FACTORS RELATED TO WORK STRESS AMONG EMPLOYEES AT THE BANDUL COMMUNITY HEALTH CENTER

Nur Aziza[1*], Winda Parlin[1]
[1]Faculty of Health and Informatics, Payung Negeri Pekanbaru Health Institute, Indonesia.
*Corresponding author: windysandrinaefri@gmail.com

Abstract

Work stress is one of the psychosocial problems that can affect the performance and welfare of health workers. This study aimsto determine the factors related to work stress in the workforce at the Bandul Health Center, Tasik PutripuyuDistrict, Meranti Islands Regency. This type of research is quantitative with a cross-sectional study approach. The research population was 32 people, with a total sampling technique so that the entire population was used a sample. Data was collected through questionaires and analyzed using the Chi-Square test at a 95% confidence level. The results of the study show that 46,9% of the workforce experience work stress. There was significant relationship between workload and work stress (p-value = 0.005; OR = 8,938), which indicates that workers with heavy workloads are 9 times more likely to experience stress compared to light workloads. Meanwhile, leadership style (p = 0.946) and interpersonal relationships (p = 0.688) were not significantly associated with work stress. The conclusion of this study is that workload is the dominant factor that affects the work stress of health workers at the Bandul Health Center. It is recommended that the management of the health center adjust the workload proportionately and increase social support in the work environment.

Keywords: Work stress, Workload, Leadership style, Interpersonal relationships, Health Center

INTRODUCTION

Health workers are an important component of the public health service system because the directly contribute to maintaining and improving the health of the community. However, health workers often face a variety of work-related stresses while carrying out their duties, including workloads, service demands, and limited resources. Contant stress in the workplace can lead to work stress, which ultimately lowers productivity, job satisfaction, and the quality of health care standards.

Work stress is defined as a mental and physical reaction that occurs due to an imbalance between one's job demands and one's ability to cope with them. Because stress in the workplace significantly affects workers mental health and productivity, the World Health Organization (WHO) Identifies it as a worldwide health problem. According to a Gallup international survey conducted in 2023, about 44% of workers worldwide reported high levels of work-related stress, resulting in lower productivity and higher absenteeism rates. Similar conditions are also found in Indonesia, where research shows that more than half of health workers experience work stress of varying severity[1]

According to previous research, excessive workload is a major factor contributing to the onset of work stress among healthcare workers. In addition, leadership style factors and interpersonal relationship style factors and interpersonal relationships are essential in building a positive and conducive work environment. Effective leadership can reduce psychological stress and increase job satisfaction [2]. Meanwhile, harmonious interpersonal relationships can strengthen social support among colleagues.

In the health center environment, work pressure can come from high service expectations, limited number of workers, and increasing administrative burden. This situation has become increasingly complex in health facilities in rural areas such as the Bandul Health Center, Tasik Putripuyu District, Meranti Islands Regency, which has low resoucers, which are

expected to continue to provide the best health care or the community. An imbalance berween individual workloads and abilities can magnify workers mental health and performance.

Based on the phenomenon, this study was conducted to determine factors such as workload, leadership style, and interpersonal relationships related to work stress in workers at the Bandul Health Center. The results of the research are expected to be the basis for management to improve working conditions and develop strategies to prevent work stress in the health service environment.

RESEARCH METHODS

This study uses a quantitative design with a cross-sectional approach, namely data collection is carried out at the same time which aims to determine the relationship between several factors and the incidence of work stress in workers at the Bandul Health Center. The research will be carried out in October 2025 in the working area of the Bandul Health Center. The population in this study is the entire workforce at the Bandul Helath Cnter which totals 32 people, consisting of doctors, nurses, midwives, pharmacists, administrative staff, and laboratory staff. The sampling technique uses the total sampling method, which means that all members of the population are used as research samples.

Data were collected using a structured questionnaire consisting of questions such as woek stress as a depedent variable, and workload, leadership style, and interpersonal relationships as independent variables. Work stress, namely a negative response to work pressure, was evaluated through 21 statements with a Likert scale of 1-5 and respondents were categorized as experiencing stress if the total score was ≥ 41. Workload describes the employee's view of the number and difficulty of the tasks received, measured by 6 questions; It is categorized as heavy if the score is > 12 and light if <12. Leadership style, which reflect views on leadership behavior in influencing and directing subordinates, is measured by 4 questions and categorized as good if the score is > 13 and bad if < 13. Interpersonal relationships refer to the quality of interaction and social support between workers, measured by 3questions; is categorized as good if the score is > 11 and not good if < 11.

Data were analyzed with univariate and bivariate approaches through SPSS software. Univariate analysis was used to describe the frequency distribution of each research variable, while bivariate analysis was used to test the relationship between independent variables (workload leadership style, and interpersonal relationships) and dependent variables (work stress) using the Chi-Square test with a significance level of $\alpha = 0.05$. The test results are considered significant if the p-value ≤ 0.05 with a confidence level of 95%.

RESEARCH RESULTS

1. Distribution of Work Stress

Categories of Work Stress	Frequency (n)	Percentage (%)
Experiencing Work Stress	15	46,9
Not Experiencing Work Stress	17	53,1
Total	**32**	**100**

The majority of respondents did not experience work stress (53.1%), but almost half of the workforce experienced signs of stress (46.9%), which indicated a psychological burden in the performance of tasks.

2. Employment Factors

Variabel	Category	Frequency (n)	Percentage (%)
Workload	Weight	15	46,9
	Lightweight	17	53,1
Leadership Style	Not Good	13	40,6
	Good	19	59,4
Interpersonal Relationships	Not Good	14	43,8
	Good	18	56,3

The result showed that most respondents rated leadership style and interpersonal relationships in the good category, while assessments of workload looked quite diverse.

3. The Relationship of Occupational Factors to Work Stress (Chi-Square Test)

Variabel	P-value	Remarks	GOLD(95% CI)
Workload	0,005	Signifikan	8,938
Leadership Style	0,946	Insignificant	-
Interpersonal Relationships	0,688	Insignificant	-

The result of the Chi-Square test showed that only workload had a significant correlation with work stress ($p < 0.05$), while leadership style and interpersonal relationships showed no significant relationship.

DISCUSSION

1. The Relationship of Workload to Work Stress

The result showed that respondents with heavy workloads had a 9 times higher risk of experiencing work stress compared to those with light workloads (OR = 8.938; p = 0.005). These findings are in line with research [3] and [4] which explains that there is a strong correlation between increased work stress among health workers and excess working hours.

This condition illustrates that the high workload, both in physical and administrative aspects, plays a role as the main cause of stress at the Bandul Health Center. In addition, other factors that make work more difficult include a limited number of workers and responsibilities in a very broad community service.

2. The Relationship of Leadership Style and Work Stress

The results of the analysis showed that there was no significant relationship between leadership style and work stress (p = 0.946). This shows that the leadership style democratic and participatory, so that it does not cause psychological pressure on workers.

These findings are in line with research [5] which states that transformational leadership types have a greater impact on job satisfaction compared to stress levels. Thus, leadership that is supportive, open, and communicative can help maintain an emotional balance among the workforce.

3. Interpersonal Relationship with Work Stress

This interpersonal relationship variable also showed no significant association with work stress (p = 0.688). Nevertheless, good relationships between workers within the Bandul Health Center still play a protective factor against stress. These result are slightly different from studies [6] who found that interpersonal communication had an effect on stress levels in nurses. This

difference is likely due to the relatively harmonious and supportive work environment between staff at the Bandul Health Center, so that psychological pressure due to social interaction is relatively small.

CONCLUSION

This study shows that almost half of the workforce at the Bandul Health Center, Tasik Putripuyu District, Meranti Islands Regency experiences work stress (46.9%). The results of statistical analysis proved that workload had a significant relationship with work stress lecels (p = 0.005; OR = 8,938), which indicates that employees with heavy workloads have a higher likelihood of experiencing stress compared to those with lighter workloads.

In contrast, leadership style (p = 0.946) and interpersonal relationships (p = 0.688) were not significantly associated with work stress. This indicates that work pressure factors than by social or managerial factors in the workplace.

Thus, it can be concludedthat workload is the dominant factor related to work stress in the workforce at the andul Health Center. Efforts to control work stress need to be focused on balancing a proportionate workload, increasing organizational support, and strengthening the psychological well-being of health workers so that performance and service quality can be maintained optimally.

REFERENCES

[1] M. M. Hendryk Pryatna, "Gambaran Tingkat Kecemasan d an Stres Kerja Tenaga Kesehatan Puskesmas Saat Pandemi Covid - 19," *Holist. Nurs. Heal. Sci.*, vol. 4, no. 2, pp. 74–82, 2021.

[2] K. Devi, P. Hananingrum, and Y. D. A. Wahyudiono, "Why Does Work Stress Occur in Nurses?," *Indones. J. Occup. Saf. Heal.*, vol. 12, no. 1, pp. 95–103, 2023, doi: 10.20473/ijosh.v12i1.2023.95-103.

[3] L. Dewi, "ANALISIS HUBUNGAN KELELAHAN KERJA DAN BEBAN KERJA TERHADAP STRES KERJA," *J. Ilm. Multi Sci. Kesehat.*, vol. 16, 2024, [Online]. Available: https://jurnal.stikes-aisyiyah-palembang.ac.id/index.php/Kep/article/view/1276?utm_source=chatgpt.com

[4] M. Birhanu, B. Gebrekidan, G. Tesefa, and M. Tareke, "Workload Determines Workplace Stress among Health Professionals Working in Felege-Hiwot Referral Hospital, Bahir Dar, Northwest Ethiopia," *J. Environ. Public Health*, vol. 2018, 2018, doi: 10.1155/2018/6286010.

[5] R. Anindita and Tofan, "How Role Conflict and Leadership Style can Affect Job Satisfaction among Community Health Service Workers," *J. Educ. Heal. Community Psychol.*, vol. 9, no. 3, pp. 205–225, 2020.

[6] F. Fadila, "HUBUNGAN KOMUNIKASI INTERPERSONAL DENGAN STRES DITEMPAT KERJA PADA PERAWAT RSIA ERIA BUNDA PEKANBARU," 2021.

[11] D. Isam and T. Prasetyo, "Analisis Implementasi Program Keselamatan dan Kesehatan Kerja (K3) dan Kecelakaan Kerja (Studi Kasus di PT Gemilang Prima Utama," *J. m&a*, vol. 8, no. 1, pp. 1–9, 2025.

[12] H. Ike, D. Purba, S. A. Munthe, K. Manullang, and K. K. Kerja, "PENERAPAN PELAKSANAAN STANDAR KESELAMATAN DAN KESEHATAN KERJA DENGAN KEJADIAN KECELAKAAN KERJA PADA PEKERJA TEROWONGAN PEMBANGUNAN PLTA," vol. 9, no. 1, pp. 29–35, 2021.

[13] A. W. Shari, "Pengaruh Pelatihan dan Kesehatan Keselamatan Kerja (K3) Terhadap

Kinerja Karyawan Pada PT . Lutvindo Wijaya Perkasa Pekanbaru," *J. eco buss*, vol. 7, no. 3, 2025, doi: 10.32877/eb.v7i3.1642.

[14] A. Jusriadi, "MANAJEMEN PENERAPAN KESELAMATAN DAN KESEHATAN KERJA TEKNIK KONSTRUKSI DAN PROPERTI DI PT XXX TAHUN 2024 MANAGEMENT OF OCCUPATIONAL SAFETY AND HEALTH IMPLEMENTATION OF CONSTRUCTION ENGINEERING AND PROPERTY AT PT XXX IN 2024," *J. Intellect. Publ.*, vol. 5, no. 2, 2025.

[15] F. Soyka, P. Nickel, F. Rebelo, A. Lux, and A. Grabowski, "Editorial : Use of AR / MR / VR in the context of occupational safety and health," *J. Front.*, no. February, pp. 1–3, 2025, doi: 10.3389/frvir.2025.1528804.

[16] S. Subhi and C. Septiawan, "THE EFFECTIVENESS OF THE OCCUPATIONAL HEALTH AND SAFETY ASSESSMENT SERIES 18001:2007 PT. SURYA BESINDO SAKTI," *J. Vocat. Heal. Stud.*, vol. 03, pp. 114–119, 2020, doi: 10.20473/jvhs.V3I3.2020.114.

[17] G. N. Nuraty, I. Widiasanti, and R. B. Yasinta, "Penerapan Safety Net sebagai Upaya Pencegahan Kecelakaan Kerja di Proyek Facility Support Telkomsel Smart Office," *J. JK3L*, vol. 06, no. 1, pp. 52–58, 2025.

[18] S. D. Permana and T. Siregar, "Manajemen Risiko Keselamatan dan Kesehatan Kerja pada Perawat Menggunakan Hazard Identification Risk Assessment And Risk Control," *J. JK3L*, vol. 04, no. 2, pp. 74–82, 2023.

[19] D. Purnamawati, T. Srisantyorini, A. Baktiasyah, and A. Triyono, "Implementation of Occupational Safety and Health Management System in the Education Sector," *J. Occup. Saf. Heal.*, vol. 12, no. December, pp. 363–371, 2023, doi: 10.20473/ijosh.v12i3.2023.363-371.Received.

[20] A. D. Putra, E. Syamsuir, and F. I. Wahyuni, "Analisis Penerapan Kesehatan Dan Keselamatan Kerja (K3) Di Perusahaan Jasa Konstruksi Kota Payakumbuh," *Rang Tek. J.*, vol. 4, no. 1, pp. 76–82, 2021, doi: 10.31869/rtj.v4i1.2034.

[21] A. Septianto and A. R. Wardhani, "Penerapan Analisis Resiko Terhadap Kesehatan," *Apl. Dan Inov. Ipteks SOLIDITAS Vol.*, vol. 3, pp. 6–11, 2020.

[22] A. Nova, S. . Mutmainah, and I. Angelia, "Analisis Penerapan Keselamatan Dan Kesehatan Kerja Pada Program Keselamatan Kerja Di Rumah Sakit Umum Daerah Sungai Dareh," *J. Kesehat. Med. Saintika*, vol. 11, no. 2, pp. 237–246, 2020.

[23] A. Sarbiah, "Penerapan Pelaksanaan Keselamatan dan Kesehatan Kerja (K3) pada Karyawan," *Heal. Inf. J. Penelit.*, vol. 15, no. 2, pp. e1210–e1210, 2023.

[24] P. A. Handayani, "Optimalisasi Peran Dan Program Kesehatan Dan Keselamatan Kerja (K3) Di Stikes Telogorjeo Semarang: Optimizing the Role and Program of Health and Safety Work in Stikes Telogorjeo Semarang," *J. Pengabdi. Masy. Kesehat.*, vol. 7, no. 2, pp. 105–111, 2021.

[25] P. Indah, K. Rusba, and L. Zainul, "Implementasi Keselamatan Dan Kesehatan Kerja Di Pdam Perumda Tirta Manuntung Balikpapan," *J. Keselamatn, Kesehat. Kerja dan Lindungan Lingkung.*, vol. 10, no. 1, pp. 107–113, 2024.

[26] G. W. Putra *et al.*, "ANALISIS MANAJEMEN RISIKO KESELAMATAN DAN KESEHATAN KERJA DENGAN METODE INSPEKSI KESEHATAN LINGKUNGAN (IKL) DINAS KESEHATAN TAHUN 2023 Keselamatan dan Kesehatan Kerja , Universitas Binawan PENDAHULUAN Saat bekerja di toko atau restoran , semua karyawan ," vol. 8, no. 2, pp. 67–80, 2023.

[27] M. Tejamaya, W. Puspoprodjo, H. Susetyo, and R. Modjo, "An analysis of pivotal factors in the implementation of occupational health and safety management systems in micro,

small and medium enterprises (MSMEs): Literature review," *Gac. Sanit.*, vol. 35, pp. S348–S359, 2021, doi: 10.1016/j.gaceta.2021.10.050.

[28] R. J. Guerin and M. D. Toland, "An application of a modified theory of planned behavior model to investigate adolescents' job safety knowledge, norms, attitude and intention to enact workplace safety and health skills," *J. Safety Res.*, vol. 72, pp. 189–198, 2020, doi: 10.1016/j.jsr.2019.12.002.

[29] F. S. I. Noviarmi and L. H. Prananya, "Knowledge and Attitudes Workers Toward Compliance Use Personal Protective Equipment," *Indones. J. Occup. Saf. Heal.*, vol. 12, no. 3, pp. 391–401, 2023, doi: 10.20473/ijosh.v12i3.2023.391-401.

[30] Selvia Selvia, Firda Vinanda, Muhammad Raply, and Abdurrozzaq Hasibuan, "Implementasi ISO 45001 dalam Meningkatkan Kinerja K3 di Berbagai Sektor Industri," *Antigen J. Kesehat. Masy. dan Ilmu Gizi*, vol. 3, no. 2, pp. 216–226, 2025, doi: 10.57213/antigen.v3i2.665.

[31] N. Shafira Putri, M. Idris, and D. I. Asiati, "Peran Kesehatan dan Keselamatan Kerja (K3) serta Motivasi terhadap Produktivitas melalui Kepuasan Kerja," *Motivasi*, vol. 10, no. 1, pp. 22–32, 2025, doi: 10.32502/motivasi.v10i1.552.

[32] D. Pratiwi, H. B. Dwicahyo, and D. N. Haqi, "Implementation of Occupational Health and Safety Standards for Office Buildings in Universitas Airlangga Rectorate Building," *Indones. J. Occup. Saf. Heal.*, vol. 11, no. 2, pp. 224–238, 2022, doi: 10.20473/ijosh.v11i2.2022.224-238.

[33] R. Kunodzia, L. S. Bikitsha, and R. Haldenwang, "Perceived Factors Affecting the Implementation of Occupational Health and Safety Management Systems in the South African Construction Industry," *Safety*, vol. 10, no. 1, 2024, doi: 10.3390/safety10010005.