



THE EFFECT OF WORKLOAD ON NURSES' MENTAL HEALTH AT DUREN SAWIT DRUG SURGERY, EAST JAKARTA

Arif Rahman¹, Mahyar Suara², Achmad Fauzi³

^{1,2,3}Department Keperawatan, STIKES Abdi Nusantara, Indonesia

ariflala0103@gmail.com

Abstract

Nurses are among the healthcare workers who play a crucial role in the healthcare system. High workloads, long hours, shift systems, and limited staffing often result in nurses having to handle excessive workloads. This can lead to physical exhaustion, emotional stress, and a reduced quality of life. The pressure of workload not only impacts the physical but also significantly impacts the mental health of nurses. Objective to determine the influence of workload on the mental health of nurses. Method this study used a cross-sectional analytical design. The sample in this study were some of the nurses working in Building A of the Duren Sawit Regional Specialist Hospital, East Jakarta, in November 2025, with a total sample size of 58 people. The sampling technique used was random sampling. Results the majority of respondents were aged 26-35 years (72.4%), had a Diploma III in Nursing (84.5%), were female (58.6%), had mild/moderate disorders (70.7%), and had a heavy workload (48.3%). There was an effect of workload on nurses' mental health, with a p-value of 0.002. Conclusions and recommendations workload impacts nurses' mental health. Nurses are expected to improve their stress management skills, maintain a balance between work and personal life, and utilize available mental health support facilities.

Keywords : *Workload, Mental Health, Nurses*

@Jurnal Ners Prodi Sarjana Keperawatan & Profesi Ners FIK UP 2026

* Corresponding author :

Address : STIKES Abdi Nusantara

Email : ariflala0103@gmail.com

INTRODUCTION

Nurses are among the healthcare workers who play a crucial role in the healthcare system. They are not only tasked with providing physical care to patients, but also with providing emotional support, health education, and bridging communication between patients, families, and other medical personnel. The complexity of this role requires nurses to work professionally despite high work pressure. This pressure often results in an increased workload, both physically and psychologically (WHO, 2023).

Nurses' workload can stem from various factors, such as the number of patients they treat, the complexity of their illnesses, and the need for intensive care. Furthermore, long working hours, shift workloads, and limited nursing staff often require nurses to handle workloads beyond their ideal capacity. This can lead to physical exhaustion, emotional stress, and a reduced quality of life for nurses (Xiaoyan Hao et al., 2025).

Workload pressure not only impacts physical health but also significantly impacts nurses' mental health. Recent research shows that nurses with high workloads tend to experience higher levels of stress, symptoms of depression, and emotional exhaustion (burnout). Burnout is characterized by prolonged fatigue, cynicism about work, and decreased work effectiveness. If left untreated, this condition can seriously impair nurses' mental health (Frontiers in Public Health, 2024).

External factors such as an unsupportive work environment, high administrative demands, and the use of complex digital documentation systems also contribute to increased mental stress. Recent studies have found that the use of electronic medical record systems increases nurses' cognitive workload, increasing the risk of stress and mental health disorders, particularly in intensive care units and emergency departments (JMIR Medical Informatics, 2024; Critical Care Nurse, 2024).

The impact of mental health disorders on nurses cannot be underestimated. In addition to reducing nurses' quality of life, this condition also impacts the quality of healthcare services. Nurses experiencing burnout are at greater risk of errors in care, reducing patient safety, and lowering patient satisfaction with hospital services. In other words, nurses' mental health is closely linked to

the overall quality of the healthcare system (Journal of Nursing Scholarship, 2024).

Previous studies have shown that nurses' workload is closely linked to mental health. A recent global study revealed that the prevalence of burnout among nurses reaches over 30–50% in various countries, particularly in high-intensity units such as the ICU and emergency department. This condition is triggered by excessive workload, long working hours, and the emotional demands of interacting with critically ill patients (Chen, Li, & Wang, 2025).

In Indonesia, a similar phenomenon is also beginning to be widely reported. Nurses in large hospitals often face a disproportionate patient-to-staff ratio. Furthermore, irregular shift systems cause some nurses to experience physical exhaustion and disrupted sleep patterns. Preliminary interviews with several nurses at referral hospitals revealed complaints about high administrative workloads, excessive fatigue, and stress symptoms such as irritability and difficulty concentrating (Frontiers in Public Health, 2024).

Organizational factors also play a significant role in increasing nurses' mental burden. An unsupportive work environment, limited facilities, and a complex electronic documentation system add to psychological stress. A recent study showed that the use of an unfriendly electronic medical record system increases nurses' cognitive load, ultimately exacerbating job stress levels (JMIR Medical Informatics, 2024).

This situation raises concerns, as nurses' mental health issues not only impact individuals but also affect patient safety and satisfaction. Previous research has demonstrated a significant link between nurse burnout and increased medical errors, decreased quality of care, and low patient satisfaction (Journal of Nursing Scholarship, 2024).

METHODS

This was an analytical study with a cross-sectional design. The sample consisted of 58 nurses working in Building A of the Duren Sawit Regional Specialist Hospital, East Jakarta, in November 2025. The sample size was 58. Random sampling was used as the sampling technique. Univariate and bivariate analyses were used with the chi-square test.

RESULT AND DISCUSSION

Table 1. Respondent Characteristics

Characteristics	n	%
Age		
26-35 years	42	72.4
36-45 years	12	20.7
46-55 years	4	6.9
Education		
D3 Nursing	49	84.5
Nursing Profession	9	15.5
Gender		
Male	24	41.4
Female	34	58.6

The interpretation of the table above shows that of the 58 respondents studied, the majority were aged 26-35 years (42 people) (72.4%), aged 36-45 years (12 people) (20.7%), and aged 46-55 years (4 people) (6.9%). Of the 58 respondents,

the majority had a DIII Nursing education (49 people) (84.5%), and 9 people (15.5%) had a professional nursing education. Of the 58 respondents, the majority were female (34 people) (58.6%) and male (24 people) (41.4%).

Table 2 Frequency Distribution of Mental Health of Nurses at Duren Sawit Regional General Hospital, East Jakarta

Mental Health	n	%
No disturbance	17	29.3
Mild/moderate disturbance	41	70.7
Severe disturbance	0	0.0
Total	58	100,0

The interpretation of the table above shows that of the 58 respondents, the majority experienced mild/moderate mental health disorders, as many as 41 people (70.7%), there

were no mental health disorders as many as 17 people (29.3%), and those who experienced severe mental health disorders were not found (0%).

Table 3 Frequency Distribution of Nurses' Workload at Duren Sawit Regional General Hospital, East Jakarta

Workload	n	%
Light	5	8.6
Medium	25	43.1
Heavy	28	48.3
Total	58	100,0

The interpretation above shows that of the 58 respondents, the majority had a heavy workload of 28 people (48.3%), a moderate

workload of 25 people (43.1%), while a light workload of 5 people (8.6%).

Table 4 The Effect of Workload on the Mental Health of Nurses at Duren Sawit Regional General Hospital, East Jakarta

Workload	Mental Health				Total	P. Value
	No distractions		Mild/moderate disturbance			
	n	%	n	%		
Light	4	80,0	1	20,0	5	100,0
Medium	10	40,0	15	60,0	25	100,0
Heavy	3	10,7	25	89,3	28	100,0

Total	17	29,3	41	70,7	58	100,0
--------------	-----------	-------------	-----------	-------------	-----------	--------------

The interpretation above shows that of the 5 respondents with light workloads, most of them had no mental health problems, as many as 4 people (80.0%), of the 25 respondents with moderate workloads, most of them had mild/moderate mental health problems, as many as 15 people (60.0%), and of the 28 respondents with heavy workloads, most of them had mild/moderate mental health problems, as many as 25 people (89.3%). The cross-tabulation results between the workload variable and the mental health of nurses showed that the Chi-Square statistical test results obtained a p value of 0.002 (p value <0.05), which means that there is an effect of workload on the mental health of nurses at Duren Sawit Regional General Hospital, East Jakarta.

Discussion

Frequency Distribution of Nurses' Mental Health

Mental health is a state in which a person's physical, intellectual, and emotional development grows, develops, and matures throughout life, accepting responsibility, finding adjustments, and maintaining social and cultural norms and practices. Mental health comes from the English word "mental hygiene." The word "mental" comes from the Latin word "mens" and "mentis," meaning soul, life, spirit, and spirit. Meanwhile, "hygiene" comes from the Greek word "hygiene," meaning the science of health (Ardiansyah et al., 2023).

The results of this study align with those of Moh Rizal (2025), who reported that the majority of nurses (85.7%) experienced mild mental health problems. This finding is also supported by Linda Permatasari's (2023) study, which found that all emergency room nurses (100%) experienced mild mental health problems in the form of burnout.

According to the researchers' assumptions, 70.7% of respondents experienced mild/moderate mental health disorders. This finding indicates that the majority of respondents were in a less stable psychological state, but had not yet reached the level of severe disorders. Mild to moderate disorders are generally characterized by feelings of anxiety, fatigue, difficulty concentrating, or emotional tension that arise in response to life pressures or the burden of certain responsibilities.

This high rate can be influenced by various factors such as work stress, dual roles within the family, social demands, or mounting personal problems without adequate coping mechanisms.

Meanwhile, 29.3% of respondents did not experience mental health disorders, indicating that a small proportion of respondents had better adjustment skills, mental resilience, and social support than others. They likely had more effective coping strategies, a balanced routine, or a supportive social environment, enabling them to manage psychological distress healthily. Interestingly, the study also found that no respondents experienced severe mental health disorders (0%). This may indicate that although most respondents experienced psychological distress, it had not yet developed into a serious disorder such as major depression or severe anxiety disorder, possibly due to the presence of protective factors such as family support or access to a relatively stable environment.

Overall, this distribution indicates that respondents' mental health needs attention, especially those in the mild to moderate categories. Preventive interventions such as education on constructive individual coping management, counseling, stress management training, or increased social support are crucial to prevent their condition from developing into a more serious disorder. These findings emphasize that mental health disorders, even those with mild symptoms, still need to be identified and treated early to maintain respondents' quality of life.

Frequency Distribution of Nurse Workload

According to Dika et al., (2023), workload is a collection or number of activities that must be completed by an organizational unit or position holder within a specific time period. If a worker's abilities exceed the job demands, boredom will arise. Conversely, if a worker's abilities are lower than the job demands, fatigue will occur. The workload imposed on employees can be categorized into three conditions: standard workload, excessive workload (overcapacity), and undercapacity.

Research by Dewi Zuniawati (2022) found that the majority of nurses had a heavy workload (60.2%). This finding is also supported by research by Muhammad Fandi Ahmad (2025),

which showed that the majority of nurses had a high workload (90.8%).

According to the researchers' assumptions, the results showed that the majority of respondents, 48.3%, fell into the heavy workload category. This finding indicates that nearly half of respondents felt high job demands, both physically and mentally. A heavy workload can include a large volume of tasks, complex responsibilities, time pressure, and high work quality demands. This condition has the potential to lead to stress, fatigue, and decreased performance if not balanced with adequate time management skills and a supportive work environment. According to workload theory, high task demands that are not balanced with an individual's capacity can affect a person's physical and psychological condition.

Furthermore, 43.1% fell into the moderate workload category. This proportion indicates that nearly half of respondents were still able to manage their workload, although it remained quite challenging. A moderate workload is usually tolerable if an individual has effective coping strategies and a supportive work environment. However, if job demands increase or are not accompanied by effective stress management, this category can develop into a heavy workload.

Meanwhile, 8.6% had a light workload. This indicates that only a small proportion of respondents felt their work demands were low and relatively easy to complete. A light workload typically does not cause significant pressure and is within an individual's normal capacity, thus not putting them at high risk of burnout or work stress. Overall, this workload distribution indicates that the majority of respondents face high job demands. This finding highlights the need for attention to workload management, such as more proportional task allocation, improved time management skills, and organizational support to prevent burnout and its negative impact on mental health and productivity.

The Impact of Workload on Nurses' Mental Health

According to Hermanto and Mukhlis (2023), workload is the volume of work output or a record of work output that can indicate the volume of output produced by a number of employees in a particular department. Excessive workloads can lead to physical and mental fatigue and emotional reactions such as headaches,

digestive disorders, and irritability. Conversely, too little workloads, where the work involves repetitive movements, can lead to boredom and monotony. Boredom in daily routine work due to too few tasks or work, results in a lack of attention to the job, potentially endangering workers.

The results of this study align with those of Septi Apriyani (2022), who stated that the analysis revealed a relationship between workload and mental health (p -value < 0.05). This study is also supported by the results of Dewi Zuniawati's (2022) study, which showed a significant effect of workload on mental health, specifically burnout syndrome, among inpatient nurses at Orpeha Islamic Hospital in Tulungagung, with a p -value of 0.041.

The researchers concluded that the results indicate a significant relationship between workload and nurses' mental health. In the light workload category, the majority (80.0%) did not experience mental health problems. This finding aligns with the concept that a low workload allows individuals to regulate their work rhythm, minimize stress, and maintain psychological balance, thus reducing the risk of developing mental health disorders. A light workload also allows nurses to carry out their duties without excessive pressure, thus maintaining emotional and mental stability.

In contrast, in the moderate workload group, 60.0% experienced mild to moderate mental health disorders. This indicates that even though the workload is not heavy, high work demands can begin to cause psychological distress, especially if not balanced by a supportive work environment, effective coping skills, or good time management.

The situation was even more striking in the heavy workload group, where the majority (89.3%) experienced mild to moderate mental health disorders. This percentage indicates that the higher the workload, the greater the likelihood of mental health disorders in nurses. Heavy workloads typically include a high patient volume, complex task demands, long work shifts, and the emotional pressure of patient care. These factors can lead to prolonged stress, emotional exhaustion, and decreased mental well-being.

The results of the Chi-Square statistical test showed a p -value of 0.002 ($p < 0.05$), thus concluding that there is a significant influence between workload and the mental health of nurses at Duren Sawit Regional General Hospital, East

Jakarta. This finding supports theories stating that high workload is a major risk factor for job stress, burnout, and other mental disorders in healthcare workers (Maslach, C., & Leiter, M. P., 2022).

In the context of nursing work, which has high physical and emotional demands, an unbalanced workload can increase vulnerability to mental health disorders (WHO, 2022). Overall, the results of this study confirm that managing a proportional workload is crucial for maintaining nurses' mental well-being. Efforts to manage workload, increase organizational support, and provide mental health facilities for healthcare workers need to be addressed to ensure optimal service quality and maintain nurses' mental health.

CONCLUSION

The majority of respondents were aged 26-35 (72.4%), had a Diploma III in Nursing (84.5%), were female (58.6%), had mild/moderate mental health problems (70.7%), and had a heavy workload (48.3%). There was an effect of workload on nurses' mental health, with a p-value of 0.002.

REFERENCES

- Ardiansyah, S. et al. (2023) *Buku Ajar Kesehatan Mental*.
- Chen, J., Li, X., & Wang, Y. (2025). Global prevalence and contributing factors of nurse burnout: An umbrella review. *BMC Nursing*, 24(1), 126. <https://doi.org/10.1186/s12912-025-03266-8>
- Dewi Zuniawati (2022). Pengaruh Beban Kerja Terhadap Faktor *Burnout Syndrome* Pada Perawat Unit Rawat Inap Rumah Sakit Islam Orpeha Tulungagung. *Jurnal Keperawatan Jiwa (JKJ): Persatuan Perawat Nasional Indonesia Volume 10 No 3, Agustus 2022, e-ISSN 2655-8106, p-ISSN2338-2090*
- Frontiers in Public Health. (2024). *Stress in novice nurses in new work environments: A systematic review*. *Frontiers in Public Health*, 12, 1463751.
- Hermanto, Mukhlis, (2023). *Pengaruh Lingkungan Kerja Non Fisik, Kepuasan Kerja Dan Beban Kerja Terhadap Kinerja Pegawai Dinas Kependudukan Dan Catatan Sipil Kabupaten Bima*
- JMIR Medical Informatics. (2024). *Evaluating the prevalence of burnout among health care professionals associated with the use of the*

- EHR system*. *JMIR Medical Informatics*, 12 (1), e54811.
- Journal of Nursing Scholarship. (2024). *Nurse burnout and patient safety, satisfaction, and quality of care: A meta-analysis*. *Journal of Nursing Scholarship*, 56 (2), 145–157.
- Linda Permatasari (2023). Hubungan Beban Kerja Mental Dengan Burnout Perawat di Ruang IGD Rumah Sakit UNS. *Avicenna : Journal of Health Research, Vol 6 No 1. Maret 2023 (81 - 92)*
- Maslach, C., & Leiter, M. P. (2022). *The burnout challenge: Managing people's relationships with their jobs*. Harvard University Press.
- Moh Rizal (2025). *Hubungan Beban Kerja Dengan Kesehatan Mental pada Perawat di Ruang Rawat Inap Rumah Sakit Islam Gondangle*. Universitas Tribhuwana Tunggaladewi Malang
- Muhammad Fandi Ahmad (2025). Pengaruh Beban Kerja Mental dan Kualitas Tidur terhadap Produktivitas Kerja pada Perawat di RSUD Andi Makkasau Parepare. *Indonesian Research Journal on Education Volume 5 Nomor 4 Tahun 2025*.
- Reni, Asmara, Ariga (2021). *Sejarah Dan Profesi Keperawatan Seri Buku Ajar Konsep Dasar Keperawatan*. Yogyakarta : CV Budi Utama
- Septi Apriyani (2022), *Hubungan Beban Kerja dengan Kesehatan Mental pada Perawat di Ruang Rawat Inap di Ruang Rawat Inap di Rumah Sakit Umum Daerah Ahmad Yani Metro*. Fakultas Kesehatan Masyarakat Universitas Sriwijaya
- World Health Organization (WHO). (2023). *Global strategic directions for nursing and midwifery 2021–2025: Report by the Director-General*. Geneva: WHO. <https://apps.who.int/iris/handle/10665/344562>
- World Health Organization. (2022). *Mental health at work*. World Health Organization. <https://www.who.int/publications/i/item/WHO-UCN-MSD-22.1>
- Xiaoyan Hao, Yueguang Dai, Shengjie Jia, Shuqin Liu, Chunling Zhao & Xiaomin Liu (2025). *Latent profile analysis of mental workload among emergency department nurses*. *BMC Nursing*, 24 (1), 98.
- Zuriana, Linda, Suwani, K., (2024). *Pengaruh Beban Kerja Dan Motivasi Ekstrinsik Terhadap Kinerja Karyawan Pt. Lautan*

*Berlian Utama Motor Bandar Jaya
Lampung. jesy 7, 566–574.*