

THE EFFECT OF WORKLOAD ON NURSES PERFORMANCE WITH WORK STRESS AS AN INTERVENING VARIABLE IN VIOLA MOTHER AND CHILD HOSPITAL

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ABSTRACT

The hospital is a sector engaged in the health sector to provide good service to patients. Viola Mother and Child Hospital which generally focuses on childbirth and obstetrical and child health care. The good and bad of a hospital can be seen in its performance which is also considered in the workload and work stress of nurses, if the workload is heavy and causes work stress then performance will decrease, and vice versa if the workload is low and there is no work stress then performance will increase. The population and sample in this study are nurses with quantitative research methods which collect data through interviews for the initial stage and questionnaires for the research stage. To analyze data through SMARTPLS 4.0 which can be used to see the path coefficient. The results of the study show that workload has a significant positive effect on performance ($0.024 < 0.050$ with Tstatistic $2.253 > 1.96$), workload has a positive and significant effect on work stress ($0.00 < 0.05$), work stress has a significant and positive effect on performance ($0.022 < 0.05$ with tstatistic $2.294 > 1.96$), and workload has a significant positive effect on nurse performance through work stress ($0.022 < 0.05$ with t statistics $2.284 > 1.96$).

INTRODUCTION

A hospital as a medical safety organization is a place for providing services in the health sector to the community with the aim of being established to provide health services in the form of diagnostic procedures, medical procedures, examinations, and other treatments within the limits of facilities, technology, facilities and other available systems. Hospitals must pay attention to several factors in order to be successful in the health sector, especially in terms of human resources because one of the unexpected and unanticipated assets is that humans are a dynamic resource and can grow to contribute to the creation of quality health.

Performance is the result completed by employees based on the number and quality of responsibilities delegated within a certain time (Muis et al., 2018). So having quality performance can raise hope because good performance can certainly create harmonious relationships for companies and organizations (Hidayat & Yusuf, 2021).

Hospitals are also required to create quality and professional nursing care services, which means hospitals must be able to build and improve the quality of their nurses' performance, but there are things that can affect nurses' performance, namely workload because if the workload is too heavy it can cause decreased productivity in the nurse. Workload is an activity carried out and completed by employees within the time determined by an organization (Nabawi, 2021).

The workload can also result in work stress in nurses, because their duties and profession have great responsibilities. Nurses interact with patients, coworkers, colleagues, families, physicians, and hospital regulations while doing their jobs. They also deal with workloads that sometimes disrupt their psychological, physical and emotional conditions.

There are only three RSIA's that can be accessed for mother and child care, especially in North Bekasi, which has a population of 300,000 people, one of the RSIA's is the Viola Mother and Child Hospital which has state-of-the-art facilities that offer mother and child care located in Pondok Ungu Permai Sector V, North Bekasi. RSIA Viola also provides prenatal and postnatal care. Caesarean section, neonatal intensive care unit (NICU), as well as various other medical services needed by maternal and child patients.

In initial observations and interviews, 7 nurses participated in discussing phenomena that existed in the hospital, including workload. In addition to the many complaints and demands from co-workers and patient families, nurses often deal with uncooperative patients who want to leave the hospital immediately or refuse to receive injections. This can make it difficult for nurses to carry out medical procedures, thereby increasing the workload for nurses. As many as 4 nurses stated that they felt tired at work due to the tasks they had to do to ensure the health and safety of patients which required a lot of energy. A total of 3 nurses said they felt mentally burdened by their duties to ensure the perceived health and safety of patients.

In the assessment, the performance of nurses also decreased, it can be seen that completing tasks on time fell to 86%, and the level of collaboration between nurses fell to 84%. Where the target is 100% accuracy in completing tasks and cooperation is expected to reach more than 90%. Apart from that, the nurses' initiative also decreased to 86%. This can be a reminder that the performance of nurses at RSIA Viola is decreasing which may be related to the workload and stress they experience at work.

THEORETICAL REVIEW

Work load

Workload is not only about heavy work but also light work, where workload in the workplace does not only involve work overload but also

workload that is too small (work underload) (D.J & Suwatno, 2018) . There are several indicators of workload (Rolos et al., 2018) such as work conditions, targets that must be achieved, and physical demands.

Workload can be interpreted as a form of action process in completing tasks or responsibilities carried out within a specified time period, all of which are related to the indicators. Inappropriate workload can cause a gap between the work and the employee's abilities, causing physical or mental fatigue (Nabawi, 2021).

Performance

Performance is the result of the performance achieved by an individual or group of people in a company or organization in a quantitative or qualitative manner in accordance with duties, responsibilities and authority based on morals and ethics in order to achieve company goals optimally (Nabawi, 2021).

The indicators for employee performance (Diana, 2019) are seen from the quality and quantity of employees which can be measured through the perfection of their work and the number or results of the speed of each employee. Then another indicator is punctuality where each employee must complete the task and maximize the time available to carry out the task.

Work Stress

Stress has a different meaning for each person, this is because each individual has varying abilities in dealing with the amount, type and duration of stress. Stress itself comes from Latin called "estrica" or in French "estrece" which was used to mean disaster, sorrow, problems and catastrophe in the 17th century (Hastutiningsih, 2019). Work stress is tension that can affect physical, mental and emotional conditions. The impact of stress if it is not handled properly is the individual's inability to interact positively with their environment, including in the work environment (Sulastri & Onsardi, 2020).

The level of stress in an employee can be measured from several indicators (Sulastri & Onsardi, 2020), including task demands, interpersonal demands, psychological conditions, physical conditions, behavioral conditions, and role demands.

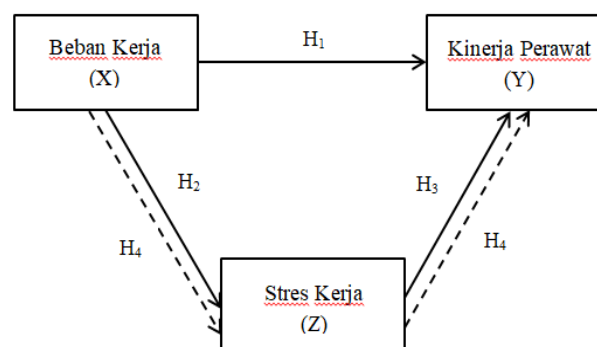


Figure 1. Conceptual Framework

Hypothesis:

- H1: Workload has a significant effect on nurse performance.
H2: Workload has a significant effect on work stress in nurses.
H3: Jobstress has a significant effect on nurse performance.
H4: Workload has a significant effect on nurse performance through work stress.

METHODOLOGY

This quantitative research was conducted at the Viola Mother and Child Hospital with a sample size of 31 respondents. There are two data used in this research, namely secondary and primary data. This research uses Structural Equation Modeling as an analysis tool. Provide a clear and shortened version of your methods in conducting the research, the population and sample, and means of data analysis.

RESULTS

Results of Measurement Model Analysis (Outer Model)

This research begins with analyzing the outer model which aims to ensure that the indicators used as measuring tools are valid and reliable.

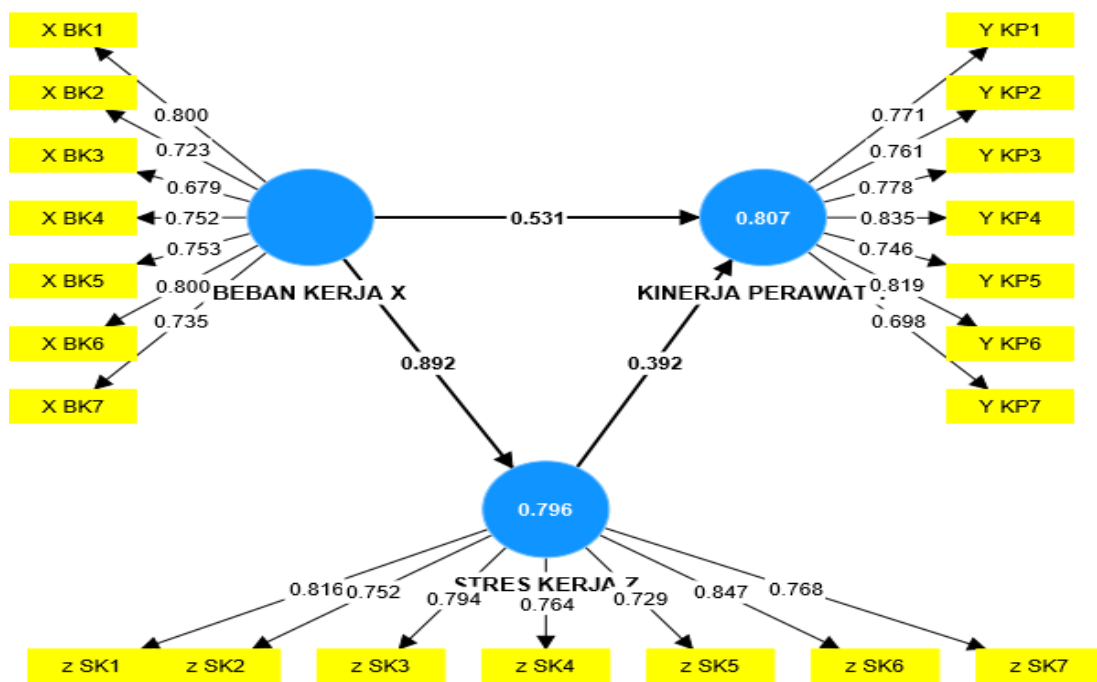


Figure 2. Outer Model

Based on the Loading Factor (convergent validity), several indicators were removed, including BK3 and Y7. This is because the loading factor value is smaller than 0.70 (assuming the minimum loading factor value used is 0.70) so it cannot be used in analyzing the data.

Table 1. Cronbach Alpha and Composite Reliability

Item	Cronbach's alpha	Composite reliability

		(rho_c)
Beban Kerja	0.863	0.898
Kinerja Perawat	0.881	0.910
Stres Kerja	0.894	0.917

The results of Composite Reliability and Cronbach Alpha show that all the constructs or variables studied are worth more than the assessment criteria of above 0.7. This shows that each indicator of each variable is declared reliable, accurate, consistent and precise, to measure the variable so that the level of reliability is quite good.

Structural Mode Testing (Inner Model)

To be able to predict the existence of a relationship between latent variables in this research, an inner model test is needed (Rianto et al., 2022). This measurement goes through the Q Square, R Square and Path Coefficient test stages of the inner model.

R Square (R²)

based on tests that have been tested, namely to analyze and assess how much the exogenous variable or variable good and said to be normal if the R Square value is > 0.5.

Table 2. R Square

Variabel	R Square (R ²)
Stres Kerja	0.762
Kinerja Perawat	0.775

It can be seen that the R Square for the work stress variable is 0.762, which results show that the percentage from this research is 76.2%, while the other 23.8% is outside of this research. Meanwhile the nurse performance variable was 0.775 and the research percentage was 77.5% so that the other 22.5% was outside of this research. This value is assumed to be 100%.

Q Square

Based on the analysis there is a Q value² on work stress is 0.445 and the Q value² on nurse performance is 0.470. The results of measurements using SmartPLS 4.0 obtained from the Q Square value are:

$$Q \text{ Square} = 1 - (1 - Q^2)$$

Q Square Job Stress:

$$= 1 - (1 - 0.455)$$

$$= 1 - 0.555$$

$$= 0.445$$

Q Square Nurse Performance:

$$= 1 - (1 - 0.470)$$

$$= 1 - 0.53$$

$$= 0.470$$

Based on calculations, the Q Square value for work stress is 0.445, which means the presentation in this study is 44.5%, while the other 55.5% is outside this study. Meanwhile, the Q square of nurse performance has a result of 0.470, which results show a percentage of 47%, while 53% is outside the results of this study, so it can be said that both have good goodness of fit.

Path Coefficient

Significance values between constructs, p-values, and T-statistics are useful in determining whether a hypothesis is accepted or not. T-statistic > 1.96 with a significance level at p-value 0.05 (5%).

Table 3. Path Coefficient

	Original sample (O)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Workload X -> Nurse's Performance Y	0.448	0.199	2.253	0.024
Workload X -> Work Stress Z	0.873	0.032	26.981	0.000
Work Stress Z -> Nurse's Performance Y	0.461	0.201	2.294	0.022

The table above shows that workload on nurse performance has a significant positive influence of 0.448 (T-Statistics 2.253 > Table 1.96), meaning that the heavier the workload, the higher the nurse's performance. while the influence of workload on work stress has a positive effect of 0.873 (T-Statistics 26.981 > Table 1.96), this shows that high workload can cause high levels of work stress in nurses. Meanwhile, work stress on nurses' performance is said to have a positive effect of 0.461 (T-Statistics 2.294 > Table 1.96). This states that although work stress for nurses is high, it does not result in decreased performance for nurses.

Mediation Analysis

Table 4. Specific Indirect Effect

	Original sample (O)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Keterangan
BEBAN KERJA X -> STRES KERJA Z -> KINERJA PERAWAT Y	0.402	0.176	2.284	0.022	Partial Mediation

By using Bootstrapping in SmartPLS 4.0, you can find out the mediation test in the Specific Indirect Effect section. This research was conducted to test the mediating variable as a link between the dependent and independent variables, with the results of values (T-statistics 2.284 > 1.96) and (P Values 0.022 < 0.050) that work stress has role in mediating the significant relationship between workload and nurse performance. So it can be interpreted that the indirect influence of workload on nurse performance through work stress has proven to be significant and is expressed as partial mediation, which means that whether there is work stress or not, workload has an influence on nurse performance.

DISCUSSION

Workload on Nurse Performance

The first hypothesis shows that workload has a positive and significant influence on the performance of nurses at the Viola Mother and Child Hospital. With this, the researcher concludes that workload has a role and influence on the performance of nurses. This influence can be proven, such as increasing task and physical demands on nurses, so it has a high influence on nurses' performance, such as quality, quantity and timeliness in carrying out tasks. This research is also supported by (Irawati & Carrollina, 2019) where internal workload has a positive effect on the performance of operator employees at PT Giken Precision Indonesia.

Workload on work stress

The second hypothesis shows that workload has a positive and significant effect on nurses' work stress. result of *path coefficient* shows that there is an influence, it is proven that the task and physical demands experienced by nurses in the sense that the workload is increasing, so that work stress on nurses, such as physical, psychological conditions, and behavior on nurses is also increasing. Vice versa if

The workload experienced by nurses decreases, so the work stress of nurses also decreases. This research is also supported by previous researchers (Jayati & Sulistyan, 2021) that workload has a positive influence on work stress, where if workload increases, work stress can increase.

The influence of work stress on nurse performance

Based on the third hypothesis which shows the results that work stress has a positive and significant effect on nurses' performance, as evidenced by work stress such as physical, behavioral and psychological conditions experienced by nurses increasing, the more it influences work results or performance such as quality, quantity and accuracy. task time. In this research, it is also supported by (Wartono, 2017) that work stress has a positive effect on employee performance among magazine employees *mother and baby*.

Workload on nurse performance through work stress

Based on the tests above, the workload at the Viola Women's and Children's Hospital has a significant and positive effect on nurses' performance through work stress. Job stress is said to be a partial mediation (*partial* mediation) which means whether or not work stress is a mediating variable, workload still has an influence on nurse performance. However, with the mediating variable, workload has a more significant influence of 0.02 on nurse performance through work stress as a mediating variable.

CONCLUSIONS AND RECOMMENDATIONS

Based on the analysis, test results and hypotheses, it can be concluded as follows:

1. Workload has a positive and significant effect on the performance of nurses at the Viola Women's and Children's Hospital. The results of this research are in line with research (Diana, 2019) entitled The Effect of Workload on Employee Performance in the Housekeeping Department at the Bintan Lagoon Resort Hotel. So when The workload borne by nurses, such as increased task demands and physical demands, can affect their performance, and vice versa if the hospital provides *jobdesk* If every nurse meets work standards, the nurse will have more optimal performance.
2. Workload has a positive and significant effect on the work stress of nurses at the Viola Women's and Children's Hospital. These results are in line with (Rizki et al., 2022) who say that workload has a positive and significant effect on work stress. This means that when the workload carried by nurses is low, the level of work stress will also decrease. However, on the other hand, if

nurses often experience a high workload or do not comply with work standards, this can cause increased work stress which can be seen from psychological, behavioral and physical conditions. Therefore, it is important to pay attention to the distribution of workload for each nurse so that nurses can work optimally which can also reduce work stress levels.

3. Work stress has a positive and significant effect on the performance of nurses at the Viola Women's and Children's Hospital. The results of this research are in line with (Novi et al., 2018). If the work stress experienced by nurses is low, then the nurse will be able to carry out each job more optimally, but the opposite is true if work stress is low. If it is high, it will have an impact on nurses' lack of focus in completing their work.
4. Workload has a positive and significant effect on nurse performance through work stress as an intervening variable at the Viola Mother and Child Hospital. Even though workload has a significant influence on nurse performance, it will be more significant if work stress is used as an intervening or mediating variable, so this can be stated *partial mediation*. The results of this research are in line with (Batubara & Ferrya, 2022) entitled The Effect of Workload and Colleague Support on Employee Performance with Job Stress as an Intervening Variable. If you look at the results *specific indirect effect* shows that any work that is given excessively, causing workload, will have an impact on decreased performance and not optimal work results, while appropriate workload and low levels of stress can have a good psychological impact in the form of comfort when working and provide space for workers to function. maximize their personal abilities in optimizing performance.

Based on the results of the analysis conclusions above, several recommendations can be made as follows:

1. Based on the research results, the Viola Mother and Child Hospital is encouraged to focus more on the standards of nursing responsibilities and the conditions of nurses due to workload, work stress, and the need for more nursing staff. Even though the performance of nurses has not decreased, the performance is not optimal due to the workload excessive and causes work stress. Because work stress grows with the nurse's workload, this can impact the quality and quantity of nurse performance.
2. Future researchers are advised to increase the sample size and research variables to compare survey results with other things and produce better research. Apart from that, because there are still several other variables that might be used, it is hoped that future researchers can include or use intervening variables other than work stress.
3. Support developments in the fields of human resource management and academics.

REFERENCES

- Batubara, G. S., & Ferrya, A. (2022). Pengaruh Beban Kerja dan Dukungan Rekan Kerja Terhadap Kinerja Karyawan dengan Stres Kerja Sebagai Variabel Intervening. *Inovasi Manajemen Bisnis Dan Akuntansi*, 1(11), 2483–2496.
- D.J, P., & Suwatno. (2018). *Manajemen SDM dalam Organisasi Publik dan Bisnis*. Alfabeta.
- Diana, Y. (2019). Pengaruh Beban Kerja Terhadap Kinerja Karyawan Di Housekeeping Departement Pada Hotel Bintang Lagoon Resort. *Jurnal Manajemen Tools*, 53(9), 193–205.
- Hastutiningsih, A. T. (2019). Pengaruh Beban Kerja Dan Lingkungan Kerja Terhadap Kinerja Karyawan Dimediasi Stres Kerja. *Prosiding National Conference on Applied Business*, 1–8.
- Hidayat, R., & Yusuf, M. (2021). Pengaruh Motivasi Kerja dan Pengalaman Kerja Terhadap Produktivitas Kerja di Duta Cell Elektronik Kota Bima. *Akuntabel*, 18(2), 229–234.
- Irawati, R., & Carrollina, D. A. (2019). *Analisis Pengaruh Beban Kerja Terhadap Kinerja Karyawan Operator Pada PT Giken Precision Indonesia*.
- Jayati, D. D., & Sulistyan, R. B. (2021). Pengaruh Beban Kerja dan Dukungan Rekan Kerja terhadap Stres Kerja Karyawan Dira Kencong. 4(1), 335–340.
- Komariah, N. S., Nursal, M. F., & Rianto, M. R. (2022). Pengaruh Inovasi dan Media Sosial terhadap Kinerja UMKM Makanan Halal di Kota Bekasi Utara. *Jurnal Ilmiah Ekonomi Islam*, 8(2), 2247. <https://doi.org/10.29040/jiei.v8i2.5957>
- Muis, M. R., Jufrizen, J., & Fahmi, M. (2018). Pengaruh Budaya Organisasi Dan Komitmen Organisasi Terhadap Kinerja Karyawan. *Jesya (Jurnal Ekonomi & Ekonomi Syariah)*, 1(1), 9–25. <https://doi.org/10.36778/jesya.v1i1.7>
- Nabawi, R. (2021). Pengaruh Lingkungan Kerja Dan Karakteristik Individu Terhadap Kinerja Karyawan SMK Kartini. *Jurnal Administrasi Dan Manajemen*, 11(2), 136–145. <https://doi.org/10.52643/jam.v11i2.1880>
- Novi, C. C. D., Bagia, I. W., & Gede, P. A. J. S. (2018). Pengaruh stres kerja dan kepuasan kerja terhadap UD surya raditya negara. *Jurnal Manajemen*, 4(2), 154–161. <https://ejournal.undiksha.ac.id/index.php/BISMA-JM/article/view/22015>
- Rizki, Natasha, Saputra, & Abriyoso. (2022). Pengaruh Beban Kerja Terhadap Stres Kerja Pegawai Satuan Polisi Pamong Praja Kota Tanjungpinang. *Jurnal Pendidikan Tambusai*.
- Rolos, J. K. R., Sambul, S. A. P., & Rumawas, W. (2018). Pengaruh Beban Kerja Terhadap Kinerja Karyawan Pada. *Jurnal Administrasi Bisnis*, 6(4), 19–27.
- Sulastri, & Onsardi. (2020). Pengaruh Stres Kerja Dan Beban Kerja Terhadap Kinerja Karyawan. *File:///C:/Users/VERA/Downloads/ASKEP_AGREGAT_ANAK_and_REMAJA_PRINT.Docx*, 2(1), 1–9.
- Wartono, T. (2017). *Pengaruh stres kerja terhadap kinerja karyawan*. 4(2), 41–55.