Open Access

Journal of Scientific Insights
E-ISSN: 3062-8571
DOI: https://doi.org/10.69930/jsi.v3i3.752
Research Article

ScienceTech. Group

Vol. 3 (3), 2026
Page: 273-281

Analysis of Burnout Syndrome Levels Among Nurses at Baubau Regional General Hospital

Mitha Rahmilah *, Meliana Handayani, Wa Ode Maghfira Nurul Insani

Department of Health Administration, Faculty of Sport and Health Sciences, Universitas Negeri Makassar, Indonesia
*Email (corresponding author): mitharahmilahh@gmail.com

Abstract. *Burnout syndrome is a condition characterized by physical, emotional, and mental exhaustion resulting from prolonged work-related stress, which may negatively affect the quality of nursing care services. Nurses, as healthcare professionals with high work intensity, are particularly vulnerable to burnout due to complex and continuous job demands. This study aimed to describe the prevalence of burnout syndrome among nurses at Baubau Regional General Hospital and to support occupational mental health promotion in line with Sustainable Development Goals (SDGs) 3.4, 3.c, and 8.8. A quantitative study with a cross-sectional descriptive design was conducted involving 146 nurses selected through simple random sampling. Data were collected using the 22-item Maslach Burnout Inventory-Human Services Survey (MBI-HSS), which measures three dimensions of burnout: emotional exhaustion, depersonalization, and personal accomplishment. The results showed that most respondents had low levels of emotional exhaustion (93.8%) and depersonalization (64.4%), while the majority demonstrated high levels of personal accomplishment (63.0%). These findings indicate that most nurses at Baubau Regional General Hospital had not experienced severe burnout syndrome and generally maintained a relatively good psychological work condition. Nevertheless, several respondents demonstrated moderate to high levels of depersonalization and emotional exhaustion, which require attention. Therefore, burnout prevention efforts are needed through effective workload management, psychosocial support, and strengthening occupational health programs for nurses.*

Keywords: *Burnout Syndrome; Nurses; Emotional Exhaustion; Depersonalization; Personal Accomplishment*

1. Introduction

Healthcare facilities are an essential component of health resources that support the implementation of comprehensive healthcare services. In hospital service delivery, healthcare institutions are required to continuously improve service quality, including both general and medical services, through various initiatives such as accreditation, certification, and other quality improvement programs (Ministry of Health of the Republic of Indonesia, 2019). The decline in hospital service quality is not only influenced by the quality of human resources but may also result from excessive workloads that contribute to physical and mental fatigue among healthcare workers. Such conditions may reduce the ability of healthcare personnel to perform their duties optimally. A study conducted by Gautama and Wardani (2025) at Pusdikkes Puskesad Hospital, East Jakarta, revealed that high workloads and increased levels of fatigue contributed to decreased healthcare worker performance, ultimately negatively affecting the quality of healthcare services provided.

Received: 9 May 2026 / Accepted: 5 June 2026 / Available online: 8 June 2026

Nursing services constitute one of the fundamental healthcare services and play a vital role in hospital operations. In Indonesia, nurses represent the largest group of healthcare professionals compared to other medical personnel, giving them a strategic role in supporting healthcare service quality. In general, nurses perform multiple important roles, including as care providers, managers, educators, advocates, and researchers. In practice, nurses play a crucial role in supporting patient recovery and achieving optimal health outcomes. In addition, nurses are responsible for delivering effective, safe, and patient-centered care that addresses the needs of both patients and their families (Nathasya et al., 2023). Nursing care is critically important to public health, a fact that became increasingly apparent during the pandemic when it was clear that nursing is essential for ensuring uninterrupted services around the clock. Regardless of the field of practice or level of care, the nature of the profession requires direct, continuous contact with patients, their families, and multidisciplinary teams. This proximity, however, makes nursing an emotionally demanding activity, exposing nurses to pain, suffering, and death (Portero & Vaquero, 2015).

Nurses are required to make rapid decisions, manage cases with varying levels of severity, and work under considerable time pressure. Such dynamic, fast-paced, and unpredictable working conditions may lead to significant physical and mental exhaustion. When work pressure and job demands persist over a prolonged period, these conditions may increase the risk of stress. Nurses who are unable to effectively manage prolonged occupational stress are at risk of developing burnout syndrome. This condition may reduce nursing performance and potentially compromise service quality and patient safety (Gündüz & Öztürk, 2025).

The World Health Organization (WHO) has recognized burnout as an occupational phenomenon associated with negative impacts on workers' mental health. Burnout has also been classified in the 11th edition of the International Classification of Diseases (ICD-11) as an important occupational health issue (WHO, 2019). According to Christina Maslach and Susan E. Jackson (1981), burnout is defined as a syndrome of emotional exhaustion accompanied by cynical attitudes, commonly experienced by individuals whose work involves intensive interaction with others. Burnout describes a condition of mental and emotional exhaustion resulting from prolonged stress, particularly due to excessive role demands, limited time to fulfill responsibilities, and insufficient resources to support job performance. Burnout can cause a range of problems at both the individual and societal levels. Its impacts include sleep disturbances, behavioral problems, and dysfunctions of the immune, digestive, and circulatory systems. The condition also affects personal life, reduces work quality, increases the risk of medical errors and sick leave rates, and exacerbates workforce shortages as many nurses choose to leave the profession. In more severe cases, burnout can even lead to addiction, depression, and suicide (Membrive-Jiménez, et. al., 2022).

Burnout is characterized by three main dimensions: emotional exhaustion, depersonalization, and reduced personal accomplishment. Emotional exhaustion is characterized by diminished emotional energy, feelings of fatigue, and decreased work enthusiasm. In individuals experiencing burnout, this condition generally represents the initial symptom before progressing to the next stage, namely depersonalization. Depersonalization is reflected in indifferent attitudes, emotional distancing, and reduced empathy toward others. Meanwhile, reduced personal accomplishment is associated with decreased feelings of competence, low self-confidence, and reduced productivity in carrying

out professional and personal activities. This condition is also closely related to individual self-control and social support (Christina, 2016).

Burnout syndrome among nurses may have serious consequences for patient satisfaction and patient safety because it contributes to decreased performance and reduced quality of nursing care. Nurses experiencing burnout are more vulnerable to errors in healthcare delivery, including medication errors and other nursing-related mistakes. This condition may also increase the risk of infections and patient falls during hospitalization (Dall'Ora et al., 2020). Nurses experiencing burnout generally suffer from prolonged emotional, physical, and mental exhaustion, resulting in decreased concentration and focus while delivering care. Such conditions may affect the accuracy of decision-making in nursing practice and may also lead to negative outcomes, including increased absenteeism, sick leave, and intentions to leave the profession (Nursalam, 2015).

This study is also relevant to global health workforce priorities under the Sustainable Development Goals (SDGs). Preventing burnout among nurses supports SDG 3.4, which emphasizes mental health and well-being; SDG 8.8, which promotes safe and secure working environments; and SDG 3.c, which highlights the need to strengthen the health workforce, including retention and support for health personnel. By identifying burnout levels among nurses, hospitals can develop evidence-based occupational health strategies that protect staff well-being and sustain quality healthcare services.

The situation observed at Baubau Regional General Hospital indicates a high volume of patient visits, reaching 6,382 visits in 2025, which directly contributed to the increased workload of nursing staff. The high number of patients has the potential to intensify nurses' work-related pressures, both physically and psychologically, thereby affecting their working conditions and overall well-being. Therefore, it is necessary to conduct a study on the level of burnout syndrome among nurses at Baubau Regional General Hospital, considering that these conditions indicate strong potential factors contributing to burnout syndrome.

While previous studies have examined burnout among nurses in tertiary hospitals, mental health facilities, emergency units, or specific inpatient wards, evidence from regional general hospitals in eastern Indonesia remains limited. The novelty of this study lies in its specific focus on Baubau Regional General Hospital in Southeast Sulawesi, an under-researched geographic context. The findings provide baseline prevalence data that can inform targeted occupational health interventions for nurses in smaller and regional hospital settings.

2. Methods

This study employed a quantitative research design with a cross-sectional descriptive approach. The study was conducted at Baubau Regional General Hospital, Southeast Sulawesi, considering that the hospital has a high and diverse level of operational activity, making it appropriate for the objectives of the study. The research was carried out from October to November 2025 and included direct observation, interviews with nurses, and data collection related to the research variables. Because the purpose of this study was to describe the prevalence and distribution of burnout syndrome, the analysis was limited to descriptive statistics in the form of frequencies and percentages; no inferential or bivariate statistical tests were performed.

The population of this study consisted of all nurses working at Baubau Regional General Hospital, totaling 234 individuals. The study sample included 146 respondents selected using a simple random sampling technique. The instrument used in this study was

the 22-item Maslach Burnout Inventory-Human Services Survey (MBI-HSS) for human service professionals, which is a standardized instrument for measuring burnout syndrome. The questionnaire demonstrated a Kaiser-Meyer-Olkin (KMO) validity value of 0.931 and a reliability coefficient of 0.916. The instrument was used to assess burnout syndrome based on three primary dimensions: emotional exhaustion, depersonalization, and personal accomplishment.

3. Results and Discussion

Table 1 presents the distribution of respondents' characteristics, including gender, age, and length of employment among nurses at Baubau Regional General Hospital. The presentation of these data aims to provide a general overview of the respondents' demographic profiles as a basis for understanding the context of the study analysis, particularly in relation to the level of burnout syndrome among nurses.

Table 1. Characteristics of Respondents Based on Gender, Age, and Length of Employment Among Nurses at Baubau Regional General Hospital

Respondent Characteristics	Kategori	Frekuensi (n)	
		(n)	(%)
Gender	Male	34	23.3
	Female	112	76.7
Age	17-25 years	3	2.1
	26-35 years	63	43.2
	36-45 years	69	47.3
	46-55 years	10	6.8
	>55 years	1	0.7
Work Period	Senior	19	13.0
	Junior	127	87.0
Total		**146**	**100.0**

Based on Table 1, the total number of respondents in this study was 146 nurses at Baubau Regional General Hospital. Based on gender, the majority of respondents were female nurses, totaling 112 individuals (76.7%). The predominance of female nurses is consistent with the characteristics of the nursing profession, which is generally still dominated by women due to their perceived empathy, attentiveness, and effective communication skills in providing patient care. This condition also indicates that female nurses play a substantial role in supporting healthcare services within hospitals.

Regarding age group, most respondents were aged 36–45 years, accounting for 69 individuals (47.3%), while the fewest respondents were aged over 55 years, with only 1 individual (0.7%). These findings indicate that the majority of nurses were within the productive and professionally mature age group. Productive age is generally associated with greater work experience, better decision-making abilities, and stronger emotional stability in dealing with workplace demands in hospital settings. Nurses within this age range also tend to demonstrate higher adaptability and greater professional responsibility compared to younger nurses. Age is considered an important factor influencing the physical and psychological well-being of nurses. With increasing age and maturity, individuals tend to

demonstrate more advanced cognitive abilities, greater professional competence, and improved work performance. Consequently, older nurses may be better equipped to optimize their performance and contribute their accumulated knowledge and clinical experience to the delivery of patient care (Hidayat & Sureskiarti, 2020).

Based on work period, most respondents were categorized as having long work experience, totaling 127 individuals (87.0%). The high proportion of nurses with long work experience indicates that most respondents had substantial experience in providing nursing care services. Longer work experience may enhance professional skills, communication abilities, and understanding of hospital service procedures. However, extended years of service may also contribute to work-related fatigue if not balanced with effective stress management and appropriate workload distribution. Overall, the respondent characteristics in this study indicate that the majority of nurses at Baubau Regional General Hospital were female, within the productive age group, and had relatively long work experience. These characteristics may influence nurses' psychological conditions and their ability to cope with occupational stress, including the risk of burnout syndrome within the hospital work environment.

Table 2. Analysis of Burnout Syndrome Levels Among Nurses at Baubau Regional General Hospital

Burnout Syndrome Dimensions	Frekuency	
	(n)	(%)
Emotional Exhaustion		
Low	137	93.8
Moderate	8	5.5
High	1	0.7
Depersonalization		
Low	94	64.4
Moderate	31	21.2
High	21	14.4
Personal Accomplishment		
Low	31	21.2
Moderate	23	15.8
High	92	63
Total	**146**	**100**

Based on Table 2, the findings regarding burnout syndrome among nurses at Baubau Regional General Hospital indicate that, in the dimension of emotional exhaustion, the majority of respondents were categorized as having low levels of emotional exhaustion, totaling 137 individuals (93.8%). Meanwhile, 8 respondents (5.5%) were categorized as moderate, and only 1 respondent (0.7%) was categorized as high. These findings suggest that most nurses experienced low levels of emotional exhaustion and were generally still able to manage emotional pressure in the workplace. In the depersonalization dimension, the majority of respondents were also categorized as low, accounting for 94 individuals (64.4%). Furthermore, 31 respondents (21.2%) were categorized as moderate, while 21 respondents (14.4%) were categorized as high. These findings indicate that most nurses still maintained

professional attitudes and empathy toward patients, although some respondents had begun to exhibit symptoms of depersonalization at moderate to high levels.

In contrast to the previous two dimensions, the personal accomplishment dimension showed that most respondents were categorized as high, totaling 92 individuals (63.0%), followed by 31 respondents (21.2%) in the low category and 23 respondents (15.8%) in the moderate category. These findings indicate that the majority of nurses had positive perceptions regarding their abilities and professional achievements, suggesting that they still felt competent and capable of achieving positive outcomes in carrying out nursing duties. Overall, the findings on burnout syndrome among nurses at Baubau Regional General Hospital demonstrate that most respondents had low levels of emotional exhaustion and depersonalization, along with high levels of personal accomplishment. These results indicate that the majority of nurses had not experienced severe burnout syndrome and generally maintained relatively good psychological working conditions.

The findings of this study indicate that the overall condition of burnout syndrome among nurses at Baubau Regional General Hospital was relatively favorable. This is reflected in the predominance of respondents who demonstrated low levels of emotional exhaustion, low depersonalization, and high personal accomplishment. These findings suggest that most nurses had not experienced severe levels of burnout syndrome, although several respondents were still identified within the moderate to high categories across certain dimensions, which warrants attention.

In the emotional exhaustion dimension, the majority of respondents were categorized as low (93.8%). These findings indicate that most nurses were still capable of managing emotional demands during work. Emotional exhaustion is considered the core dimension of burnout syndrome and represents a condition in which individuals experience loss of energy, weakness, and fatigue. Higher emotional exhaustion scores indicate a greater burden of burnout symptoms (Brady et al., 2020). Compared with previous Indonesian hospital-based evidence, the Baubau finding appears generally consistent with studies reporting that many nurses remain in the mild or low burnout category, although the proportion of low emotional exhaustion in this study is particularly high. Ashiilah et al. (2023), in a study among psychiatric nurses in West Java, also reported that most respondents experienced emotional exhaustion at a mild level. Lastari et al. (2025), in a study among nurses in the surgical inpatient ward at Arifin Achmad Regional General Hospital, Riau Province, similarly reported favorable personal accomplishment among many respondents. These similarities suggest that strong adaptation, collegial support, and professional experience may protect nurses from severe burnout in several Indonesian hospital settings.

In the depersonalization dimension, the majority of respondents were also categorized as low (64.4%). This finding indicates that most nurses were still able to maintain empathy, concern, and positive interpersonal relationships with patients. However, the proportion of moderate to high depersonalization in this study (35.6%) was more prominent than the proportion of moderate to high emotional exhaustion. This pattern suggests that although most nurses did not feel emotionally depleted, some may have started to develop psychological distancing as an adaptive response to repeated patient contact and service pressure. Differences across Indonesian studies may be explained by hospital type, unit characteristics, patient volume, staffing patterns, and regional service demands. For example, mental health facilities and surgical inpatient wards may expose nurses to different emotional

burdens, clinical risks, and patient interaction patterns than a regional general hospital such as Baubau Regional General Hospital.

In the personal accomplishment dimension, the majority of respondents were categorized as high (63.0%). These findings indicate that most nurses still possessed self-confidence, competence, and confidence in their ability to perform their duties effectively. This finding is consistent with the study conducted by Lastari et al. (2025) among nurses in the surgical inpatient ward at Arifin Achmad Regional General Hospital, Riau Province, where most respondents reported high personal accomplishment, indicating that many felt effective and successful in their work. High personal accomplishment reflects that nurses still perceived their work as meaningful and beneficial, both for patients and the institution. A sense of achievement at work serves as an important protective factor against burnout syndrome. When nurses feel capable, appreciated, and able to contribute meaningfully, the risk of occupational exhaustion tends to decrease. Conversely, nurses with low personal accomplishment may experience reduced self-confidence, dissatisfaction with work outcomes, and greater vulnerability to burnout.

Overall, the findings of this study indicate that the psychological working conditions of nurses at Baubau Regional General Hospital were generally favorable. Low levels of emotional exhaustion and depersonalization, along with high levels of personal accomplishment, suggest that most nurses still possessed good adaptability to work-related pressures. These findings may be associated with respondent characteristics, which were predominantly female nurses, within productive adult age groups, and with relatively long work experience. Longer work experience may protect against emotional exhaustion because nurses with more years of service may have stronger clinical competence, better familiarity with hospital routines, and more mature coping mechanisms. Conversely, extended years of service may also increase cumulative fatigue if workload distribution, rest periods, and psychosocial support are inadequate. Because this study used descriptive analysis only, future studies should apply inferential statistics, such as chi-square tests or logistic regression, to examine whether age, gender, and work period are significantly associated with each burnout dimension.

Nevertheless, the presence of respondents with moderate to high levels of depersonalization and emotional exhaustion still requires attention. These findings indicate that burnout syndrome remains a potential issue among some nurses, particularly when work pressure increases, workloads become imbalanced, or organizational support decreases. Therefore, hospitals should continue implementing preventive measures through effective workload management, enhanced psychosocial support, evaluation of the work environment, and strengthening occupational health programs for nurses. The clear delineation of roles and responsibilities among physicians, nurses, and other healthcare professionals, in accordance with applicable regulations, may reduce the risk of excessive workload being placed on specific individuals. This enables healthcare workers to exercise greater control over their duties, work schedules, and time management in the provision of healthcare services (Mayzell, 2020). Such efforts are essential to maintain optimal psychological well-being among nurses and to prevent the progression of burnout syndrome in the future.

Limitations and Future Research

This study has several limitations. First, the cross-sectional design prevents observation of changes in burnout symptoms over time. Second, the single-hospital sample

limits the generalizability of the findings to other healthcare settings, particularly hospitals with different service levels, staffing patterns, and patient volumes. Third, the study relied on self-reported questionnaire data, which may be influenced by recall bias or social desirability bias. Fourth, the analysis did not link burnout levels with objective workload indicators, staffing ratios, absenteeism, or patient outcomes. Future research should consider longitudinal designs, bivariate and multivariate analysis, and intervention studies to evaluate strategies for reducing burnout and improving nurse well-being.

Conclusions

Based on the findings of this study, the overall condition of burnout syndrome among nurses at Baubau Regional General Hospital was relatively favorable, as indicated by the majority of respondents demonstrating low emotional exhaustion (93.8%), low depersonalization (64.4%), and high personal accomplishment (63.0%). These findings suggest that most nurses had not experienced severe burnout syndrome, were still capable of managing work-related pressures, maintaining interpersonal relationships with patients, and demonstrating confidence in their professional abilities. Nevertheless, a small proportion of nurses still exhibited moderate to high levels of burnout symptoms, indicating the need for continued preventive efforts through effective workload management, psychosocial support, and improvements in occupational health programs.

Funding

This research received no external funding.

Acknowledgments

We express our gratitude to the nurses of Baubau Hospital for their cooperation and participation in this study. Appreciation is also extended to all parties who provided support and assistance during the data collection process. Finally, the authors thank colleagues and supervisors who offered valuable guidance and constructive input throughout the completion of this research

Conflicts of Interest

The authors declare no conflict of interest.

References

Ashiilah, A. B., Mediawati, A. S., & Hidayati, N. O. (2023). Gambaran kejadian burnout syndrome pada perawat jiwa. Jurnal Keperawatan, 15(4), 1815-1824. https://doi.org/10.32583/keperawatan.v15i4.1240

Brady, K. J. S., Ni, P., Sheldrick, R. C., Trockel, M. T., Shanafelt, T. D., Rowe, S. G., Schneider, J. I., & Kazis, L. E. (2020). Describing the emotional exhaustion, depersonalization, and low personal accomplishment symptoms associated with Maslach Burnout Inventory subscale scores in US physicians: An item response theory analysis. Journal of Patient-Reported Outcomes, 4(1), 42. https://doi.org/10.1186/s41687-020-00204-x

Christina, M. (2016). Burnout. In G. Fink (Ed.), Stress: Concepts, cognition, emotion, and behavior (pp. 351–357). Academic Press. https://doi.org/10.1016/B978-0-12-800951-2.00044-3

Dall'Ora, C., Ball, J., Reinius, M., & Griffiths, P. (2020). Burnout in nursing: A theoretical review. Human Resources for Health, 18(1), 41. https://doi.org/10.1186/s12960-020-00469-9

Gautama, I., & Wardani, R. (2025). Analisa beban kerja dan tingkat kelelahan terhadap kinerja tenaga kesehatan di IGD dan ruang rawat inap RS Pusdikkes Puskesad Jakarta Timur. Al Qalam: Jurnal Ilmiah Keagamaan dan Kemasyarakatan, 19(2), 1290. https://doi.org/10.35931/aq.v19i2.4809

Gündüz, E. S., & Öztürk, N. K. (2025). Mental workload as a predictor of burnout in intensive care nurses. Nursing in Critical Care, 30(2), 1-9. https://doi.org/10.1111/nicc.1317

Hidayat, R., & Sureskiarti, E. (2020). Hubungan beban kerja terhadap kejenuhan (burnout) kerja pada Perawat di Ruang Rawat Inap Rumah Sakit Umum Daerah Inche Abdoel Moeis Samarinda. Borneo Student Research, 1(3), 2168–2173. https://journals.umkt.ac.id/index.php/bsr/article/view/895

Lastari, R. F., Saifulaman, M., Mulud, Z. A., Amyrusdi, R. Z., Rajunitrigo, Erianti, S., & Anggreny, Y. (2025). Gambaran burnout pada perawat di rumah sakit. JKA (Jurnal Keperawatan Abdurrab), 8(2), 44-50. https://doi.org/10.36341/jka.v8i2.7316

Maslach, C., & Jackson, S. E. (1981). Maslach Burnout Inventory Manual (2nd ed.). Palo Alto, CA: Consulting Psychologists Press.

Mayzell, G. (2020). The Resilient Healthcare Organization. In The Resilient Healthcare Organization. https://doi.org/10.4324/9780429286025

Membrive-Jiménez, M. J., Gómez-Urquiza, J. L., Suleiman-Martos, N., Velando-Soriano, A., Ariza, T., De la Fuente-Solana, E. I., et al. (2022). Relation between burnout and sleep problems in nurses: A systematic review with meta-analysis. Healthcare, 10(5), 954. https://doi.org/10.3390/healthcare10050954

Ministry of Health of the Republic of Indonesia. (2019). Regulation of the Minister of Health of the Republic of Indonesia Number 7 of 2019 concerning hospital environmental health.

Nathasya, R. P., Suci, W. P., & Amir, Y. (2023). Analisis beban kerja di ruang rawat inap surgical RSUD Arifin Achmad Pekanbaru. Health Information: Jurnal Penelitian, 15(2), 1-12. https://myjurnal.poltekkeskdi.ac.id/index.php/hijp/article/view/978

Nursalam. (2015). Metodologi penelitian ilmu keperawatan: Pendekatan praktis (4th ed.). Jakarta: Salemba Medika.

Portero de la Cruz, S., & Vaquero Abellán, M. (2015). Professional burnout, stress and job satisfaction of nursing staff at a university hospital. Revista Latino-Americana de Enfermagem, 23(3), 543–552. https://doi.org/10.1590/0104-1169.0284.2

World Health Organization. (2019, May 28). Burn-out an occupational phenomenon: International Classification of Diseases. https://www.who.int/news/item/28-05-2019-burn-out-an-occupational-phenomenon-international-classification-of-diseases

CC BY-SA 4.0 (Attribution-ShareAlike 4.0 International).
This license allows users to share and adapt an article, even commercially, as long as appropriate credit is given and the distribution of derivative works is under the same license as the original. That is, this license lets others copy, distribute, modify and reproduce the Article, provided the original source and Authors are credited under the same license as the original.