KEMAS 21 (4) (2026) 921-928

Jurnal Kesehatan Masyarakat

http://journal.unnes.ac.id/nju/index.php/kemas

Work-Environment Predictors of Burnout Among Psychiatric Nurses in Indonesia

Aquila Ghafril Azizah[1]✉, Indriati Paskarini[2], Mahmudah[2], M. Shalehuddin[3]

[1]School of Medicine and Dentistry, Griffith University, Australia
[2]Faculty of Public Health, Universitas Airlangga, Indonesia
[3]Dr Radjiman Wediodiningrat Psychiatric Hospital, Indonesia

Article Info

Article History:
Submitted October 2025
Accepted March 2026
Published April 2026

Keywords:
Work enviroment; burnout; nurses

DOI
https://doi.org/10.15294/kemas.v21i4.41229

Abstract

Healthcare professionals, particularly nurses, operate in demanding environments that require advanced expertise and considerable responsibility. Nurses frequently encounter heavy workloads, increasing their susceptibility to burnout. This risk is heightened among psychiatric nurses, who routinely care for patients with mental disorders and must address complex emotional challenges. In the present study, 22.22% of participating nurses reported experiencing burnout as a result of aggressive patient behavior. Methods: This cross-sectional study involved 180 nurses selected through stratified random sampling from outpatient, inpatient, emergency, and Intensive Psychiatric Care Unit (IPCU) settings at Dr. Radjiman Wediodiningrat Psychiatric Hospital. Environmental factors were assessed using the Copenhagen Psychosocial Questionnaire III, while burnout was measured with the Maslach Burnout Inventory. Data analysis was conducted using Structural Equation Modeling-Partial Least Squares (SEM-PLS) to examine the association between environmental factors and burnout. Results: A statistically significant negative association was identified between environmental factors and burnout among nurses (path coefficient = -0.355, p-value < 0.05). The most influential environmental indicators included community relationships, work values, and perceived fairness. Higher levels of these indicators corresponded with lower levels of burnout. Conclusion: Environmental factors, especially community relationships, work values, and fairness, play a critical role in reducing burnout among psychiatric hospital nurses. Interventions focused on these factors may enhance nurse well-being and improve the quality of care.

Introduction

The healthcare sector constitutes a high-risk domain within human services, necessitating continuous support, assistance, and care to enhance the quality of life for both patients and the broader community (Ezie *et al*., 2023). Nurses, in particular, are exposed to considerable stress arising from routine clinical duties, the critical responsibility of ensuring patient safety, the demands of effective teamwork, and frequent encounters with emotionally challenging situations, all of which significantly increase their susceptibility to burnout (Ulfah *et al*., 2020). Burnout is defined as a state of mental exhaustion resulting from sustained occupational stress, and is frequently associated with adverse health outcomes (Edú-valsania *et al*., 2022). This syndrome is characterized by emotional fatigue, depersonalization, and diminished personal accomplishment (Maslach & Leiter, 2021). Epidemiological data indicate that the prevalence of burnout among nurses is 38% in North America, 32% in Europe and Africa, 27% in Asia, and 21% in South America (Ge *et al*., 2023). In East Java, Indonesia, more than 24% of nurses have reported experiencing symptoms such as emotional fatigue, depersonalization, and reduced personal accomplishment (Putra *et al*., 2021). The prevalence of burnout highlights

✉ Correspondence Address:
School of Medicine and Dentistry, Griffith University, Australia
Email: aquilaghafril@gmail.com

pISSN 1858-1196
eISSN 2355-3596

that it is not only an international concern but also a significant challenge within Indonesia's national healthcare system.

The etiology of burnout among nurses is multifactorial and involves complex interactions among individual, organizational, and systemic factors. Ineffective communication, particularly in a strained interpersonal relationship, can exacerbate the symptoms of burnout. Furthermore, excessive workload has a pronounced impact on fatigue, job quality, motivation, and overall job satisfaction among nurses. The convergence of these challenges impedes effective team communication, exacerbates exhaustion, and poses significant risks to the health and well-being of healthcare professionals (Marković *et al*., 2024). Additional determinants of nurse burnout comprise occupational uncertainty, role conflict, diminished autonomy, staffing shortage, extended working hours, excessive workloads, constrained opportunities for career development, workplace bullying, suboptimal management practices, inadequate resources, and limited participation in the organizational decision-making process (Şenol *et al*., 2024). The determinants of burnout among nurses are complex and dynamic, differing based on the clinical settings to which nurses are assigned. Nursing roles are generally classified as inpatient care, outpatient care, or emergency services. Emergency nurses, in particular, work in the most demanding and high-pressure hospital environments and frequently report higher levels of fatigue than nurses in other units. These environments impose substantial physical and emotional demands, as emergency nurses are regularly exposed to critically ill patients, life-threatening situations, and a heightened risk of workplace violence (Lee *et al*., 2021).

Despite the distinct environment and specific etiological factors present in psychiatric care settings, scholarly inquiry into nurse burnout within these contexts remains insufficient. Prior research indicates that 22.2% of nurses working in Intensive Psychiatric Care Units have reported experiencing burnout, with aggressive patient behavior identified as a significant contributing factor (Haherera *et al*., 2024). However, aggressive behavior represents only one aspect among the myriad contributors to nurse burnout. The present study seeks to systematically examine environmental determinants influencing the prevalence of burnout among nurses in psychiatric hospitals, focusing on factors such as workload, perceived rewards, social connectedness, perceptions of fairness, job significance, emotional experiences in the workplace, job security, role ambiguity, job autonomy, and shift work.

Method

This study is an analytical observational study with a cross-sectional design. The research population included all nurses employed in the outpatient, inpatient, emergency, and Intensive Psychiatric Care Unit (IPCU) departments of Radjiman Wediodiningrat Hospital. A proportionate stratified random sampling method was employed, resulting in a sample of 180 nurses. The independent variables—workload, rewards, community relationships, fairness, job significance, emotional experiences at work, job security, role ambiguity, job autonomy, and work shifts—were evaluated using the Copenhagen Psychosocial Questionnaire III, a proven and reliable tool. The Maslach Burnout Inventory-Human Services Survey, which is used around the world, was used to quantify the dependent variable, burnout. The questionnaire utilized in this study has been internationally validated, ensuring its validity and reliability for research purposes. The collected data will be examined through descriptive statistical methods, including the summarization of frequency distributions and proportions for each variable. Afterward, inferential analysis will be performed using Structural Equation Modeling-Partial Least Squares (SEM-PLS) with SmartPLS software to ascertain the impact of the independent factors on burnout. The evaluation of models using SEM-PLS consists of two primary stages: assessment of the measurement model (outer model) and the structural model (inner model). The measurement model assesses the relationship between observed indicators and their corresponding latent constructs. In contrast, the structural model investigates the relationships among latent variables within the

TABLE 1. Characteristic Radjiman Wedioninggrat Hospital's Nurses

Indicators	Frequency (n)	Percentage (%)
Age		
Late teenagers (17-25 years old)	11	6,11
Early adult (26-35 years old)	44	24,44
Late adult (36-45 years old)	75	41,67
Early elderly (46-55 years old)	50	27,78
Total	180	100,00
Gender		
Male	68	37,78
Female	112	62,22
Total	180	100,00
Marital status		
Single	27	15,00
Married	148	82,22
Divorce	5	2,78
Total	180	100,00
Education		
Diploma III	29	16,11
Diploma IV	26	14,44
Bachelor	124	68,89
Magister	1	0,56
Total	180	100,00
Length of work		
≤5 years	41	22,78
>5 years	139	77,22
Total	180	100,00
Working unit		
Outpatient care	18	10,00
In-patient care	138	76,66
Emergency care	12	6,67
IPCU	12	6,67
Total	180	100,00

Source: Primary data, 2025

proposed theoretical framework. The Radjiman Wediodiningrat Hospital Ethics Committee gave this study ethical approval (ethics certificate number TK.02.04/D.XXXVII.3.6/6313/2025).

Result and Discussion

A demographic analysis of nurses at Radjiman Wediodiningrat Hospital, based on questionnaire responses, revealed that most participants were late adults aged 36 to 45 years (41.67%), female (62.22%), and married (82.22%). The majority held a bachelor's degree (68.89%), had more than five years of work experience (72.22%), and were primarily assigned to inpatient units (76.66%) (Table 1). Regarding burnout dimensions, the largest proportion of nurses reported high emotional exhaustion (35%),

TABLE 2. Frequency Distribution of Burnout Among Nurses at Radjiman Wediodiningrat Hospital

Category	Burnout					
	Emotional Exhaustion		Depersonalization		Personal Achievement	
	Frequency (n)	%	Frequency (n)	%	Frequency (n)	%
Low	62	34,44	76	42,22	55	30,56
Medium	55	30,56	46	25,56	80	44,44
High	63	35,00	58	32,22	45	25,00
Total	180	100,00	180	100,00	180	100,00

low depersonalization (42.22%), and moderate personal accomplishment (44.44%) (Table 2). A comprehensive assessment using the Maslach Burnout Inventory identified four nurses experiencing burnout, as indicated by elevated emotional exhaustion, increased depersonalization, and reduced personal accomplishment across all three dimensions (Maslach & Leiter, 2021).

The results of the measurement (outer) model show that several indicators had p-values greater than 0.05, indicating a lack of statistical significance. Six environmental factors—work shift (E10), job autonomy (E9), reward (E2), emotional experience at work (E6), workload (E1), job security (E7), and role ambiguity (E8)—did not meet the significance threshold (see Figure 1). Therefore, a stepwise elimination procedure was applied to remove these non-significant indicators from the model. Following this refinement, the final measurement model showed that the Average Variance Extracted (AVE) values for all variables were above 0.5, confirming that each remaining indicator sufficiently explained its underlying latent construct. Table 2 further shows that community relations (loading = 0.822) was the most salient indicator for the environmental factor variable, while depersonalization (loading = 0.867) was the strongest indicator for the burnout variable.

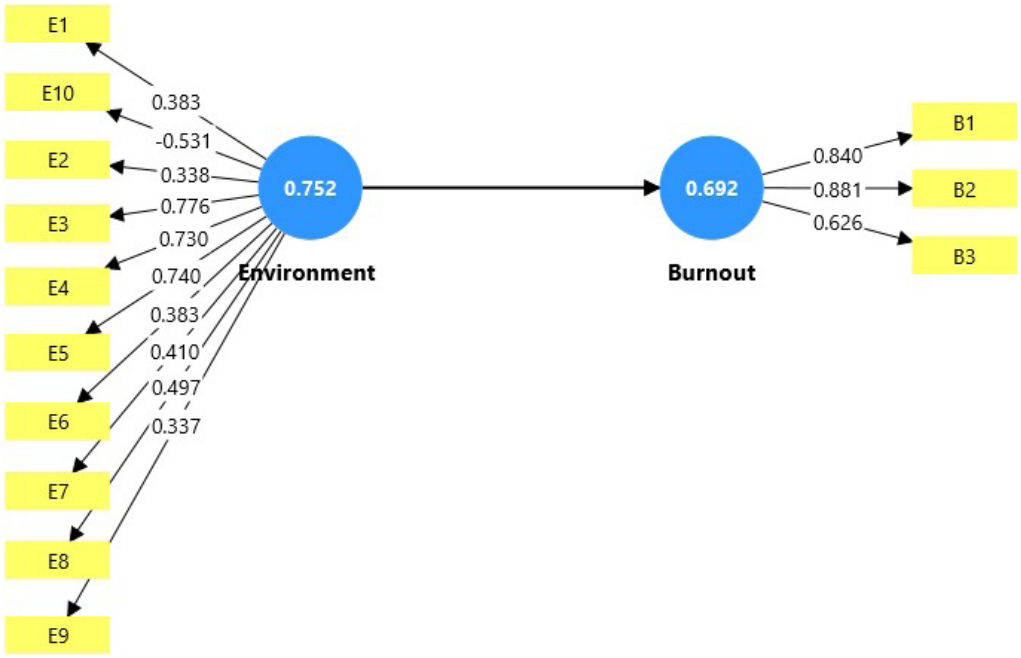

FIGURE 1. Outer Model

TABLE 3. Loading Factor Environment Indicators

Variable		Indicator	Loading Factor	Average Variance Extracted (AVE)
Environment Factors	E3	Community relationships	0,836	0,657
	E4	Fairness	0,796	
	E5	Work values	0,798	
Burnout	B1	Emotional Exhaustion	0,811	
	B2	Depersonalization	0,873	0,625
	B3	Personal Achievement	0,673	

TABLE 4. The correlation between work environment and burnout

Variable	R-Square	Path Coefficient	P-value	Hypothesis
	0,126	-0,355	0,000	Significance

The R-square value, or coefficient of determination, measures the proportion of variance in the dependent variable explained by the independent variables, with possible values between 0 and 1. Values approaching 1 indicate greater explanatory power of the model. In this study, the R-square value is 0.126, demonstrating that environmental factors explain 12.6% of the variance in burnout among nurses at Radjiman Wediodiningrat Hospital. The remaining 87.4% of the variance is due to factors not examined in this research. Hypothesis testing in this study employed a 5% significance level. A variable is considered to have a statistically significant effect if its p-value is below 0.05. Analysis of path coefficients reveals both the direction and strength of relationships between variables. A path coefficient near +1 indicates a strong positive association, while negative values indicate an inverse relationship. The findings for the second hypothesis indicate that environmental factors have a significant effect on burnout (p-value = 0.000), with a path coefficient of -0.355. This negative coefficient indicates that higher environmental factor scores are associated with lower levels of burnout. Thus, the data support the second hypothesis (see Table 3).

The work environment encompasses all external factors that may contribute to nurse burnout. Empirical evidence indicates that the work environment significantly affects nurses' psychological well-being, professional performance, patient outcomes, and the overall effectiveness of healthcare organizations (Clari *et al*., 2022). This association is particularly pronounced in developing countries, where inadequate working conditions have been identified as major risk factors for nurse burnout (Tamata & Mohammadnezhad, 2023). In contrast, a supportive and well-structured work environment promotes a more positive and productive professional atmosphere for nurses (Sibuea *et al*., 2024).

Analysis of individual indicators suggests that community relationships most accurately represent the environmental factors influencing nurses at Radjiman Wediodiningrat Hospital. Community relationships include interpersonal interactions, social support, and positive reinforcement from supervisors and peers. Strong interpersonal relationships among team members are essential, as collaborative and coordinated efforts improve the overall quality of patient care (Malta *et al*., 2024). Effective communication is also vital in healthcare settings, enabling nursing staff to manage high workloads through shared understanding and cooperation with colleagues and management (Ashipala & Nghole, 2022). Empirical studies further demonstrate that strong coworker relationships, teamwork, and supportive,

collaborative leadership are inversely associated with burnout among nurses, indicating that these factors serve as protective mechanisms against occupational stress (Hudays *et al*., 2024). Additionally, relationships outside the workplace, such as those with family members and patients, have been shown to affect mental fatigue, particularly if not managed effectively (Wang, Li, *et al*., 2025). This is especially relevant for psychiatric nurses, who require specialized skills to provide care for individuals with mental health disorders. In contrast, lack of willingness and commitment are identified as barriers to effective interpersonal relationships in nursing environments, while patience and understanding are key facilitators of positive interactions in healthcare institutions (Aydogdu, 2024).

The second key environmental indicator is the perceived meaning of work among nurses. In the nursing profession, work values refer to the core beliefs and ethical principles that guide conduct, influence behavioural responses, inform decision-making, and shape coping strategies during occupational stress (Wang, Wang, *et al*., 2025). Nurses who place a high value on patient care tend to demonstrate greater resilience, patience, and diligence, even in challenging or stressful situations. The literature further indicates that work values are associated with the satisfaction and recognition individuals derive from their occupations, which subsequently influence professional attitudes and aspirations. Higher work values among nurses correlate with increased job satisfaction and a lower risk of burnout (Kim *et al*., 2024). When the perceived meaning of work aligns with institutional goals, nurses are more likely to achieve professional growth, find fulfilment in their duties, and improve the overall quality of care (Vargas-Benítez *et al*., 2023). Nevertheless, ongoing exposure to patient suffering, grief, and mortality can heighten work-related stress and fatigue, especially when personal and professional values are challenged, thereby increasing vulnerability to burnout (Grande *et al*., 2022).

Nurses' perception of fairness within the workplace represents a critical environmental factor. Perceived fairness includes equitable task distribution, appropriate recognition and rewards for high-quality performance, and consistent follow-up on completed work. Fair organizational practices have been shown to increase job satisfaction, foster respect and appreciation among nursing staff, and promote a harmonious and productive work environment (Jo & Shin, 2025). A fair workplace also empowers nurses, enhancing their confidence and professional courage in task execution (Koksal & Mert, 2024). In contrast, low perceived fairness is associated with reduced organizational commitment, which may lead to moral distress and a heightened risk of burnout (Lotfi-Bejestani *et al*., 2023). Evidence indicates that organizational fairness communicates mutual respect among staff, whereas perceived unfairness can create uncertainty regarding institutional values and the employer–employee relationship (Azama & Lim, 2025). Experiences of unfairness may undermine nurses' psychological resilience and increase emotional and physical disengagement from their roles (Parola *et al*., 2022). These findings are consistent with research demonstrating that persistent dissatisfaction across multiple domains of work life, such as community, autonomy, fairness, workload, values, and rewards, can precipitate burnout (Christianson *et al*., 2024). Furthermore, excessive workloads and perceptions of unfairness are significant contributors to burnout, negatively impacting nurses' health and well-being (Abuhammad *et al*., 2025).

Conclusion

The results indicate an association between environmental factors and burnout among nurses at Dr. Radjiman Wediodiningrat Psychiatric Hospital, as measured by indicators including community relations, perceived fairness, and sense of meaning in work. The relationship is negative, suggesting that a supportive work environment correlates with a lower incidence of nurse burnout. These findings underscore the need for hospital management to foster positive interpersonal relationships among nursing staff and other healthcare professionals, promote shared professional values, and ensure equitable distribution of work assignments and recognition of nurses' contributions.

Acknowledgments

The author would like to thank Airlangga University for granting permission to conduct this research, as well as Dr. Radjiman Wediodiningrat Psychiatric Hospital for their cooperation in this study.

References

Abuhammad, S., Alzoubi, K.H., Al-Azzam, S., Karasneh, R., Masadeh, M.M., & Alameddine, M., 2025. Work-Life Balance, Job Satisfaction, and Burnout Among Nurses in Jordan: A Cross-Sectional Study. *PLOS ONE*, 20(10).

Ashipala, D.O., & Nghole, T.M., 2022. Factors Contributing to Burnout Among Nurses at a District Hospital in Namibia: A Qualitative Perspective of Nurses. *Journal of Nursing Management*, 30(7), pp.2982–2991.

Aydogdu, A.L.F., 2024. Interpersonal Relationships of the Nursing Team in the Work Environment According to Nursing Students: A Qualitative Study. *Nurse Education in Practice*, 74.

Azama, K.A., & Lim, E., 2025. A Psychometric Evaluation of the Maslach Burnout Inventory in Nurse Practitioners. *Journal of the American Association of Nurse Practitioners*, 38(1), pp.28-35.

Christianson, J., Bekhet, A., Guttormson, J., Singh, M., & Johnson, N.L., 2024. Reframing Burnout: Measuring "Altruistic Execution" to Understand Nurse Burnout. *Western Journal of Nursing Research*, 46(11), pp.941–948.

Clari, M., Gonella, S., Gatti, P., Garzaro, G., Paleologo, M., Cortese, C.G., & Dimonte, V., 2022. Multi-Level Analysis of Individual and Work Environment Factors Associated with Nurses' Perceived Emotional Exhaustion. *Applied Nursing Research*, 63.

Edú-valsania, S., Laguía, A., & Moriano, J.A., 2022. Burnout: A Review of Theory and Measurement. *International Journal of Environmental Research and Public Health*, 19(3).

Ezie, K.N., Amekpor, F., Scott, G.Y., Andigema, A.S., Musa, S.S., Takoutsing, B.D., & Lucero-Prisno, D.E., 2023. Healthcare Workers' Safety; A Necessity for a Robust Health System. *Annals of Global Health*, 89(1).

Ge, M.W., Hu, F.H., Jia, Y.J., Tang, W., Zhang, W.Q., & Chen, H.L., 2023. Global Prevalence of Nursing Burnout Syndrome and Temporal Trends for the Last 10 Years: A Meta-Analysis of 94 Studies Covering Over 30 Countries. *Journal of Clinical Nursing*, 32(17–18), pp.5836–5854.

Grande, R.A.N., Berdida, D.J.E., Villagracia, H.N., Raguindin, S.M., Cornejo, L.T.O., Al Reshidi, N.M., Alshammari, A.T., Aljebari, B.J., & AlAbd, A.M.A., 2022. The Moderating Effect of Burnout on Professionalism, Values and Competence of Nurses in Saudi Arabia Amidst the COVID-19 Pandemic: A Structural Equation Modelling Approach. *Journal of Nursing Management*, 30(7), pp.2523–2536.

Haherera, A., Fatmawati, A., & Rachmah, S., 2024. Hubungan Perilaku Agresif Pasien Gangguan Jiwa dengan Kecenderungan Burnout Pada Perawat di Ruang IPCU Rumah Sakit Radjiman Wediodinigrat. *Jurnal Kesehatan Tambusai*, *5*(2).

Hudays, A., Gary, F., Voss, J.G., Arishi, A., Alfar, Z.A., Algodimi, A.M., & Fitzpatrick, J.J., 2024. Factors Influencing Job Satisfaction among Mental Health Nurses: A Systematic Review. *Healthcare (Switzerland)*, 12(20).

Jo, H., & Shin, D., 2025. The Impact of Recognition, Fairness, and Leadership on Employee Outcomes: A Large-Scale Multi-Group Analysis. *PLoS ONE*, 20(1).

Kim, E., Kim, H., & Lee, T., 2024. How are New Nurses Satisfied with Their Jobs? From the Work Value Perspective of Generations Y and Z Nurses. *BMC Nursing*, 23(1).

Koksal, K., & Mert, I.S., 2024. The Role of Courage and Interactional Justice in Emotional Exhaustion of Emergency Nurses: A Cross-Sectional Study in Turkey. *International Nursing Review*, 71(1), pp.54–61.

Lee, M.M.D., Gensimore, M.M., Maduro, R.S., Morgan, M.K., & Zimbro, K.S., 2021. The Impact of Burnout on Emergency Nurses' Intent to Leave: A Cross-Sectional Survey. *Journal of Emergency Nursing*, 47(6), pp.892–901.

Lotfi-Bejestani, S., Atashzadeh-Shoorideh, F., Ghafouri, R., Nasiri, M., Ohnishi, K., & Ghadirian, F., 2023. Is there any Relationship Between Nurses' Perceived Organizational Justice, Moral Sensitivity, Moral Courage, Moral Distress and Burnout?. *BMC Nursing*, 22(1).

Malta, G., Plescia, F., Zerbo, S., Verso, M.G., Matera, S., Skerjanc, A., & Cannizzaro, E., 2024. Work and Environmental Factors on Job Burnout: A Cross-Sectional Study for Sustainable Work. *Sustainability (Switzerland)*, 16(8).

Marković, S., Kostić, O., Terzić-Supic, Z., Tomic Mihajlovic, S., Milovanović, J., Radovanovic, S., Zdravković, N., Stojić, V., Jovčić, L.,

Jocić-Pivač, B., Tomić Lučić, A., Kostić, M., & Šorak, M., 2024. Exposure to Stress and Burnout Syndrome in Healthcare Workers, Expert Workers, Professional Associates, and Associates in Social Service Institutions. *Medicina (Lithuania)*, 60(3).

Maslach, C., & Leiter, M.P., 2021. *How to Measure Burnout Accurately and Ethically*.

Parola, V., Coelho, A., Neves, H., Bernardes, R.A., Sousa, J.P., & Catela, N., 2022. Burnout and Nursing Care: A Concept Paper. *Nursing Reports*, 12(3), pp.464–471.

Putra, K.R., Sutadi, H., Setyowati., & Hariyati, R.T.S., 2021. The Effect of Caring Work Environment Model on Nurses' Burnout in General Hospitals. *International Journal of Public Health Science*, 10(3), pp.537–543.

Şenol, Ç.S., Sariköse, S., & Çelik, Y., 2024. Structural and Psychological Empowerment and Burnout Among Nurses: A Systematic Review and Meta-Analysis. *International Nursing Review*, 71(1), pp.189–201.

Sibuea, Z.M., Sulastiana, M., & Fitriana, E., 2024. Factor Affecting the Quality of Work Life Among Nurses: A Systematic Review. *Journal of Multidisciplinary Healthcare*, 17, pp.491–503.

Tamata, A.T., & Mohammadnezhad, M., 2023. A Systematic Review Study on the Factors Affecting Shortage of Nursing Workforce in the Hospitals. *Nursing Open*, 10(3), pp.1247–1257.

Ulfah, A., Ezdha, A., & Hamid, A., 2020. Analysis Relationship Burnout and Work Loads Nurse in Pekanbaru Medical Center Hospital. *Jurnal Kesehatan Sealmakers Perdana*, 3(2).

Vargas-Benítez, M.Á., Izquierdo-Espín, F.J., Castro-Martínez, N., Gómez-Urquiza, J.L., Albendín-García, L., Velando-Soriano, A., & Cañadas-De la Fuente, G.A., 2023. Burnout Syndrome and Work Engagement in Nursing Staff: A Systematic Review and Meta-Analysis. *Frontiers in Medicine*, 10.

Wang, Y., Li, N., Huang, X., Wang, J., Huang, J., Huang, Y., Feng, Y., Qin, L., & Huang, H., 2025. Burnout and Anxiety Among Chinese Nurses: The Mediating Roles of Positive Coping Strategies and Interpersonal Relationship Problems: A Cross-Sectional Study. *Frontiers in Psychiatry*, 16.

Wang, Y., Wang, X., Gao, L., Ge, Y., Xue, M., & Ji, Y., 2025. Nurses' Work Value Patterns and Their Relationship with Burnout: A Cross-Sectional Study Based on Latent Profile Analysis. *BMC Nursing*, 24(1).