
BURNOUT AMONG HEALTHCARE WORKERS: THE ROLE OF WORKLOAD AND PSYCHOLOGICAL ENVIRONMENT IN A REGIONAL HOSPITAL SETTING

***Wida Wildani, Muhardi, Sri Suwarsi**

Magister of Management Study Program, Faculty of Economics and Business, Universitas
Islam Bandung.

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***Corresponding Author: Wida Wildani**

Magister of Management Study Program, Faculty of Economics and Business, Universitas Islam Bandung.

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ABSTRACT

This study examines the influence of workload and psychological work environment on burnout among healthcare workers at Bandung Kiwari Regional General Hospital. Healthcare professionals operate in high-demand settings characterized by heavy workloads, time pressure, and emotionally intense interactions with patients and their families, which may lead to chronic stress and, ultimately, burnout. Burnout is defined as a psychological syndrome comprising emotional exhaustion, depersonalization, and reduced personal accomplishment. A quantitative approach with a verification method was employed. The study population consisted of healthcare workers with a minimum of one year of service, selected using incidental sampling. Data were collected using a 4-point Likert-scale questionnaire and analyzed through multiple linear regression, supported by validity, reliability, and classical assumption tests. The results indicate that workload has a positive and significant effect on burnout ($t = 5.219, p < 0.05$), while the psychological work environment has a negative and significant effect on burnout ($t = -3.746, p < 0.05$). Simultaneously, both variables significantly influence burnout ($F = 1725.944, p < 0.05$). The coefficient of determination ($R^2 = 0.672$) suggests that 67.2% of the variance in burnout is explained by workload and psychological work environment. These findings highlight that burnout among healthcare workers is shaped not only by high job demands but also by the quality of the psychological work environment. Excessive workload, when not balanced by supportive psychological conditions, increases the risk of burnout, whereas a positive work environment serves as a protective factor. Therefore, healthcare management should focus on

optimizing workload distribution and fostering a supportive psychological environment to enhance employee well-being and improve the quality of patient care.

KEYWORDS: Burnout; healthcare workers; hospital; psychological work environment; workload

INTRODUCTION

The healthcare system in Indonesia plays a strategic role in national development, aiming to achieve the highest possible level of public health. As mandated by national policy, healthcare services are designed as an integrated system encompassing promotive, preventive, curative, and rehabilitative efforts (Wendimagn& Bezuidenhout, 2019). At the core of this system are healthcare workers, whose performance and well-being directly determine the quality of service delivery, patient safety, and public trust in healthcare institutions (Nowrouzi-Kia et al., 2022).

In the context of increasingly complex healthcare demands, healthcare workers are required to perform not only clinical duties but also administrative and collaborative functions within multidisciplinary teams. The expansion of the National Health Insurance (JKN) program, rising public expectations, and stricter accreditation standards have intensified these demands (Susilo et al., 2025). Consequently, healthcare workers operate in high-pressure environments characterized by heavy workloads, time constraints, and emotionally demanding interactions with patients and their families.

From a human resource management perspective, employees are regarded as strategic assets whose performance is influenced by both job demands and organizational support. The Job Demands–Resources (JD-R) theory posits that excessive job demands, such as high workload, can deplete employees' physical and psychological energy, while job resources, including a supportive psychological work environment, can mitigate stress and enhance well-being (Mohamed et al., 2025). An imbalance between these demands and resources may lead to chronic work stress and ultimately result in burnout.

Burnout is a psychological syndrome characterized by emotional exhaustion, depersonalization, and reduced personal accomplishment. It is particularly prevalent in healthcare professions due to the intensity of interpersonal interactions and the continuous exposure to emotionally charged situations (Johnson et al., 2020). Empirical evidence suggests that burnout among healthcare workers is associated with decreased job

performance, increased medical errors, reduced patient safety, and higher turnover intentions, making it a critical issue for healthcare organizations worldwide (Ujjan et al., 2022).

In addition to workload, the psychological work environment plays a crucial role in shaping employees' experiences. Factors such as organizational support, leadership quality, interpersonal relationships, communication, and perceived fairness contribute to the overall psychological climate (Cui et al., 2025). A supportive environment can function as a protective factor against burnout, whereas a poor psychological environment may exacerbate stress and accelerate emotional exhaustion (Al Sabei et al., 2022).

As a public hospital, Bandung Kiwari Regional General Hospital operates under conditions of high service demand and resource constraints. Since its transition from a specialized maternal and child hospital to a general hospital, it has experienced a significant increase in patient volume and service complexity. This situation is further compounded by workforce limitations and the need to maintain high standards of service quality and patient safety. These conditions create substantial pressure on healthcare workers, increasing the risk of burnout.

Despite the growing concern regarding burnout, previous studies have often focused on single determinants, such as workload or stress, without simultaneously examining the role of the psychological work environment (Bakker & Demerouti, 2017; Mubaraq & Syarif, 2025; Sharifi et al., 2020). Moreover, limited research has specifically addressed burnout within the context of regional public hospitals experiencing rapid service expansion (Kusumawati & Dewi, 2021; Maulana et al., 2020; Pradana et al., 2017). This gap highlights the need for a more comprehensive analysis that integrates both job demands and psychological work conditions.

Therefore, this study aims to examine the effect of workload and psychological work environment on burnout among healthcare workers at Bandung Kiwari Regional General Hospital. By analyzing these factors simultaneously, this research seeks to provide both theoretical contributions to human resource management in healthcare and practical insights for hospital management in developing strategies to reduce burnout and improve employee well-being and service quality.

METHOD

This study adopted a quantitative design to examine the relationship between workload, psychological work environment, and burnout among healthcare workers at Bandung Kiwari

Regional General Hospital. The approach was explanatory in nature, aiming to test the proposed relationships between variables.

The study population consisted of all healthcare workers employed at the hospital (N = 1,010). A sample of 287 respondents was determined using the Slovin formula with a 5% margin of error. Participants were selected using incidental sampling, with inclusion criteria requiring at least one year of work experience and willingness to participate.

Data were collected using a structured questionnaire measuring workload, psychological work environment, and burnout. Responses were recorded on a 4-point Likert scale ranging from strongly disagree (1) to strongly agree (4).

The data were analyzed using multiple linear regression to assess the effect of workload and psychological work environment on burnout. Prior to analysis, data quality was ensured through validity and reliability testing, along with standard assumption checks. The regression analysis was used to evaluate both the individual and combined effects of the independent variables on burnout.

RESULTS

Respondent Characteristics

A total of 287 healthcare workers participated in this study, representing a diverse range of professional roles, ages, educational backgrounds, and work experience. This diversity reflects the composition of human resources directly involved in healthcare service delivery at Bandung Kiwari Regional General Hospital.

The majority of respondents were female (65.51%), while males accounted for 34.49%. In terms of age, most respondents were within the productive age group, with the largest proportion aged 26–30 years (37.98%), followed by 31–35 years (25.09%) and 21–25 years (23.69%). Only a small proportion (13.24%) were above 35 years old.

Regarding educational background, most respondents held a diploma degree (68.64%), followed by bachelor's degrees (22.65%) and master's degrees (8.71%). In terms of work experience, the majority had 4–6 years of experience (50.17%), followed by 1–3 years (38.33%), indicating that most respondents were in the early to mid-career stage.

Based on professional roles, respondents consisted primarily of midwives (31.01%) and nurses (27.87%), followed by physicians (21.95%) and medical record staff (16.03%), with a small proportion in other roles. This distribution indicates that the sample is dominated by healthcare professionals with direct and intensive patient interaction.

Descriptive Analysis of Variables

The descriptive analysis indicates that workload is perceived at a relatively high level (mean = 2.53). Among its dimensions, mental demands (mean = 2.57) and time pressure (mean = 2.54) were rated higher compared to physical demands (mean = 2.49), suggesting that workload is more strongly associated with cognitive and temporal pressures rather than physical effort.

In contrast, the psychological work environment was rated very positively, with an overall mean of 3.47, indicating a highly supportive environment. All dimensions, including interpersonal relationships, supervisory support, role clarity, organizational climate, and psychological safety, were consistently rated in the very high category. This suggests that respondents perceive strong organizational support, clear roles, and positive interpersonal dynamics in the workplace.

Despite the relatively high workload, the level of burnout among respondents was found to be low, with an overall mean of 1.99. All dimensions of burnout, emotional exhaustion (mean = 2.00), depersonalization (mean = 1.98), and reduced personal accomplishment (mean = 1.99), remained within the low category, indicating that respondents generally did not experience severe burnout symptoms.

Statistical Analysis (Regression Analysis)

Multiple linear regression analysis was performed to examine the effects of workload and psychological work environment on burnout among healthcare workers. The analysis aimed to assess both the direction and strength of the relationships, as well as the overall explanatory power of the model.

The regression results show that workload has a positive and statistically significant effect on burnout ($t = 5.219, p < 0.001$). This indicates that increases in workload are associated with higher levels of burnout. In practical terms, as healthcare workers experience greater demands, particularly in terms of mental effort and time pressure, the likelihood of experiencing burnout also increases. The positive direction of the relationship confirms that workload acts as a risk factor in the development of burnout.

In contrast, the psychological work environment demonstrates a negative and statistically significant effect on burnout ($t = -3.746, p = 0.001$). This finding indicates that improvements in the psychological work environment are associated with lower levels of burnout. A more supportive work environment, characterized by effective supervision, clear role expectations, positive interpersonal relationships, and a sense of psychological safety,

appears to reduce the intensity of burnout experienced by healthcare workers. The negative direction of this relationship suggests that the psychological work environment functions as a protective factor.

The regression model as a whole was found to be statistically significant ($F = 1725.944$, $p < 0.001$), indicating that the independent variables jointly explain variations in burnout. This result confirms that workload and psychological work environment, when considered together, provide a meaningful explanation of burnout among the respondents.

The coefficient of determination ($R^2 = 0.672$) indicates that 67.2% of the variance in burnout can be explained by workload and psychological work environment. This reflects a relatively strong explanatory power, suggesting that the model captures a substantial portion of the factors influencing burnout. The remaining 32.8% of the variance may be attributed to other variables not included in this study, such as individual coping mechanisms, organizational policies, or external stressors.

Further examination of the regression coefficients indicates that workload has a slightly stronger influence on burnout compared to the psychological work environment. This suggests that while both variables are important, job demands play a more dominant role in increasing burnout levels. However, the psychological work environment still contributes significantly, indicating that organizational support and workplace conditions remain critical in managing employee well-being.

Overall, the regression findings demonstrate that burnout among healthcare workers is shaped by the interaction between job demands and workplace conditions. Higher workload tends to elevate burnout, whereas a supportive psychological work environment helps reduce its impact.

Summary of Findings

Overall, the results show that healthcare workers at Bandung Kiwari Regional General Hospital experience relatively high workload, particularly in terms of mental demands and time pressure, while simultaneously perceiving a highly supportive psychological work environment. Despite these job demands, burnout levels remain low. The regression findings confirm that workload increases burnout, whereas a supportive psychological work environment reduces it, highlighting the importance of both factors in shaping employee well-being.

DISCUSSION

Effect of Workload on Burnout

The results of this study indicate that workload has a positive and significant effect on burnout among healthcare workers. This finding suggests that an increase in job demands is associated with higher levels of burnout. In the healthcare context, workload is not only reflected in the number of tasks but also in the complexity of cases, time pressure, and the need for continuous interaction with patients and their families. These conditions require sustained cognitive effort and emotional regulation, which may gradually lead to exhaustion. This finding is consistent with previous research that identifies workload as a major determinant of burnout in healthcare settings (Alanazy&Alruwaili, 2023; Chen & Lin, 2021; Hwang et al., 2023; Selamu et al., 2019; Wijaya & Kusuma, 2024). High job demands tend to increase psychological strain, which in turn contributes to emotional exhaustion and reduced motivation. Within the framework of the Job Demands–Resources theory, workload represents a core demand that can deplete energy when not balanced by sufficient resources. In the context of Bandung Kiwari Regional General Hospital, the operational environment reflects these conditions. Healthcare workers are required to manage multiple responsibilities simultaneously, including clinical services, administrative duties, and communication tasks. The presence of shift work and fluctuations in patient volume further intensify workload. Over time, these factors may contribute to cumulative fatigue if not managed effectively. These findings highlight the importance of workload management in healthcare organizations. Without appropriate adjustments in task distribution, scheduling, and staffing, high workload may continue to increase the risk of burnout among healthcare workers.

Effect of Psychological Work Environment on Burnout

The findings also show that the psychological work environment has a negative and significant effect on burnout. This indicates that a supportive work environment is associated with lower levels of burnout among healthcare workers. A positive psychological environment is reflected in strong interpersonal relationships, effective communication, supportive leadership, and a sense of safety in expressing concerns or difficulties at work. This result is in line with previous studies that emphasize the role of psychosocial factors in reducing burnout. A supportive work environment provides emotional and social resources that help individuals cope with job demands (Al Sabei et al., 2022; de Lisser et al., 2024; Kohnen et al., 2024; Lucas-Mangas et al., 2022; Yu et al., 2023). In the perspective of the Job

Demands–Resources theory, the psychological work environment functions as a key resource that enhances resilience and reduces the impact of stress.

In practice, the work environment at Bandung Kiwari Regional General Hospital appears to support collaboration and coordination among healthcare workers. Clear role expectations and positive communication patterns contribute to a more stable and predictable work setting. These conditions help reduce uncertainty and create a sense of control, which is important in managing stress.

Furthermore, a supportive environment encourages collective coping, where healthcare workers rely on teamwork and shared responsibility to manage work pressures. This reduces the likelihood that stress accumulates at the individual level and develops into burnout. Therefore, strengthening the psychological work environment is essential in maintaining the well-being of healthcare workers.

Combined Effect of Workload and Psychological Work Environment on Burnout

The results of this study also demonstrate that workload and psychological work environment jointly have a significant effect on burnout. Together, these variables explain a substantial proportion of the variation in burnout levels among healthcare workers. This finding indicates that burnout is not caused by a single factor, but rather by the interaction between job demands and workplace conditions.

This result supports previous research which suggests that the balance between job demands and job resources is crucial in determining employee well-being. When workload is high but supported by a positive psychological work environment, the negative effects of job demands may be reduced. Conversely, when high workload is accompanied by a poor work environment, the risk of burnout increases significantly (Bakker & Demerouti, 2017; Chen & Lin, 2021; Kusumawati & Dewi, 2021; Meredith et al., 2022; Sun et al., 2023).

In the context of Bandung Kiwari Regional General Hospital, the findings suggest that although healthcare workers face relatively high workload, the presence of a supportive psychological environment helps maintain relatively low levels of burnout. This indicates that the work environment plays a buffering role in reducing the impact of job demands.

These findings emphasize the importance of a balanced approach in managing human resources in healthcare settings. Efforts to reduce burnout should not focus solely on reducing workload, but also on strengthening the psychological work environment. By improving both aspects simultaneously, healthcare organizations can create conditions that support employee well-being while maintaining high-quality patient care.

CONCLUSION

This study demonstrates that healthcare workers at Bandung Kiwari Regional General Hospital operate under relatively high workload conditions, characterized by substantial service demands, patient volume, and professional responsibilities that require both physical and mental engagement. Despite these pressures, the psychological work environment is perceived as supportive, reflected in positive interpersonal relationships, organizational support, and effective teamwork. This supportive environment appears to play a crucial role in maintaining burnout at a relatively manageable level, even in the presence of high job demands. The findings confirm that workload has a positive and significant effect on burnout, indicating that increased job demands elevate the risk of emotional exhaustion and work-related strain. In contrast, the psychological work environment has a negative and significant effect on burnout, highlighting its function as a protective factor that can mitigate the impact of work pressure. Furthermore, the simultaneous influence of workload and psychological work environment underscores that burnout is shaped by the interaction between job demands and workplace conditions. These results suggest that efforts to manage burnout should not be limited to reducing workload alone but should also include strengthening the psychological quality of the work environment. A balanced approach that integrates effective workload management with the development of a supportive organizational climate is essential to sustain the well-being of healthcare workers and ensure the continuity of high-quality healthcare services.

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