THE IMPACT OF WORKLOAD ON NURSE BURNOUT IN THE HOSPITAL

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Abstract

Background: *Nurses frequently report experiencing professional burnout in the workplace; however, quantitative evidence regarding the contributing factors is currently lacking within the Inpatient Department of Arifin Achmad Regional General Hospital, Riau, Indonesia. Therefore, this study aimed to examine the impact of workload on nurse burnout in this specific setting.* ***Objectives:*** *The primary objective of this study was to examine the relationship between workload and nurse burnout among nurses working in the Dahlia and Edelweis wards of Arifin Achmad Regional General Hospital, Riau, Indonesia.* ***Methods:*** *This study utilized a quantitative correlational design with a cross-sectional approach. The research was conducted in the Dahlia and Edelweis wards of Arifin Achmad Regional General Hospital, Riau Province. The total sample size was 52 nurses, recruited using a total sampling technique. Data collection instruments were adapted from Nursalam (2015). The research period spanned from September 2024 to February 2025.* ***Results:*** *The study demonstrated a statistically significant relationship between workload and nurse burnout among the nurses at Arifin Achmad Regional General Hospital. This finding is supported by the high prevalence rates observed for both heavy workload (71.2%) and severe burnout (65.4%).* ***Conclusion:*** *This finding aligns with existing literature, affirming that workload is a major determinant of burnout among nursing staff. The results strongly suggest that high workload contributes to the critical level of burnout observed in the Inpatient Department.*
 Key Word : Workload; Burnout; Nurse ; Hospital

Abstrak

Latar Belakang: Perawat sering melaporkan mengalami burnout profesional di lingkungan kerja; namun demikian, bukti kuantitatif mengenai faktor-faktor yang berkontribusi terhadap kondisi tersebut masih terbatas, khususnya di Instalasi Rawat Inap Rumah Sakit Umum Daerah (RSUD) Arifin Achmad Provinsi Riau, Indonesia. Oleh karena itu, penelitian ini bertujuan untuk mengkaji pengaruh beban kerja terhadap burnout perawat di lingkungan tersebut.**Tujuan:** Tujuan utama penelitian ini adalah untuk menganalisis hubungan antara beban kerja dan burnout pada perawat yang bekerja di ruang Dahlia dan Edelweis RSUD Arifin Achmad Provinsi Riau, Indonesia.**Metode:** Penelitian ini menggunakan desain kuantitatif korelasional dengan pendekatan potong lintang (*cross-sectional*). Penelitian dilaksanakan di ruang Dahlia dan Edelweis RSUD Arifin Achmad Provinsi Riau. Jumlah sampel sebanyak 52 perawat yang diambil menggunakan teknik *total sampling*. Instrumen pengumpulan data diadaptasi dari Nursalam (2015). Penelitian ini dilaksanakan pada periode September 2024 hingga Februari 2025.**Hasil:** Hasil penelitian menunjukkan adanya hubungan yang bermakna secara statistik antara beban kerja dan burnout perawat di RSUD Arifin Achmad. Temuan ini didukung oleh tingginya prevalensi beban kerja berat (71,2%) serta tingkat burnout berat (65,4%) pada responden.**Kesimpulan:** Temuan ini sejalan dengan berbagai penelitian sebelumnya yang menyatakan bahwa beban kerja merupakan salah satu determinan utama terjadinya burnout pada perawat. Hasil penelitian ini menunjukkan secara kuat bahwa tingginya beban kerja berkontribusi terhadap tingkat burnout yang serius pada perawat di Instalasi Rawat Inap.
Kata kunci : Beban kerja, Burnout ; Perawat ; Rumah Sakit

PENDAHULUAN

Nurses are essential healthcare workers who provide comprehensive services to patients, encompassing promotive, preventive, curative, and rehabilitative measures. In executing these duties, nurses are required to deliver professional and continuous nursing care. This obligation often leads to an increased workload, particularly in hospital settings where the nurse-to-patient ratio may be disproportionate to the number of patients being treated(Cucolo et al., 2024; Dall'Ora et al., 2020)

The workload experienced by nurses is complex, involving both physical and psychological dimensions. The physical workload is reflected in extended working hours, the quantity of patients under their care, and the necessity of numerous administrative tasks. Conversely, the psychological workload stems from emotional pressure exerted by patients and their families, coupled with rigorous professional demands. If this demanding situation persists without adequate stress management and organizational support, nurses face a significant risk of developing burnout gundus(Gündüz & Öztürk, 2025)(Janzarik et al., 2022)

Burnout is defined as a state of emotional exhaustion, diminished motivation, and feelings of cynicism regarding work, resulting from prolonged and excessive work pressure. This phenomenon is highly prevalent in hospital environments and negatively impacts the quality of nursing services, patient safety, and the psychological well-being of the nurses. Nurses experiencing burnout tend to exhibit decreased productivity, increased absenteeism, and a higher potential for leaving the profession (Alzoubi et al., 2024; Liang et al., 2025a; Prawatya et al., 2023)

Several previous studies have consistently shown that high workload is significantly associated with elevated burnout levels in nurses. The heavier the perceived workload, the higher the corresponding levels of emotional exhaustion and depersonalization. Conversely, factors such as a supportive work environment, equitable task distribution, and a balance between job demands and individual capacity can effectively mitigate the risk of burnout (Dall'Ora et al., 2020)

Arifin Achmad Regional General Hospital, Riau Province, functions as a primary referral hospital and manages a high daily patient volume. This environment is likely to significantly elevate the workload of nurses, particularly in units with high patient occupancy rates. Based on this localized context, the study entitled "The Impact of Workload on Nurse Burnout at Arifin Achmad Regional General Hospital, Riau Province" is warranted.

METODE
Participants

The respondents in this study were all nurses who work in the Dahlia rom 21 people, and people, Edelweis room 31 of Arifin Achmad Regional Hospital, Riau Province, totaling 52 people.

Instruments

The tool used in this quantitative research is a written interview sheet (questionnaire) used to measure workload using the NASA-TLX (National Aeronautics and Space Administration-Task Load Index) Method instrument, which has been tested for validity with a calculated r value (0.731) > r table (0.2058), meaning the data is reliable or consistent(Prawatya et al., 2023) . Meanwhile, the burnout instrument that has been tested for validity with a calculated r value > r table 0.444 (Deniati & Maritsa, n.d.; Kurniawan & Noviza, 2018).

Methods

The method in this research uses a quantitative design with a correlational approach utilizing a cross-sectional research design. This research has received research ethics testing at the KEPK of the

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HASIL

A. Respondent Characteristics

Table 1 Presents the demographic and professional characteristics of the nurse respondents in the Dahlia and Edelweis Wards of Arifin Achmad Regional General Hospital, Riau Province.

Characteristics	Frequency (n)	Percentage (%)
Gender		
1. Female	41	78.8
2. Male	11	21.2
Total	52	100.0
Age		
1. 18-40 years (Adulthood)	41	78.8
2. 41-60 years (Middle Age)	11	21.2
Total	52	100.0
Education		
1. Diploma 3	21	40.4
2. Nursing Degree	31	59.6
Total	52	100.0
Length of Service		
1. 0-5 years	19	36.5
2. 6-10 years	10	19.2
3. >10 years	23	44.2
Total	52	100.0

Source: Primary Data

Based on Table 1, the majority of respondents were female (n=41, 78.8%), and the majority fell within the 18-40 years age bracket (n=41, 78.8%). In terms of education, more than half of the respondents possessed a Nursing Degree (n=31, 59.6%). Regarding professional experience, the largest proportion of nurses (n=23, 44.2%) had worked for more than 10 years.

B. Workload and Burnout Assessment.

1. Nurse Workload

Table 2 displays the distribution of nurse workload levels in the specified wards.

Workload Level	Frequency (n)	Percentage (%)
Heavy	37	71.2
Medium	12	23.1
Light	3	5.8
Total	52	100.0

Source: Primary Data

Based on Table 2, the majority of respondents (n=37, 71.2%) reported experiencing a heavy workload.

2. Nurse Burnout Levels

Table 3 presents the severity of burnout among the nurse respondents.

Burnout Level	Frequency (n)	Percentage (%)
Severe	34	65.4
Medium	12	23.1
Light	6	11.5
Total	52	100.0

Source: Primary Data

Based on Table 3, the results indicate that more than half of the respondents (n=34, 65.4%) exhibited a severe level of burnout.

C. Relationship Between Workload and Burnout

Table 4 illustrates the cross-tabulation of Workload and Burnout Levels.

Workload	Severe Burnout	Medium Burnout	Light Burnout	Total	P-value
	n (%)	n (%)	n (%)	n (%)	
Heavy	31 (83.8)	5 (13.5)	1 (2.7)	37 (100.0)	<0.001
Medium	1 (8.3)	7 (58.3)	4 (33.3)	12 (100.0)	
Light	2 (66.7)	0 (0.0)	1 (33.3)	3 (100.0)	
Total	34 (65.4)	12 (23.1)	6 (11.5)	52 (100.0)	

Source: Primary Data

The cross-tabulation in Table 4 reveals a concentration of severe burnout

among those with a heavy workload (n=31, 83.8%), while a moderate workload was most frequently associated with moderate burnout (n=7, 58.3%).

The results of the Chi-Square statistical test yielded a p-value of <0.001 (or 0.000 in SPSS output). Since the p-value is less than the established significance level ($\alpha = 0.05$), the null hypothesis (H_0) is rejected. Therefore, it is concluded that there is a statistically significant relationship between workload and burnout among nurses in the Dahlia and Edelweis Wards of Arifin Achmad Regional General Hospital, Riau Province.

PEMBAHASAN
Respondent Characteristics

The results of the study provide demographic data where the majority of nurses are female, as many as 41 people (78.8%) in the Dahlia and Edelweis Rooms of Arifin Achmad Regional Hospital, Riau Province. Female nurses are more likely to experience conflict between intense work demands (such as heavy workloads and night shifts) and family and household responsibilities. This dual role conflict significantly increases levels of emotional exhaustion. (Maulidina et al., 2025)A study focusing on married female nurses in Indonesia found that they had relatively high occupational burnout and were prone to sexual dysfunction, indicating the profound physical and mental health impacts of workload and burnout(Khalid & Akhtar, 2025)

The majority of nurses in the Dahlia and Edelweis wards are aged 18–40 (78.8%) indicating a predominantly early-career workforce, which has important implications for burnout risk. Young and early career nurses often face greater emotional exhaustion and depersonalization due to limited clinical experience, less developed coping strategies, and heavier exposure to demanding shift patterns, making them more susceptible to burnout than their more experienced colleagues.(Beier et al., 2023a)

Targeted organizational interventions such as structured orientation and residency programs, formal mentorship, workload monitoring, and accessible mental-health support are therefore essential to mitigate burnout in a workforce concentrated in this age band. (Juanamasta et al., 2024) Empirical evidence and recent meta-analyses demonstrate that nurse burnout is associated with poorer patient safety and quality outcomes, and that younger nurses frequently show higher burnout scores in many settings, underscoring the need for age-sensitive retention and well-being strategies. Regular screening for burnout (e.g., Maslach Burnout Inventory) and early interventions focused on younger staff can help preserve both nurse well-being and care quality in these wards. (Li et al., 2024a)(Beier et al., 2023b)(Zhao et al., 2023)

The finding that 59.6% of nurses hold a Ners (professional bachelor's) degree indicates a workforce with relatively high formal qualifications, and this educational profile has meaningful implications for burnout risk. Higher educational attainment in nursing is often associated with increased clinical responsibility, greater expectations for professional performance, and heavier role demands factors known to contribute to emotional exhaustion and depersonalization, the key dimensions of burnout(Li et al., 2024a) Recent reviews further note that professionally educated nurses may experience intensified workload pressures and complex decision-making demands, which can elevate their vulnerability to burnout when organizational resources and managerial support are insufficient(Boamah et al., 2024). Moreover, structural and psychosocial determinants of burnout, such as staffing adequacy, leadership style, and work environment, interact with educational level, suggesting that Ners qualified nurses may face heightened stress if these conditions are suboptimal(Dall'Ora et al., 2020). Therefore, the predominance of Ners-trained nurses in the Dahlia and

Edelweis wards underscores the importance of providing supportive leadership, manageable workloads, clear career development pathways, and accessible mental health resources to mitigate burnout risks within this professional cohort.

The finding that 44.2% of nurses have more than 10 years of work experience indicates a substantial group of long-tenured staff whose prolonged exposure to occupational stressors may increase their vulnerability to burnout. Although extensive experience is often linked to higher clinical competence, recent evidence suggests that cumulative job demands over many years can contribute to sustained emotional exhaustion and diminished personal accomplishment among nurses(Li et al., 2024a). Moreover, meta-analyses emphasize that burnout remains prevalent across experience levels and is shaped more by organizational factors such as staffing adequacy, leadership quality, and resource availability than by tenure alone, indicating that experienced nurses remain at continued risk if working conditions are suboptimal(Li et al., 2024b). Therefore, considering that nearly half of the nurses in this study are long-serving employees, implementing organizational strategies such as regular burnout screening, workload redistribution, and targeted psychosocial support is essential to prevent chronic burnout and sustain high-quality patient care.

Workload Prevalence

The finding that 71.2% of nurses in the Dahlia and Edelweis wards experience a heavy workload indicates substantial exposure to quantitative and emotional job demands, which recent studies have consistently linked to higher levels of burnout, particularly emotional exhaustion and depersonalization(Li et al., 2024a)(Ross et al., 2023). High nursing workload has also been associated with poorer patient-focused outcomes, suggesting that the predominance of heavy workload in these units may increase the vulnerability of nurses to burnout while simultaneously compromising care quality. Mechanistically, excessive patient assignments, prolonged work hours, and intensive emotional labor reduce opportunities for psychological recovery, leading to cumulative fatigue that develops into chronic emotional exhaustion, as documented in recent empirical studies(Pamungkas et al., 2022). Given that burnout is multifactorial, evidence underscores the need for organizational strategies such as appropriate staffing, workload redistribution, and safe nurse-patient ratios—supported by managerial interventions and individual resilience resources—to mitigate the adverse effects of heavy workload in settings where such conditions are highly prevalent(Ross et al., 2023)

Based on observations related to the number of nurses available in the Dahlia Room based on nurses' working hours according to the Giellis formula with a BOR of 94% in 2024, there should be 24 nurses, but only 21 nurses. Meanwhile, in the Edelweiss Room with a BOR of 81%, there are 31 nurses available, whereas there should be 37. This shortage of nurses makes the nurses' workload heavy. (Siti Melani Simbolon et al, 2023)

Burnout Prevalence

The finding that 65.4% of nurses in the Dahlia and Edelweis wards experience severe burnout reflects an alarmingly high level of psychological strain, exceeding many national and international estimates. Recent global evidence indicates that nurse burnout remains widespread, with emotional exhaustion identified as the most prevalent dimension(Getie et al., 2025). Although the prevalence varies across settings, the proportion observed in this study is considerably higher than the global averages reported during major stress periods, such as health emergencies, where approximately 48% of nurses were found to experience burnout(Liang et al., 2025b). This suggests that nurses in these units may

be exposed to persistent organizational and emotional demands that heighten their vulnerability to burnout.

In the Indonesian context, recent literature has also documented substantial burnout rates among nurses. (Juanamasta et al., 2024) for example, reported high levels of burnout among nurses across various Indonesian healthcare settings, underscoring that burnout is a pervasive problem within the national health system. Additionally,(Simbolon & Bashabih, 2023)noted that burnout prevalence among Indonesian healthcare workers—including nurses—ranges widely from 5% to as high as 82%, indicating that severe burnout, such as the 65.4% found in the present study, remains within a plausible spectrum for high-demand work environments. These findings support the interpretation that the high burnout levels observed in Dahlia and Edelweis wards may be influenced by systemic factors such as workload intensity, emotional labor, inadequate staffing, or limited organizational support.

From the results of interviews with nurses, they often experience fatigue, body aches, emotional aches, difficulty sleeping after night shifts, and difficulty concentrating

Workload and Burnout Prevalence

The results of this study demonstrate a clear and statistically significant relationship between workload and burnout among nurses in the Dahlia and Edelweis wards, as indicated by the finding that 83.8% of nurses with heavy workloads experienced severe burnout, compared to 58.3% of those with moderate workloads, and 66.7% of those with light workloads who also reported severe burnout. The statistical analysis ($p = 0.000$, $\alpha < 0.05$) confirms that this association is unlikely to be due to chance, supporting rejection of the null hypothesis and affirming that workload is a critical determinant of burnout in this setting. These findings align with recent international evidence, which

consistently shows that quantitative and emotional workload demands contribute to significantly higher burnout levels among nurses. Similarly, recent reviews emphasize that long working hours, inadequate staffing, increased patient acuity, and continuous emotional labor collectively exacerbate stress and heighten the likelihood of burnout (Pamungkas et al., 2022).

The pattern observed in this study suggests that even nurses categorized as having "light workload" may still encounter substantial emotional or cognitive load that elevates burnout risk, highlighting that workload is multidimensional and influenced not only by patient volume but also by task complexity, shift patterns, and organizational conditions. This is consistent with broader literature showing that burnout can occur even in lower-workload environments when support systems are weak or job demands are unpredictable. Given the strong association observed, targeted interventions are essential. Organizational strategies such as optimizing staffing ratios, implementing fair workload distribution, improving shift scheduling, and strengthening managerial support have been recommended in recent research to reduce burnout prevalence and improve nurse well-being. Enhancing resilience programs, providing access to mental-health resources, and creating supportive team environments are also critical components for mitigating burnout risk and sustaining a healthy nursing workforce.

These results collectively indicate that the majority of nurses face significant work demands, and a substantial proportion experience the resulting exhaustion and decreased personal accomplishment, key dimensions of burnout described in the literature (Kurniawan & Noviza, 2018; Novrian Kaani et al., 2023). The significant correlation confirms that workload is a strong and direct risk factor for burnout within this hospital setting. Specifically, the observation that nearly three out of four

nurses reported a high workload while two out of three experienced severe burnout strongly suggests that high workload acts as a major trigger for burnout.

Theoretical and Empirical Alignment

The established relationship aligns directly with the Job Demands–Resources (JD-R) Model. According to this theory, burnout risk increases when job demands (such as workload) exceed available resources (such as support, rest, and adequate staffing) (Crane et al., 2000; Liang et al., 2025a; Schoofs et al., 2022)

Empirically, the findings are consistent with existing research. For instance, another study noted that even where the reported workload was "moderate," the prevalence of burnout remained high (82.5%), and the relationship between workload and burnout was significant ($p < 0.05$) (Rohmah et al., 2025) .This body of evidence affirms that workload exerts a positive and significant influence on nurse burnout, sometimes with mediating factors like role stress (Mufti et al., 2024). Furthermore, a systematic review published in 2024 consistently identified workload as one of the factors most frequently implicated in nurse burnout literature, along with social support and the work environment (Kurniawan & Noviza, 2018)

Overall, the elevated rate of severe burnout reinforces the need for targeted interventions at organizational and managerial levels, including improving staffing ratios, providing psychological support, enhancing resilience programs, and addressing systemic stressors to mitigate the risk of burnout and protect the well-being of nurses.

SIMPULAN

This study demonstrated a statistically significant relationship between workload and nurse burnout among nurses at Arifin Achmad Regional General Hospital, evidenced by a p-value of <0.001 (reported as 0.000). The finding is strongly supported by the high prevalence rates observed for both heavy workload (71.2%) and severe burnout (65.4%). This result aligns with existing literature, confirming that workload is a major determinant of burnout among nursing staff.

Author Contributions

DP: designing research ideas, supervising work, analyzing and interpreting results, writing the manuscript. TW: Respondent coordinator, data collection, measurement, data analysis.

DAFTAR PUSTAKA

Alzoubi, M. M., Al-Mugheed, K., Oweidat, I., Alrahbeni, T., Alnaeem, M. M., Alabdullah, A. A. S., Abdelaliem, S. M. F., & Hendy, A. (2024). Moderating role of relationships between workloads, job burnout, turnover intention, and healthcare quality among nurses. *BMC Psychology*, *12*(1). https://doi.org/10.1186/s40359-024-01891-7

Beier, M. E., Cockerham, M., Branson, S., & Boss, L. (2023a). Aging and Burnout for Nurses in an Acute Care Setting: The First Wave of COVID-19. *International Journal of Environmental Research and Public Health*, *20*(8). https://doi.org/10.3390/ijerph20085565

Beier, M. E., Cockerham, M., Branson, S., & Boss, L. (2023b). Aging and Burnout for Nurses in an Acute Care Setting: The First Wave of COVID-

19. *International Journal of Environmental Research and Public Health*, *20*(8). https://doi.org/10.3390/ijerph200855 65

Boamah, S. A., Olarte-Godoy, J., Jack, S. M., Root, F., & Halladay, J. E. (2024). Past the tipping point: Understanding and addressing burnout among nursing students. *Nurse Education Today*, *141*. https://doi.org/10.1016/j.nedt.2024.1 06319

Crane, J. M. G., Van den Hof, M. C., Dodds, L., Armson, B. A., & Liston, R. (2000). Maternal complications with placenta previa. *American Journal of Perinatology*, *17*(2), 101–105. https://doi.org/10.1055/S-2000-9269

Cucolo, D. F., de Campos Oliveira, J. L., Rossit, R. A. S., Mininel, V. A., Perroca, M. G., & Silva, J. A. M. da. (2024). Effects of interprofessional practice on nursing workload in hospitals: A systematic review. *International Journal of Health Planning and Management*, *39*(3), 824–843. https://doi.org/10.1002/hpm.3779

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

Deniati, K., & Maritsa, atul. (n.d.). Hubungan Burnout Dengan Kinerja Perawat Pelaksana Di Ruang Rawat Inap Rumah Sakit Rawa Lumbu 2019. In *Jurnal Ayurveda Medistra ISSN. 2656-5609|* (Vol. 2). http://ojs.stikesmedistra-indonesia.ac.id/

Getie, A., Ayenew, T., Amlak, B. T., Gedfew, M., Edmealem, A., & Kebede, W. M. (2025). Global prevalence and contributing factors of nurse burnout: an umbrella review of systematic review and meta-analysis. *BMC Nursing*, *24*(1). https://doi.org/10.1186/s12912-025-03266-8

Gündüz, E. S., & Öztürk, N. K. (2025). Mental workload as a predictor of burnout in intensive care nurses. *Nursing in Critical Care*, *30*(2). https://doi.org/10.1111/nicc.13173

Janzarik, G., Wollschläger, D., Wessa, M., & Lieb, K. (2022). A Group Intervention to Promote Resilience in Nursing Professionals: A Randomised Controlled Trial. *International Journal of Environmental Research and Public Health*, *19*(2). https://doi.org/10.3390/ijerph190206 49

Juanamasta, I. G., Aungsuroch, Y., Gunawan, J., Dino, M. J., & Polsook, R. (2024). Prevalence of burnout and its determinants among Indonesian nurses: a multicentre study. *Scientific Reports*, *14*(1). https://doi.org/10.1038/s41598-024-63550-6

Khalid, R., & Akhtar, S. (2025). Work-Family Conflict, Job Satisfaction and Burnout in Nurses: A Correlational Study in Punjab (Pakistan). *Journal of Asian Development Studies*, *14*(3), 729–737. https://doi.org/10.62345/jads.2025.1 4.3.60

Kurniawan, Y., & Noviza, N. (2018). Peningkatan Resiliensi pada Penyintas Kekerasan terhadap Perempuan Berbasis Terapi Kelompok Pendukung. *Psikohumaniora: Jurnal Penelitian Psikologi*, *2*(2), 125. https://doi.org/10.21580/pjpp.v2i2.1 968

Liang, Y., Peng, H., Luo, X., Wang, M., Zhang, Y., Huang, H., Zhu, J., Chen, M., Tian, W., Mo, J., Nong, Y., Wang, Y., Huang, Y., Tan, S., Jiang, L., Pan, W., & Ning, C. (2025a). The impact of health emergencies on

nurses' burnout: a systematic review and meta-analysis. In *BMC Public Health* (Vol. 25, Issue 1). BioMed Central Ltd. https://doi.org/10.1186/s12889-025-24150-9

Liang, Y., Peng, H., Luo, X., Wang, M., Zhang, Y., Huang, H., Zhu, J., Chen, M., Tian, W., Mo, J., Nong, Y., Wang, Y., Huang, Y., Tan, S., Jiang, L., Pan, W., & Ning, C. (2025b). The impact of health emergencies on nurses' burnout: a systematic review and meta-analysis. In *BMC Public Health* (Vol. 25, Issue 1). BioMed Central Ltd. https://doi.org/10.1186/s12889-025-24150-9

Li, L. Z., Yang, P., Singer, S. J., Pfeffer, J., Mathur, M. B., & Shanafelt, T. (2024a). Nurse Burnout and Patient Safety, Satisfaction, and Quality of Care: A Systematic Review and Meta-Analysis. In *JAMA Network Open* (Vol. 7, Issue 11). American Medical Association. https://doi.org/10.1001/jamanetworkopen.2024.43059

Li, L. Z., Yang, P., Singer, S. J., Pfeffer, J., Mathur, M. B., & Shanafelt, T. (2024b). Nurse Burnout and Patient Safety, Satisfaction, and Quality of Care: A Systematic Review and Meta-Analysis. In *JAMA Network Open* (Vol. 7, Issue 11). American Medical Association. https://doi.org/10.1001/jamanetworkopen.2024.43059

Maulidina, A. P., Hidayatullah, M. S., & Achmad, R. A. (2025). Hubungan Work Family Conflict dan Burnout pada Perawat Wanita Yang Sudah Menikah dan Bekerja di Rumah Sakit Idaman Kota Banjarbaru. *Jurnal Kognisia*, *7*(2), 57. https://doi.org/10.20527/kognisia.2024.10.007

Mufti, D., Edwar, R. C., Ridwan, A., & Noormiati. (2024). The Influence of Workload on Burnout of Nurses at Sele Be Solu Provincial General Hospital, Sorong City During the Period of Endemic Transition of Covid-19 Through Role Stress as a Mediator. *Jurnal Manajemen Bisnis*, *11*(1), 612–622. https://doi.org/10.33096/jmb.v11i1.778

Novrian Kaani, J., Mariana Larira, D., Mauren Toar, J., Program Studi Ilmu Keperawatan Fakultas Kedokteran, M., & Sam Ratulangi Manado, U. (2023). Hubungan Beban Kerja dengan Burnout Syndrome pada Perawat di Ruang Rawat Inap Dewasa Rumah Sakit Bhayangkara Tingkat III Manado. In *MNSJ* (Vol. 1, Issue 2).

Pamungkas, R. A., Ruga, F. B. P., Kusumapradja, R., & Kusumapradja, R. (2022). Impact of Physical Workload and Mental Workload on Nurse Performance: A Path Analysis. *International Journal of Nursing and Health Services (IJNHS)*, *5*(2), 219–225. https://doi.org/10.35654/ijnhs.v5i2.604

Prawatya, Y. E., Wijayanto, D., Uslianti, S., Rahmahwati, R., Wahyudi, T., & Citra, R. W. (2023). Evaluasi Beban Kerja Mental dan Tingkat Kelelahan Perawat Terhadap Shift Kerja di Rumah Sakit XYZ dengan Metode NASA-TLX dan Bourdon Wiersma. *Prosiding Seminar Nasional Teknik Industri (SENASTI) 2023*, 2023. file:///C:/Users/ASUS/Downloads/Paper_v1_130-1.pdf

Rohmah, E., Sari, I. P., Rakhmawati, F., Natalia, D., & Zubaidah, R. (2025). The Role of Workload in Increasing the Risk of Burnout Syndrome Among Nurses at Aisyiyah Siti Fatimah Tulangan Hospital, Sidoarjo. *Journal of Nursing Management Innovations*, *1*(1), 24–32. https://doi.org/10.58723/jnmi.v1i1.8

Ross, P., Howard, B., Ilic, D., Watterson, J., & Hodgson, C. L. (2023). Nursing

workload and patient-focused outcomes in intensive care: A systematic review. In *Nursing and Health Sciences* (Vol. 25, Issue 4, pp. 497–515). John Wiley and Sons Inc. https://doi.org/10.1111/nhs.13052

Schoofs, M. C. A., Bakker, E. A., de Vries, F., Hartman, Y. A. W., Spoelder, M., Thijssen, D. H. J., Eijsvogels, T. M. H., Buffart, L. M., & Hopman, M. T. E. (2022). Impact of Dutch COVID-19 restrictive policy measures on physical activity behavior and identification of correlates of physical activity changes: a cohort study. *BMC Public Health*, *22*(1), 1–9. https://doi.org/10.1186/s12889-022-12560-y

Simbolon, M., & Bashabih, M. (2023). Burnout and Contributing Factors to Burnout Among Indonesian Healthcare Workers Before and During COVID-19 Pandemic. *Journal Universitas Airlangga*. https://doi.org/10.20473/jps

Siti Melani Simbolon et al. (2023). *Full Book Kepemimpinan dan Manajemen Keperawatan* (Abdul Karim, Ed.; 1st ed.). Yayasan Kita Menulis. https://repository.stikesrshusada.ac.id/id/eprint/151/1/FullBook%20Kepemimpinan%20dan%20Manajemen%20Keperawatan.pdf?utm_source=chatgpt.com

Zhao, Y., Zhang, X., Zheng, Z., Guo, X., Mou, D., Zhao, M., Song, L., Huang, N., & Meng, J. (2023). Burnout among Junior Nurses: The Roles of Demographic and Workplace Relationship Factors, Psychological Flexibility, and Perceived Stress. *Journal of Nursing Management*, *2023*. https://doi.org/10.1155/2023/9475220