nurses' burnout, anxiety, depression, and fear statuses and their associated factors during the COVID-19 outbreak in China	Hu et al.[35]	2020	504	Singapore	• Study of psychological impact on China's frontline nurses during COVID-19. • Research into burnout, anxiety, depression, and fear. • Examination of factors affecting psychological conditions.
Implications for COVID-19: a systematic review of nurses' experiences of working in acute care hospital settings during a respiratory pandemic	Fernandez et al.[36]	2020	428	Australia	• Review of nurses' experiences in acute care during respiratory pandemics. • Implications for managing COVID-19. • Insights for future pandemic healthcare responses.
COVID-19-related mental health effects in the workplace	Giorgi et al.[37]	2020	423	Italy	• Analysis of COVID-19's mental health effects in workplace settings. • Overview of psychological impacts in various environments. • Discussion of coping and resilience strategies.
Fear of COVID-19, psychological distress, work satisfaction and turnover intention among frontline nurses	Labrague and de los Santos [38]	2021	405	Philippines	• Study on nurses' fear of COVID-19 and its effects. • Correlation with psychological distress and job satisfaction. • Assessment of impact on turnover intentions.
Burnout and somatic symptoms among frontline healthcare professionals	Barello et al.[39]	2020	399	Italy	• Focus on burnout and physical symptoms in healthcare professionals. • Emphasis on frontline workers during the pandemic. • Highlighting the need for targeted interventions.

Continued Table

Nurses' burnout and associated risk factors during the COVID-19 pandemic	Galanis et al.[40]	2021	385	Greece	• Examination of nurses' burnout during COVID-19. • Investigation of risk factors associated with burnout. • Aimed at understanding nurses' burnout in crisis scenarios.
Impact of coronavirus syndromes on physical and mental health of health care workers	Salazar de Pablo et al.[41]	2020	384	United Kingdom	• Systematic review of coronavirus impact on healthcare workers' health. • Analysis of physical and mental health aspects. • Meta-analysis approach to synthesize findings.
A comparison of burnout frequency among oncology physicians and nurses working on the frontline and usual wards during the COVID-19 epidemic in Wuhan, China	Wu et al.[42]	2020	369	China	• Comparative study of burnout in oncology staff in Wuhan during COVID-19. • Contextualized within frontline and usual ward settings. • Insights into occupational burnout in high-stress healthcare scenarios.

DISCUSSION

The COVID-19 pandemic has profoundly impacted the mental health of HCWs leading to heightened levels of burnout. This complex issue is illuminated through a comprehensive bibliographic analysis encompassing 2,043 documents and 11,156 unique authors. This extensive body of research underscores a global, collaborative effort in understanding and addressing HCWs burnout, characterized by an interdisciplinary approach and significant contributions from countries such as the United States, China, and Italy.

A thematic analysis of the literature reveals 'COVID-19', 'burnout', and 'mental health' as key focal areas, reflecting the primary concerns in recent studies. Khatatbeh et al.[43] emphasizes the psychological strain experienced by HCWs, particularly nurses, during the pandemic. The persistent linkage between the pandemic and the mental health challenges faced by HCWs reflects a significant thematic focus in current research, emphasizing the profound psychological toll exerted by prolonged exposure to crisis conditions.[44] The development of burnout and the deteriorating mental health among healthcare workers is closely linked to chronic stress, which disrupts the hypothalamic–pituitary–adrenal (HPA) axis.[45] This dysregulation results in sustained cortisol secretion, neuroinflammatory responses, and alterations in critical neurotransmitter systems, ultimately compromising emotional regulation and cognitive performance, thereby contributing to the onset and progression of burnout. Moreover, the work of Shen et al.[46] highlighted that burnout among HCWs extends beyond psychological distress to encompass physical manifestations, thereby underscoring the necessity of a comprehensive, multidimensional approach to their overall well-being.

The interconnectedness of various facets of HCWs burnout is clearly illustrated through the network graph of research keywords, which reveals a dense clustering of terms such as stress, resilience, and depression around the central concept of burnout. This clustering signifies not only the co-occurrence of these mental health dimensions in the literature but also their conceptual interdependence in understanding the psychological toll experienced by HCWs during the COVID-19 pandemic. Such linkages reflect the multifactorial nature of burnout, which transcends a singular psychological state to encompass a broader spectrum of emotional and cognitive challenges. Workplace-related stressors intensified by the pandemic contributed significantly to deteriorating mental health outcomes, reinforcing the argument that burnout is shaped by a confluence of occupational, emotional, and systemic factors.[46] An analysis of

thematic trends from 2020 to 2023 shows an evolving research landscape. The shifting prominence of certain keywords over time reflects the adaptive responses of the academic community to emerging trends and new insights. This evolution is crucial in understanding how approaches to addressing HCWs burnout have adapted throughout the pandemic.[47,48]

The global citation impact, particularly the leading roles of the United States, China, and Italy, suggests a strong research output and influence from these countries. This may reflect the intensity of the pandemic's impact in these regions and their focused efforts to address HCWS burnout. In addition to the overarching themes identified in the bibliometric analysis, individual studies offer valuable insights into specific aspects of HCWS burnout. Kumareswaran explored the workplace-related mental health effects of COVID-19, underscoring the importance of the work environment in either mitigating or exacerbating mental health issues.[49] Labrague et al.[50] identified a significant association between nurses' fear of COVID-19 and their levels of job satisfaction, suggesting that heightened anxiety related to the pandemic adversely affected their professional well-being. Heightened anxiety stemming from fear of COVID-19 has been shown to negatively impact employees' job satisfaction, potentially due to increased psychological distress and perceived workplace vulnerability.[51] The need for tailored interventions to address burnout among HCWs is critical.[52–54] Tadesse et al.[55] emphasized the importance of understanding specific risk factors associated with nurses' burnout during crises like COVID-19. This is essential for developing effective support strategies for HCWs.

CONCLUSION

In conclusion, the thorough examination of burnout among HCWs during the COVID-19 pandemic emphasises an urgent and significant global health problem that requires prompt and efficient intervention techniques. This analysis, encompassing a substantial amount of research from several nations and fields, highlights the tremendous psychological and physical effects of the epidemic on healthcare practitioners. The literature's consistent focus on stress, resilience, and mental health highlights the profound and intricate difficulties encountered by HCWs. The extensive number of papers and authors involved in the research demonstrates the urgent need to address HCWs burnout on a global scale, highlighting its collaborative and diversified nature. It is crucial that the knowledge acquired from this research is applied to develop practical and tailored solutions to promote and maintain the well-being of healthcare workers. These workers are essential in the ongoing battle against COVID-19 and future healthcare concerns.

Conflict of Interest

The authors declare no conflict of interest

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Author Contributions

BMS prepared the initial draft of the manuscript and contributed to technical writing.TN prepared for validation, proofreading, review, and editing. SK was responsible for data curation, as well as formal and statistical analyses. All authors participated in the study design, contributed to interpreting the results, and gave their approval for the final version of the manuscript

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Data Availability Statement

This article does not involve any data sharing since no datasets were created or analysed during the course of this study.

Declaration the Use of AI in Scientific Writing

No artificial intelligence tools were employed in the preparation or writing of this scientific manuscript.

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