

Determinants of Work-Related Stress among Staff Nurses in Inpatient Wards at Al Huda Hospital

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ABSTRACT

Work-related stress among nurses is predicted to continue increasing in the coming years. This condition represents a growing concern because it is closely related to nurses' health and safety as well as the quality of healthcare services. Therefore, this research aim to analyze factors that may influence work-related stress, including workload, work shifts, and marital status. This study employed a quantitative approach using a cross-sectional design. The respondents consisted of 60 staff nurses working in inpatient wards at Al Huda Hospital, Banyuwangi, who were selected using accidental sampling. Data were collected using structured questionnaires and analyzed using ordinal logistic regression. The results showed that 27 respondents (45.0%) experienced high work-related stress, 26 respondents (43.3%) moderate stress, and 7 respondents (11.7%) low stress. Statistical analysis indicated that workload ($p = 0.773$), work shift ($p = 0.228$), and marital status ($p = 0.794$) did not have a significant effect on nurses' work-related stress ($p > 0.05$). Workload, work shift, and marital status were not significantly associated with work-related stress among nurses.

I. Introduction

Hospitals are healthcare facilities that provide inpatient, outpatient, and emergency services, in which nurses play a crucial role in maintaining service quality. Nurses are required to work professionally under high workloads and continuous responsibilities for 24 hours a day. These conditions make nurses vulnerable to work-related stress, which can affect both physical and mental health and ultimately reduce performance and quality of care (WHO, 2015).

The World Health Organization (WHO) has identified stress as a global epidemic. The American Institute of Stress reports that stress-related illnesses have caused economic losses exceeding USD 100 billion annually in the United States. A survey of practicing nurses in the United States found that 46% perceived their work as highly stressful, and 34% had seriously considered leaving their jobs within the previous 12 months due to workplace stress.

In the United States, work-related stress is a common and detrimental problem for workers. Work-related stress can lead to health problems such as fatigue, exhaustion, dizziness, and gastrointestinal disorders. Research conducted among 775 healthcare professionals in two hospitals in Taiwan showed that 64.4% experienced anxiety, 33.7% reported nightmares, 44.1% experienced irritability, 40.8% reported headaches, 35% suffered from insomnia, and 41.4% experienced gastrointestinal disturbances.

Work-related stress is also prevalent in Asian countries. In Singapore, the primary causes of stress among nurses include staff shortages, high job demands, and workplace conflict. In Indonesia, work-related stress among nurses has also been widely reported. Approximately 44% of inpatient nurses at Husada Hospital, 51.5% at MH Thamrin International Hospital Jakarta, 54% at PELNI "Petamburan" Hospital Jakarta, and 51.2% of nurses working in the Intensive Care Unit (ICU) and Emergency



Department (ED) at Mitra Keluarga Hospital Bekasi experienced work-related stress due to various contributing factors.

According to a survey conducted by the Indonesian National Nurses Association (PPNI) in 2018, approximately 50.9% of Indonesian nurses experienced work-related stress, manifested by frequent headaches, extreme fatigue, and anxiety. Excessive workload was reported as overly demanding and time-consuming (PPNI, 2018). Work-related stress is associated with both psychological and physical problems. Factors contributing to stress among nurses include heavy workload, risk of disease transmission, family-related problems, and inadequate workplace facilities (Mahastuti et al., 2019).

Work-related stress among nurses has been reported in many countries, including Indonesia, with relatively high prevalence. Factors such as workload, shift work systems, and marital status have been identified as contributors to the development of work-related stress (Mahastuti et al., 2019). One major source of occupational stress is shift work. Night shifts are associated with a higher risk of moderate stress compared to morning shifts. Nurses working morning shifts tend to experience lower levels of stress due to longer rest periods and adequate lighting, which reduce work demands. In contrast, night shifts are associated with higher stress levels because they often involve overtime work and limited rest periods.

Preliminary data from Al Huda Hospital Banyuwangi indicate that most inpatient nurses experience mild work-related stress, which may negatively affect service quality if not properly managed. Therefore, this study aims to analyze the determinants associated with work-related stress among staff nurses working in inpatient wards at Al Huda Hospital Banyuwangi.

II. Methods

This study employed a quantitative approach with a cross-sectional design. The population consisted of 70 staff nurses working in inpatient wards at Al Huda Hospital Banyuwangi, with a sample of 60 nurses selected using accidental sampling. Data were collected using questionnaires, and data analysis was performed using ordinal logistic regression.

III. Results and Discussion

Table 1. Demographic Characteristics Distribution of Staff Nurses

Variables	Frequency (n)	Percentage (%)
Gender		
Male	10	16,67
Female	50	83,33
Age		
21-30 years old	16	27,00
31-40 years old	36	60,00
41-50 years old	8	13,00
Education Level		
Diploma	8	13,30
Bachelor	52	86,67
Years of Working Experience		
1-10 years	43	71,60
11-20 years	13	21,67
21-30 years	4	6,67

Table 2. Cross-Tabulation of Workload and Work-Related Stress

Workload		Work-Related Stress			Total
		Low	Medium	High	
Low	N	3	6	8	17
	%	5.0%	10.0%	13.3%	28.3%
Medium	N	2	16	14	32
	%	3.3%	26.7%	23.3%	53.3%
High	N	2	4	5	11
	%	3.3%	6.7%	8.3%	18.3%
Total	N	7	26	27	60
	%	11.7%	43.3%	45.0%	100%

Based on the table above, nurses with a moderate workload predominantly experienced high work-related stress, accounting for 14 respondents (23.3%), followed by moderate stress in 16 respondents (26.7%). Meanwhile, among nurses with a high workload, a notable proportion also experienced high work-related stress, namely 5 respondents (8.3%).

Table 3. Cross-Tabulation Between Work Shifts and Work-Related Stress

Work Shifts		Stres Kerja			Total
		Low	Medium	High	
Evening	N	2	6	10	18
	%	3.3%	10.0%	16.7%	30.0%
Afternoon	N	2	4	8	14
	%	3.3%	6.7%	13.3%	23.3%
Morning	N	3	16	9	28
	%	5.0%	26.7%	15.0%	46.7%
Total	N	7	26	27	60
	%	11.7%	43.3%	45.0%	100%

Based on the table above, respondents working the morning shift predominantly experienced moderate work-related stress, accounting for 16 respondents (26.7%).

Table 4. Cross-Tabulation Between Marital Status and Work-Related Stress

Marital Status		Work-Related Stress			Total
		Low	Middle	High	
Not Merried yet	N	0	2	2	4
	%	0.0%	3.3%	3.3%	6.7%
Merried	N	7	24	25	56
	%	11.7%	40.0%	41.7%	93.3%
Total	N	7	26	27	60
	%	11.7%	43.3%	45.0%	100%

Based on the table above, most children experienced changes in body weight before and after the Based on the table above, married respondents exhibited a high level of work-related stress, accounting for 25 respondents (41.7%).

Table 5. Analysis of the Effects of Workload, Work Shifts, and Marital Status on Work-Related Stress

Variable	Wald	significance level
Workload	.083	.773
Work Shifts	1.454	.228
Marital Status	.068	.794

Based on the table above, attention should be paid to the Wald values and their corresponding significance levels. The workload variable had a Wald value of 0.083 with a significance level of 0.773

(> 0.05), the work shift variable had a Wald value of 1.454 with a significance level of 0.228 (> 0.05), and marital status had a Wald value of 0.068 with a significance level of 0.794 (> 0.05). These results indicate that workload, work shifts, and marital status did not have a significant effect on work-related stress among staff nurses working in inpatient wards at Al Huda Hospital Banyuwangi. However, marital status was associated with a higher proportion of work-related stress among nurses, with 41.7% experiencing high stress levels.

The results of this study indicated that the majority of staff nurses working in inpatient wards at Al Huda Hospital Banyuwangi had a moderate workload (53.3%), worked predominantly on morning shifts (46.7%), and were mostly married (93.3%). Meanwhile, the highest proportion of work-related stress was found in the high-stress category (45%). These findings suggested that work-related stress was not solely influenced by workload, work shifts, or marital status, but was also affected by other factors such as individual ability to manage pressure and the coping strategies employed. This was consistent with the theory proposed by Lazarus and Folkman, which stated that stress was influenced by individuals' appraisal of situations and their capacity to cope with stressors. The findings of this study were also consistent with previous studies by Mahastuti et al. (2019) and Lestari and Handayani (2020), which reported that adaptive coping mechanisms and psychological support played an important role in reducing work-related stress among nurses, even when workloads were relatively high.

However, the results of this study differed from those reported by Putri et al. (2021), who found that workload and work shifts were significantly associated with work-related stress among nurses. These differences might have been attributed to variations in hospital context, including work management systems, organizational culture, availability of facilities, and the number of nursing staff. In addition, differences in sample size, sampling techniques, and measurement instruments used to assess work-related stress might also have influenced the statistical significance of the relationships between variables. Variations in work culture and respondent characteristics across studies were likely to have contributed to the observed differences in findings.

Although workload, work shifts, and marital status had the potential to trigger stress, the results of this study demonstrated that these factors were not always the primary determinants of work-related stress. Nurses who were able to apply adaptive coping strategies, such as effective time management, task delegation, and obtaining social support, tended to be more capable of mitigating the impact of work-related stress. Several studies showed that adaptive coping and social support played a significant role in reducing stress levels and emotional exhaustion among nurses, thereby helping them maintain psychological well-being in demanding work environments (Alharbi et al., 2020; Kim et al., 2022; Wang et al., 2023). Therefore, the management of work-related stress among nurses placed greater emphasis on psychological and personal aspects, particularly adaptive skills and available support systems, which enabled nurses to remain productive despite facing high job demands.

The results of this study showed that workload did not have a significant effect on work-related stress ($p = 0.773 > 0.05$). This finding indicated that a high workload did not directly cause stress among nurses. This result was consistent with the transactional theory of stress proposed by Lazarus and Folkman (1984), which emphasized that stress was influenced by the interaction between job demands and individual coping capacity. Studies conducted by Sari et al. (2022) and Muslikan and Ali (2022) also supported this finding, reporting that workload had a negative but non-significant effect on work-related stress.

At Al Huda Hospital Banyuwangi, additional workload beyond core nursing duties, such as administrative tasks, was perceived as the most burdensome aspect by nurses. Although this condition was not statistically significant, it still had the potential to reduce work efficiency if it was not balanced with adaptive coping strategies. Therefore, hospital management needed to pay attention to proportional task allocation and to provide stress management training in order to minimize the impact of workload on nurses' psychological well-being.

The results of this study showed that work shifts did not have a significant effect on the level of work-related stress among staff nurses working in inpatient wards at Al Huda Hospital Banyuwangi ($p = 0.228 > 0.05$). Although the majority of respondents worked morning shifts, which were commonly associated with heavier workloads, differences in shift patterns were not proven to be a primary

determinant of work-related stress. This finding was consistent with the transactional model of stress proposed by Lazarus and Folkman (1984), which emphasized that stress resulted from the interaction between environmental demands and individuals' appraisal of their coping abilities. A study by Gerber et al., cited in Irianti (2015), also supported this finding by stating that work-related stress was more strongly influenced by physiological disturbances, such as fatigue and sleep disorders, than by the shift system itself.

These findings indicated that the level of work-related stress among nurses was more strongly influenced by internal factors, such as individual perceptions and coping strategies, as well as by other external factors, including administrative workload and emergency conditions, rather than by shift patterns alone. Therefore, hospital management needed to pay attention to nurses' psychological well-being and work-life balance, in addition to shift scheduling, in order to reduce work-related stress and maintain optimal quality of healthcare services.

The results of this study showed that marital status did not have a significant effect on work-related stress among staff nurses working in inpatient wards at Al Huda Hospital Banyuwangi ($p = 0.794 > 0.05$). This finding indicated that differences in marital status, whether married or unmarried, did not directly determine the level of work-related stress experienced by nurses. This result was consistent with the Buffer Hypothesis proposed by Cohen and Wills (1985), as cited in Islahuddiny et al. (2022), which explained that social support from spouses or family members could buffer psychological strain resulting from job demands. A study by Olivia (2020) also emphasized that emotional support from close relationships was able to reduce the negative effects of excessive workload.

At Al Huda Hospital Banyuwangi, although the majority of staff nurses were married, high levels of work-related stress were not always associated with marital status. Married nurses often received emotional and practical support from their spouses and families, which enabled them to maintain a balance between multiple roles and job demands. Conversely, work-related stress was more strongly influenced by other factors, such as workload, work environment conditions, and individual ability to manage pressure. Therefore, strengthening social support systems and providing stress management training were considered strategic measures to maintain nurses' mental health while improving performance in inpatient wards.

This study had several limitations. First, the research design was **cross-sectional**, which limited the ability to examine causal relationships between variables in depth. Second, the relatively **small sample size** and the use of **non-probability sampling techniques** restricted the generalizability of the findings to a broader population. Third, the study relied on **self-report instruments**, meaning that the data were highly dependent on respondents' subjective perceptions and were therefore susceptible to information bias.

Based on these limitations, future studies were recommended to employ **longitudinal designs** to obtain a more comprehensive understanding of causal relationships. In addition, future research could involve **larger sample sizes** and utilize **probability sampling techniques** to enhance the representativeness of the findings. The inclusion of **mediating or moderating variables**, such as social support and emotional exhaustion, was also recommended to provide a deeper understanding of the factors influencing work-related stress.

IV. Conclusion

The results of this study showed that workload, work shifts, and marital status did not have a significant effect on work-related stress among staff nurses working in inpatient wards at Al Huda Hospital Banyuwangi. These findings indicated that these factors were not the primary determinants of work-related stress, suggesting that other factors, both internal and external, played a more prominent role in influencing nurses' work-related stress.

V. References

Alharbi, J., Wilson, R., Woods, C., & Usher, K. (2020). The factors influencing burnout and job satisfaction among critical care nurses: A study of coping strategies and social support. *Journal of*

- Clinical Nursing*, 29(17–18), 3473–3485. <https://doi.org/10.1111/jocn.15397>
- Aqmarina, M. N., Rinda, R. T., & Subakti, J. . (2021). Evaluasi kinerja karyawan wanita melalui konflik peran ganda dan gender. *Al Tijarah*, 6(3), 108. <https://doi.org/10.21111/tijarah.v6i3.5659>
- Assa, W. Y., Warouw, F., & Asrifuddin, A. (2021). Hubungan Antara Shift Kerja dan Kepuasan Kerja Dengan Stres Kerja Pada Perawat di Rumah Sakit GMIM Kalooran Amurang. *Jurnal KESMAS*, 10(1), 129–137.
- Farida, F. N. (2023). Konflik Peran Ganda Dan Dukungan Sosial Pasangan Bagi Pekerja Dalam Prespektif Teori Robert K. Merton. *Jurnal Dinamika Sosial Budaya*, 25(1), 320–324.
- Gaol, N. T. L. (2016). Teori Stres: Stimulus, Respons, dan Transaksional. *Buletin Psikologi*, 24(1), 1. <https://doi.org/11224>
- Husmiati, H. (2018). Stres Kerja Dari Perspektif Teori Sistem-Ekologi. *Sosio Informa*, 4(3), 581–588. <https://doi.org/10.33007/inf.v4i3.1591>
- Irianti, L. (2015). Pengaruh Shift Kerja Terhadap Stress Kerja Pengendali (Controller) Kereta Api Indonesia. *Jurnal Rekayasa Sistem Industri*, 2(4), 39–46.
- Islahuddiny, B. M., Dewi, F. I. R., & Sari, M. P. (2022). Peranan Stres Akademik Terhadap Subjective Well-Being dengan Perceived Social Support sebagai Moderator pada Mahasiswa Magang Atau Bekerja. *Provita: Jurnal Psikologi Pendidikan*, 15(2), 116–136. <https://doi.org/10.24912/provita.v15i2.20894>
- Kim, Y., Lee, E., & Lee, H. (2022). Association between coping strategies and work-related stress among hospital nurses. *International Journal of Nursing Practice*, 28(2), e12987. <https://doi.org/10.1111/ijn.12987>
- Lestari, S., & Handayani, L. (2020). Hubungan mekanisme coping dengan tingkat stres kerja pada perawat rumah sakit. *Jurnal Ilmu Keperawatan*, 8(1), 45–53.
- Lumbantoruan, S. B. C., Garnasih, R. L., & Rifqi, A. (2024). Pengaruh Konflik Peran Ganda Dan Stres Kerja Terhadap Kinerja Perawat Wanita Dengan Dukungan Sosial Sebagai Variabel Moderasi Di Rsud Rokan Hulu. *Jurnal KAFEBIS – Jurnal Kajian Fenomena Ekonomi & Bisnis*, 02(2), 53–62.
- Mahastuti, N. M., Widodo, D., & Handayani, R. (2019). Faktor-faktor yang berhubungan dengan stres kerja pada perawat di rumah sakit. *Jurnal Keperawatan*, 10(2), 85–92.
- Maulani, H. A., Sukismanto, S., Yuningrum, H., & Nugroho, A. (2020). Shift Kerja dan Masa Kerja Terhadap Kelelahan Kerja pada Pengemudi Angkutan Batu Bara. *Jurnal Penelitian Dan Pengembangan Kesehatan Masyarakat Indonesia*, 1(1), 48–53. <https://doi.org/10.15294/jppkmi.v1i1.41423>
- Merdekawati, E., & Rosyanti, N. (2020). Faktor-Faktor Yang Mempengaruhi Keberhasilan Umkm (Studi Kasus Pada Umkm Di Kota Bogor). *JIAFE (Jurnal Ilmiah Akuntansi Fakultas Ekonomi)*, 5(2), 165–174. <https://doi.org/10.34204/jiafe.v5i2.1640>
- Merdekawaty, A., & Fatmawati. (2025). Strategi Adaptif Kepala Sekolah Perempuan Dalam Mengelola Beban Kerja Dan Meningkatkan Work-Life Balance: Sebuah Kajian Literatur. *Jurnal Kependidikan*, 9(2), 33–39.
- Muslikan, A., & Ali, H. (2022). Effect Work Life Balance, Workload and Role Conflict on Work Stress for Members of Kerinci Police Criminal Investigation. *Jurnal Riset Manajemen Indonesia*, 4(3), 325–333. <https://doi.org/10.55768/jrmi.v4i3.145>
- National Library of Medicine. (2004). *Keeping Patients Safe: Transforming the Work Environment of Nurses*. National Center for Biotechnology Information.
- Nursani, Nando, F., & Putra, M. A. (2025). Pengaruh Beban Kerja Terhadap Burnout Perawat pada Ruang NICU RSUD Bima. *Muqaddimah: Jurnal Ekonomi, Manajemen, Akuntansi Dan Bisnis*, 3(1), 209–222.
- Olivia, R. D. (2020). Peran social support dalam work family conflict terhadap stres kerja: sebuah studi literatur. *Jurnal Ilmu Manajemen*, 8(2), 494–503.
- Pattiwael, E., Tetelepta, M. M., & Sahertian, O. (2023). Pengaruh Stres Terhadap Kinerja Karyawan Pt. Federal International Finance Group Cabang Kota Ambon. *Jurnal Administrasi Terapan*, 2(1), 1–9.
- PPNI. (2018). *Standar Diagnosis Keperawatan Indonesia: Definisi dan Indikator Diagnostik*. Jakarta: Dewan Pengurus Pusat Persatuan Perawat Nasional Indonesia.
- Putri, A. R., Suryani, M., & Prabowo, T. (2021). Pengaruh beban kerja dan shift kerja terhadap stres kerja perawat di rumah sakit. *Jurnal Kesehatan Masyarakat*, 16(3), 210–218.

- Ramadhan, F., Pandu Kusuma, A., & Febrinita, F. (2024). Rancang Bangun Aplikasi Web Management Penjadwalan Kemitraan Pabrik Susu Dengan Metode Cyclical Scheduling. *JATI (Jurnal Mahasiswa Teknik Informatika)*, 7(5), 3799–3805. <https://doi.org/10.36040/jati.v7i5.7946>
- Riskiamansyah, R. (2020). *Literatur Review Hubungan Dukungan Pasangan Dengan Motivasi Kerja Buruh*. Universitas Aisyiyah Yogyakarta.
- Saleky, A. A., Damayanti, R., & Afrida, I. W. (2023). Faktor Penyebab Stres Perawat IGD. *Lentora Nursing Journal*, 3(1), 22–30. <https://doi.org/1679>
- Sapardo, F. J. (2019). Hubungan Dukungan Sosial Dengan Koping Stres Pada Mahasiswa Merantau yang Bekerja. *Psikoborneo: Jurnal Ilmiah Psikologi*, 7(2), 217–224. <https://doi.org/10.30872/psikoborneo.v7i2.4776>
- Sari, V. N., Safitri, R., & Sulistyowati, E. (2022). Pengaruh Beban Kerja dan Lingkungan Kerja terhadap Kinerja Karyawan dengan Stres Kerja sebagai Variabel Intervening pada PT Batanghari Barisan Padang. *Jurnal Maksipreneur: Manajemen, Koperasi, Dan Entrepreneurship*, 12(1), 288. <https://doi.org/10.30588/jmp.v12i1.431>
- Shinta, A. O. E. (2020). Pengaruh Beban Kerja dan Kelelahan Kerja terhadap Kinerja Karyawan pada RSUH Kota Surabaya. *Jurnal Ilmu Dan Riset Manajemen*, 9, 1–18. <http://jurnalmahasiswa.stiesia.ac.id/index.php/jirm/article/view/3574>
- Shintyar, A. R., & Widanarko, B. (2021). Analisis Hubungan Antara Karakteristik Pekerja Dengan Stres Kerja Pada Pekerja Pt Lti Yang Bekerja Dari Rumah Selama Masa Pandemic Covid-19 Tahun 2021. *PREPOTIF : Jurnal Kesehatan Masyarakat*, 5(2), 664–672. <https://doi.org/10.31004/prepotif.v5i2.1954>
- Suryadi, I., Gesit Wijayanti, & Seviana Rinawati. (2022). Shift Kerja Kaitannya Dengan Tingkat Kelelahan Kerja Pada Perawat. *Jurnal Sulolipu : Media Komunikasi Sivitas Akademika Dan Masyarakat*, 1(12), 145–151.
- Wang, H., Liu, Y., Hu, K., Zhang, M., Du, M., Huang, H., & Yue, X. (2023). Factors associated with work stress and coping mechanisms among nurses in hospital settings. *BMC Nursing*, 22(1), 312. <https://doi.org/10.1186/s12912-023-01312-9>
- Yudianti, N. N. (2020). Jurnal Penelitian Perawat Profesional Pencegahan Tetanus. *British Medical Journal*, 2(5474), 1333–1336.