Literature Review: Determinants of Burnout Among Healthcare Workers

Muhammad Andi Suharto[1], Maria Mardate Loma[2], Mohamad Ariandhy Mokambu[3], Wira Suana Priyatun[4], Andri Priantono[5], Umi Setyoningrum[6]
[1]Bachelor Nursing Program, Universitas Ngudi Waluyo, stalkerwind22@gmail.com
[2]Bachelor Nursing Program, Universitas Ngudi Waluyo, maria13marde@gmail.com
[3]Bachelor Nursing Program, Universitas Ngudi Waluyo, ariandhyfadhil@gmail.com
[4]Bachelor Nursing Program, Universitas Ngudi Waluyo, wir4.su4n4@gmail.com
[5]Bachelor Nursing Program, Universitas Ngudi Waluyo, andripriantono88@gmail.com
[6]Bachelor Nursing Program, Universitas Ngudi Waluyo, umi_setyoningrum@yahoo.com
Email Correspondence: stalkerwind22@gmail.com

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Abstract
Burnout among healthcare workers is an occupational health problem that significantly affects service quality, patient safety, and workforce sustainability. It is characterized by emotional exhaustion, reduced motivation, and decreased professional performance due to prolonged exposure to work-related stress. This study aimed to analyze factors associated with burnout among healthcare workers based on a systematic descriptive literature review. This study employed a descriptive literature review design following a structured search and screening process. Articles were retrieved from Google Scholar, PubMed, and GARUDA databases using Boolean operators ("burnout" AND "healthcare workers", "workload", "work stress", "social support"). The search was limited to English and Indonesian articles published between 2020 and 2025. The selection process followed a PRISMA-based approach, consisting of identification, screening, eligibility, and inclusion stages. From an initial 58 identified articles, 21 articles were assessed in full text, and 13 were excluded due to irrelevance or incomplete data. Finally, 8 articles met the inclusion criteria and were included in the final synthesis. No formal quality scoring was applied; however, methodological characteristics of each study were compared descriptively. Data extraction focused on study characteristics, sample size, variables, and key findings. The included studies were predominantly cross-sectional in design with sample sizes ranging from 102 to 43,026 healthcare workers. Data were analyzed using comparative descriptive synthesis. The results indicate that workload, work overload, and work stress are the most dominant factors associated with increased burnout across all studies. Social support and organizational support consistently emerged as protective factors. Workplace flexibility and work-life balance were also identified as important buffering mechanisms, although they were less frequently studied. Comparative analysis shows that large-scale studies emphasize workload as a universal predictor, while smaller studies highlight psychosocial factors such as social support and perceived stress. Demographic variables such as age and length of service showed inconsistent associations with burnout across studies. In conclusion, burnout among healthcare workers is influenced by multidimensional factors, particularly job demands (workload and stress) and job resources (social and organizational support). These findings highlight the importance of integrated organizational interventions, workload management, and psychosocial support programs to prevent burnout in healthcare settings.

Corresponding author:
Muhammad Andi Suharto
Stalkerwind22@gmail.com

Introduction

Burnout is a psychological syndrome resulting from chronic workplace stress that has not been successfully managed, characterized by emotional exhaustion, depersonalization, and reduced personal accomplishment. The World Health Organization (WHO) recognizes burnout as an occupational phenomenon in ICD-11 due to its significant impact on workers' mental health and job performance, including healthcare professionals (WHO, 2022). In healthcare settings, burnout is a critical occupational health issue because it is associated with reduced quality of care, increased medical errors, and compromised patient safety (Shanafelt et al., 2022; Panagioti et al., 2022).

Burnout among healthcare workers has become an increasingly urgent global concern, particularly following the rising complexity of healthcare systems, workforce shortages, and high job demands during and after the COVID-19 pandemic (Sexton et al., 2021; Prasad et al., 2021). Healthcare workers are frequently exposed to sustained workload pressure, emotional exhaustion, and resource limitations that contribute significantly to burnout development (Morgantini et al., 2022; Woo et al., 2021). In addition, insufficient organizational support and poor work-life balance have been shown to worsen psychological distress among healthcare professionals (Søvold et al., 2021; Dobson et al., 2021).

Previous studies have identified multiple determinants of burnout among healthcare workers. Individual factors such as resilience, coping strategies, and emotional regulation influence vulnerability to burnout (Matos et al., 2022; Oliveira et al., 2023). Psychosocial factors, including perceived stress, emotional labor, and interpersonal conflict, are strongly associated with burnout symptoms (Schug et al., 2021; Koutsimani et al., 2021). Furthermore, organizational factors such as workload intensity, staffing shortages, shift work, and leadership quality have been consistently identified as major predictors of burnout in healthcare environments (De Simone et al., 2021; Luchman & González-Morales, 2021).

In many countries, including low- and middle-income settings, burnout among healthcare workers has continued to increase due to structural health system challenges and limited resources (Aryankhesal et al., 2021; Talaee et al., 2022). Evidence shows that excessive workload and emotional strain are strongly associated with burnout, while organizational support, teamwork, and workplace flexibility serve as protective factors (Mekonnen et al., 2021; Zhang et al., 2022). These findings highlight that burnout is not only an individual-level issue but also a systemic problem influenced by organizational structures and healthcare policies (Sinsky et al., 2021).

Although many studies have examined burnout among healthcare workers, most tend to analyze determinants separately rather than integrating them into a comprehensive framework. Evidence synthesis on multidimensional factors remains limited, particularly in combining individual, psychosocial, and organizational determinants across diverse healthcare settings. Therefore, a comprehensive literature review is needed to integrate recent evidence and provide a clearer understanding of the multifactorial nature of burnout among healthcare workers.

This literature review aims to identify and analyze factors associated with burnout among healthcare workers based on recent empirical studies. The findings are expected to support the development of effective prevention strategies, organizational interventions, and mental health policies to reduce burnout and improve healthcare system sustainability.

Methods

This study employed an analytical approach using a cross-sectional design to examine the research problem at a specific point in time. The population consisted of 27 respondents, and a total sampling technique was applied to include all eligible participants in the study. Data were collected through patient interviews using a structured epidemiological investigation form designed for malaria cases. The collected data were then processed and analyzed statistically using the Chi-square test to determine the relationship between variables. This study employed a literature review design to identify and analyze factors associated with burnout among healthcare workers. The review focused on multidimensional determinants of burnout, including individual, psychosocial, and organizational factors such as workload, work stress, social support, work environment, and work-life balance.

The literature search was conducted through several electronic databases, including Google Scholar, PubMed, and GARUDA (Garba Rujukan Digital), between January and March 2026. Articles published between 2020 and 2025 were included to ensure the relevance and recency of the evidence. The search strategy used Boolean operators such as AND and OR to refine the search results. The keywords used included "burnout," "health workers," "healthcare workers," "work stress," "workload," "social support," and combinations such as "burnout AND healthcare workers," "work stress AND burnout," and "factors associated with burnout among healthcare workers".

The initial search identified 58 articles relevant to the topic. After removing duplicate articles and screening titles and abstracts, 21 articles remained for full-text assessment. Subsequently, 13 articles were excluded because they did not meet the inclusion criteria, lacked

sufficient data, or were unavailable in full-text form. Finally, 8 articles were included in the final review and synthesis.

The inclusion criteria were: (1) original research articles discussing burnout among healthcare workers, (2) studies using quantitative research designs, particularly cross-sectional studies, (3) articles published between 2020 and 2025, and (4) articles available in full text in English or Indonesian. The exclusion criteria included: (1) articles unrelated to burnout among healthcare workers, (2) studies with incomplete or unclear findings, and (3) non-full-text publications.

Data extraction was conducted using a structured extraction table containing information on author, publication year, study design, sample characteristics, variables examined, and major findings related to burnout determinants. The extracted data were then synthesized descriptively to compare findings across studies and identify common patterns associated with burnout among healthcare workers.

The selected studies generally employed cross-sectional quantitative designs with sample sizes ranging from 102 to 250 respondents. Most studies consistently reported that workload, work stress, and workplace conflict were significant risk factors for burnout. In contrast, social support, supportive work environments, and work-life balance were identified as protective factors that may reduce burnout risk among healthcare workers.

Ethical considerations in this literature review included proper citation practices, avoidance of plagiarism, and maintaining the integrity of information obtained from published scientific articles. All data analyzed in this study were derived from publicly accessible sources.

Although this review provides a comprehensive overview of factors associated with burnout among healthcare workers, several limitations should be considered. The review only included articles from selected databases and focused primarily on quantitative studies, which may limit the breadth of evidence. Therefore, future reviews are recommended to include broader databases, additional study designs, and larger numbers of studies to strengthen understanding of burnout determinants among healthcare workers.

Results and Discussion

Table 1. Literatre Review Result

No	Researchers	Research methods	Results
1.	Solin (2025) – The Burnout Phenomenon in Health Workers: Risk Factors and Coping Strategies	Quantitative cross-sectional	There was a significant association between workload ($p<0.05$), emotional stress ($p<0.05$), social support ($p<0.05$), work environment, and burnout among healthcare workers.
2.	Sharif et al. (2024) – Burnout Syndrome Among Healthcare Workers: Risk Factors and Prevention Strategies	Quantitative cross-sectional	High workload and work conflict were significantly associated with burnout ($p<0.05$), while organizational support and job satisfaction reduced burnout levels.
3.	Pratomo et al. (2024) – Burnout in Health Workers in Karawang Regency: The Role of Social Support and Perceived Stress	Quantitative cross-sectional	Social support and perceived stress significantly affected burnout ($p=0.000$), with a contribution value of 24.9%.
4.	Novena et al. (2025) – Analysis of Factors Causing Burnout in Health Workers at RSU Kasih Ibu Denpasar	Quantitative cross-sectional	Workload and work conflict positively affected burnout ($p<0.05$), while work environment and work-life balance acted as protective factors.
5.	Putri et al. (2025) – Factors Related to Burnout in Health Workers in East Java Regional Hospitals	Quantitative cross-sectional	Work stress ($p=0.001$), workload ($p=0.003$), and family support ($p=0.012$) were significantly associated with burnout among healthcare workers.
6.	Zhou et al. (2022) – Burnout and Well-being of Healthcare Workers in the Post-pandemic Period of COVID-19: A Perspective from the Job Demands-Resources Model	Quantitative cross-sectional	Epidemic-related job stressors significantly increased burnout, anxiety, and depression, while social support and organizational support reduced burnout and improved psychological well-being.

7	Maglalang et al. (2021) – Job and Family Demands and Burnout among Healthcare Workers: The Moderating Role of Workplace Flexibility	Quantitative cross-sectional	High job and family demands were associated with increased burnout, whereas workplace flexibility reduced burnout risk and moderated the relationship between demands and burnout.
8	Rotenstein et al. (2023) – The Association of Work Overload with Burnout and Intent to Leave the Job Across the Healthcare Workforce During COVID-19	Quantitative cross-sectional survey	Work overload was significantly associated with higher burnout and intention to leave across all healthcare worker groups, with nurses reporting the highest burnout prevalence.

The findings from the eight included studies indicate that burnout among healthcare workers is a multidimensional phenomenon shaped by the interaction between job demands and job resources. Across studies, high job demands—particularly workload, work stress, emotional strain, and work overload—consistently emerge as the strongest predictors of burnout (Maslach & Leiter, 2021; Bakker & Demerouti, 2020; Rotenstein et al., 2023). Conversely, job resources such as social support, organizational support, work-life balance, and workplace flexibility function as protective factors that reduce burnout risk (West et al., 2021; Zhou et al., 2022; Maglalang et al., 2021).

However, the strength of these associations varies depending on contextual and methodological differences across studies. For instance, Rotenstein et al. (2023) demonstrated that work overload is a robust predictor of burnout across multiple healthcare roles, suggesting a consistent pattern across occupational categories. Similarly, Zhou et al. (2022) found that epidemic-related job stressors significantly increase burnout, while social and organizational support can moderate these effects, highlighting the buffering role of job resources in high-stress contexts.

In contrast, individual-level factors show inconsistent patterns across studies. While Novena et al. (2025) suggest that age and length of work may influence burnout, other studies report weak or non-significant associations for demographic characteristics (Sharif et al., 2024; Solin, 2025). This inconsistency suggests that burnout is more strongly driven by organizational and psychosocial conditions than by stable individual attributes, aligning with previous evidence that emphasizes structural determinants of burnout (Maslach & Leiter, 2021; Shanafelt et al., 2020).

Furthermore, protective factors are not uniformly reported across studies. Social support is consistently identified as a buffering factor in most studies (Pratomo et al., 2024; West et al., 2021), yet Zhou et al. (2022) highlight that under certain conditions it may also intensify stress–burnout relationships, indicating a context-dependent moderating effect. In addition, Maglalang et al. (2021) emphasize workplace flexibility as an important but underexplored protective factor, suggesting that structural workplace arrangements may be as important as interpersonal resources.

Despite these consistent patterns, heterogeneity exists across the included studies in terms of sample size, occupational groups, and healthcare settings. Sample sizes range from small hospital-based studies ($n \approx 102–197$) to large multi-organizational surveys ($n > 40{,}000$), which may influence effect size comparability and generalizability of findings (Rotenstein et al., 2023; Zhou et al., 2022). Moreover, differences in measurement instruments for burnout and job stress introduce variability in reported outcomes across studies (Maslach & Leiter, 2021; West et al., 2021). The predominance of cross-sectional designs also limits causal inference regarding the relationship between determinants and burnout (Bakker & Demerouti, 2020; Shanafelt et al., 2020).

From a theoretical perspective, the findings strongly align with the Job Demands–Resources (JD-R) Model, which explains burnout as the result of excessive job demands combined with insufficient job resources (Bakker & Demerouti, 2020; Demerouti et al., 2001). The synthesized evidence supports this framework, showing that high workload, emotional stress, and work overload increase burnout risk, while social support, organizational support, and workplace flexibility mitigate its impact (Zhou et al., 2022; Maglalang et al., 2021; West et al., 2021).

In terms of implications, burnout has significant consequences for healthcare systems, including reduced quality of care, increased medical errors, and decreased workforce retention (West et al., 2021; Maslach & Leiter, 2021). Evidence from Rotenstein et al. (2023) further highlights the strong association between burnout, work overload, and intention to leave, emphasizing its impact on workforce sustainability. Additionally, Zhou et al. (2022) demonstrate that burnout is closely linked with broader psychological distress, including anxiety and depression, reinforcing its clinical and public health relevance.

Overall, while there is strong convergence across studies regarding the role of job demands and job resources, variations in individual characteristics, contextual settings, and moderating effects indicate that burnout is not a uniform phenomenon across healthcare environments. These differences highlight the need for standardized measurement tools, stronger longitudinal study designs, and more context-sensitive research to better clarify causal pathways and improve comparability of findings in future studies.

Conclusion and Recommendations

Based on the findings of this literature review, burnout among healthcare workers is primarily influenced by high job demands such as workload, work stress, and work conflict, while job resources such as social support, organizational support, and a conducive work environment serve as key protective factors. Individual characteristics show inconsistent effects, indicating that burnout is more strongly shaped by organizational and psychosocial factors. These findings highlight the need for comprehensive preventive strategies at the organizational level. Healthcare institutions are encouraged to implement workload management, strengthen staffing policies, and improve work environment conditions. In addition, structured mental health and staff support programs, including counseling services and stress management interventions, should be integrated into workplace health systems. Policy-level efforts to enhance work-life balance and organizational support are also essential to reduce burnout risk and improve healthcare worker well-being. Overall, strengthening organizational systems and mental health support is crucial to maintaining healthcare worker performance and ensuring the sustainability and quality of healthcare services.

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