

## The Relationship between Heavy Workload and the Nurse's Performance

Ery Purwanti<sup>1</sup>, Suryo Ediyono<sup>2</sup>

<sup>1</sup>Doctoral Study Program of Development Extension, Health Promotion Major, Sebelas Maret University, Surakarta

<sup>2</sup>Faculty of Cultural Studies, Sebelas Maret University, Surakarta

### ABSTRACT

**Background:** Public Health Centers (Puskesmas) is a functional organization that runs integrated, comprehensive, evenly acceptable, and reachable health services for the community. Puskesmas are required to have better quality in accordance with the potential problems in its working area each. Along with the progress of the community, service delivery demand is getting more complex and critical (Zaidin, 2012). This becomes a burden for nurses in performing services for complex demands without being followed by balanced numbers of workers, infrastructure, and other factors.

**Purpose:** To examine the workload and the performance of nurses in Puskesmas Banjarnegara District.

**Methods:** the study is a descriptive correlational study with a cross-sectional design. The population was nurses in Puskesmas Wanayasa 1 and 2, Puskesmas Batur 1 and 2, Puskesmas Karangobar, Puskesmas Kalibening, Puskesmas Pandanarum and Puskesmas Pejawaran with a total of 39 nurses. Samples were determined using a total sampling technique in accordance with the inclusion and exclusion criteria. Data were collected using a questionnaire. Then, the data were analyzed using bivariate and univariate analysis with the Spearman rank test.

**Results:** Most nurses experienced a high workload with a total of 16 respondents (41%). The majority of nurses had a fairly good performance with a total of 22 respondents (56.4%). The results showed a value of 0.000 with a significance value of 0.05 and have a negative correlation.

**Conclusion:** The workload and the performance of Puskesmas nurses have a significant relation.

**KEYWORDS:** Workload and performance, Puskesmas

### ARTICLE DETAILS

**Published On:**  
**01 June 2022**

**Available on:**  
<https://ijmscr.org/>

### INTRODUCTION

Nursing services in the preventive function at Puskesmas are important for patients. Nurses as "The caring profession" have a very important position in supporting the achievement of successful health services, considering that nursing services are provided 24 hours continuously (PPNI, 2018). Along with its development, public demand for health services become more complex and critical (PPNI, 2019).

Indonesian Law No. 38 of 2014 states that nurses are people who have the ability and have been recognized by the government for their ability (Elizar et al., 2020). Nursing services are a form of professional service of health services that are based on nursing knowledge and skills aimed at individuals, families, groups, and communities, both healthy

and sick (Ponnet et al., 2019). In providing services, nurses always perform their tasks constantly and continuously, and even they contribute to the quality of a hospital (Adatara et al., 2021). The professionalism of nurses in providing nursing services can affect their performance of nurses (Ryusuke & Sanica, 2021). If the nurses perform optimally in providing basic services including promotive, preventive, curative, and rehabilitative, the quality of health services will be better (Silitonga et al., 2020).

Performance is the result of a person's work that has a strong relationship with the goals of an organization, customer satisfaction, and economic contribution (Macphee et al., 2017). The performance of nurses is a form of professional service that is part of health services.

## The Relationship between Heavy Workload and the Nurse's Performance

Furthermore, the performance of nurses in carrying out nursing services can be interpreted as a nurse's compliance in carrying out nursing care. Nursing services cover assessment, diagnosis, planning, implementation, and evaluation (Jameson et al., 2018).

Workloads are one of the factors affecting the risk of decreasing performance (Riklikiene et al., 2020). According to (Simamora, 2012), an increase in workload occurs if the number of nurses does not match the level of service needed for patients (SmithBattle et al., 2021). If the number of nurses is lower than the services needed by the patients, it can cause an increase in the workload. Workloads are all activities or activities carried out by a nurse. Besides, workloads can also be interpreted as patient days which refers to a visit examination procedure for patients (Rahmadhani et al., 2021).

The nurse's workloads can be analyzed from the main and additional tasks that are carried out, the number of patients to be treated, work capacity in accordance with the educational background, and the working time used to carry out their duties according to the daily working hours, and facility completeness that can help nurses completing their work properly (Pourteimour et al., 2021). Based on the preliminary study, in general, the number of nurses in 8 Puskesmas in Batur-Karangkobar Sub-district is 39 people. Thus, on average, one Puskesmas has 4 to 5 nurses for both inpatient and out-patient puskesmas (Elizar et al., 2020).

This number is still lacking in accordance with the Regulation of the Ministry of Health No. 75 of 2014

concerning Puskesmas in which inpatient puskesmas should at least have 8 nurses and outpatient puskesmas need to have at least 5 nurses (Kemenkes RI, 2020). Three out of the 5 nurses involved as respondents in the preliminary study stated that they have high workloads and the other had moderate and one workload each (Kemenkes RI et al., 2018). Those who had a high workload are due to additional tasks outside their main task as the number of nurses is still lacking so their performance is not optimal (PPNI, 2017). The most frequently performed main activities of nurses at Puskesmas are recording and reporting medical record data and other additional tasks outside of their main task (RI, 2018). Based on the explanation above, this study focuses on the relationship between workloads and the performance of nurses at Puskesmas Banjarnegara Sub-district.

## METHODS

This descriptive correlational study used a cross-sectional design. The population in this study was nurses from Puskesmas Wanayasa 1 and 2, Puskesmas Batur 1 and 2, Puskesmas Karangkobar, Puskesmas Kali Bening, Puskesmas Pandanarum, and Puskesmas Pejawaran with a total of 39 nurses. The sampling used a total sampling in accordance with the inclusion and exclusion criteria. This study used questionnaires to collect data. The data were then analyzed using univariate and bivariate data analysis as well as the Spearman rank test

## RESULTS

### 1. Description of the Nurses' Workloads at Puskesmas Batur-Karangkobar Sub-district

**Table 1. Frequency Distribution of Nurses' Workloads in 2020 (n=39).**

Workload Levels	(f)	(%)
Low	9	23,1
Moderate	14	35,9
High	16	41
Total	39	100 %

Table 4.1 shows that t most of the nurses experienced a high workload with a total of 16 respondents (41%), while a small number of respondents

experienced a low workload with a total of 9 respondents (23.1%).

### 2. Description of the Nurses' Performance at Puskesmas Batur-Karangkobar Sub-district

**Table 2. Frequency Distribution of Nurses' Performance in 2020 (n=39).**

Performance	(f)	(%)
Good	8	20,5
Fairly good	22	56,4
Poor	9	23,1

Based on Table 4.2, most nurses have a fairly good performance with a total of 22 respondents (56.4%) and

only a small percentage of nurses' performance is in the poor category with a total of 8 respondents (20.5%).

## The Relationship between Heavy Workload and the Nurse's Performance

### 3. Relationship between workload and nurses' performance at Puskesmas Batur-Karangkobar Sub-District

**Table 3 Bivariate Analysis Spearman's Rank between Workload and Nurses performance**

				Workload	Nurses' Performance
<i>Spearman's Rho</i>	Workload	<i>Correlation Coefficient</i>	1.000		-.689**
		<i>Sig. (2-Tailed)</i>	.		0.000
		<i>N</i>	39		39
Nurses' Performance		<i>Correlation Coefficient</i>	-.689**		1.000
		<i>Sig. (2-Tailed)</i>	0.000		.
		<i>N</i>	39		39

Based on the Spearman Rank correlation analysis, the correlation coefficient value is  $-.689^{**}$ . This means that the level of correlation between the workload variable and the nurse's performance is 0.689. Then, based on the table of correlation limits in table 4.3, the correlation is considered strong. The asterisk ( $^{**}$ ) means that the correlation is significant at a significance level of 0.01.

The correlation coefficient above is negative, namely  $-0.689$  in which the correlation between the two variables is opposite. Thus, it can be said that the more nurses experience a high workload, the lower the nurse's performance. On the other hand, if the nurse experiences a low workload, the nurse's performance will be higher.

Based on the output above, the significance value or Sig. (2-tailed) of 0.000 compared with the significance level value of 0.05 or 0.01, Sig. (2-tailed) of 0.000 is smaller than 0.05 or 0.01. This means that there is a significant relationship between the workload variable and the performance of nurses at Puskesmas.

## DISCUSSION

### 1. Description of Nurses' Workloads at Puskesmas Batur-Karangkobar Sub-district

Based on the results of the study, the nurses' workload is dominated by a high category with a total of 16 respondents (41%) and a moderate category with a total of 14 respondents (35.9%). Meanwhile, a small number of respondents have a low workload with a total of 9 respondents (23.1%).

This is in line with Ahmadun (2017) that the nurses' workload at Puskesmas Kuala Kampar Riau is in the high category with a total of 7 respondents (46.7%). Another study by Haryanti (2013) revealed that almost 50% of nurses' workload is high, where nurses perform a lot of non-nursing tasks. High workloads and repetitive routine tasks can cause burnout (Setiawan & Rahayu, 2020). Burnout is a symptom of the excessive use of energy resulting in physical, emotional and mental fatigue (Destiani et al., 2020). Besides burnout, nurses' high

workload can reduce their work performance (Silitonga et al., 2020).

Siti Juhairiyah et al., (2022) stated that an excessive workload will reduce work productivity, physical or mental fatigue, and emotional reactions such as headaches, digestive disorders and irritability. Too little workload where works are only the repetition of motion will cause boredom and a sense of monotony. Boredom and daily routine work due to too few tasks or work results in a lack of attention to work it has the potential to decrease work productivity (Rusdi et al., 2020).

### 2. Description of Nurses' Performance at Puskesmas Batur-Karangkobar Sub-district

The performance of a nurse is the application of knowledge and skills obtained from education to provide services with the responsibility to improve the health status of the patients in accordance with their duties, functions, and competencies (Yosiana et al., 2020). Based on the results of the study, most of the nurses had a fairly good performance with a total of 22 respondents (56.4%) and a small part of the performance of nurses had a poor category with a total of 8 respondents (20.5%). The researcher argues that the performance of nurses at Puskesmas is not optimal due to the workload and responsibility of non-nursing tasks. The results are in line with (Rosyidawati et al., 2020) that the performance of nurses is in the fairly good category with a total of 36 respondents (80%) at Puskesmas Kartasura. Furthermore, it is in line with Mashuri (2013) that generally the performance of nurses at Puskesmas Baranti and Manisa Sidenreng Rappang Sub-district is fairly good (94.7%) and the others are poor (5.3%).

The performance of nurses at puskesmas is influenced by some factors such as motivation, work discipline, work facilities, and remuneration for services. Motivation is individuals' desire that stimulates them to take action. Motivation drives someone to do something (Lee et al., 2017). Bahri (2013) stated that there is a relationship between work motivation and nurses'

## The Relationship between Heavy Workload and the Nurse's Performance

performance in carrying out nursing services well. According to Nursalam (2011), discipline is an individual or group that ensures compliance with orders and taking the initiative if there is no order. Discipline is a management action to encourage organizational standards. Training to justify and involve nurses' knowledge, attitudes, and behavior is to improve the nurse's ability to lead to better cooperation and achievement. A study by Bahri (2013) showed that there is a relationship between work discipline and the performance of nurses in improving their attitudes and behavior (Qureshi et al., 2021). The researcher argues that work discipline is very influential on the performance of nurses ensuring compliance with orders and taking the initiative if there is no order (Biff et al., 2020).

Besides, work facilities also affect the performance of nurses at puskesmas. Work facilities are "a form of health service for employees in order to support performance in meeting the needs of employees, to increase the productivity of nurses" (Destiani et al., 2020). The researcher argues that work facilities are closely related to the performance of nurses in implementing good and optimal services which results in increased productivity. Then, remuneration also affects the performance of nurses. Remuneration is something paid or the fulfillment of a promise, reward, or reciprocation. The biggest external motivation for a person's performance is the reward for services (Zhang et al., 2021). Bahri (2013) revealed that service rewards are related to the performance of nurses so that the nursing services can be carried out properly.

### 3. Relationship between Workloads and Performance of Nurses at Puskesmas Batur-Karangkobar Sub-district

The performance of a nurse can be seen in the quality of nursing service provided to patients. Workloads are a factor to be considered to get high work productivity. Based on the results of the study, the correlation coefficient is negative, namely -0.689 so the relationship between the two variables is opposite. Thus, the higher the workload, the lower the nurse's performance. On the other hand, if the nurse has a low workload, the nurse's performance will be higher. Pundati et al., (2018) proposed two factors affecting the nurse's performance, namely external and internal factors of the nurse. External factors are the imbalance between the nurse's workload and demands of Puskesmas that require the nurse to perform non-nursing services such as administrative tasks and managing Health Operational Assistance (BOK) and the imbalance number of personnel. The internal factors are the high ability and hard work of nurses in carrying out their responsibilities (Dwinijanti et al., 2020).

This study is in line with Ramli (2010) concerning the Relationship of Individual Characteristics and Workload on the Nurse's Performance in the Inpatient

Room of Haji Makasar General Hospital which revealed that there is a relationship between workload and nurse's performance. Another study by Afandi (2013) at Saras Husada Hospital Purworejo showed a relationship between workload and nurse performance (Holland et al., 2019).

The results showed that nurses with a high workload can result in poor performance of nurses. Nurses sometimes need to do non-nursing activities so that they do maximally their tasks and are not motivated to do it. It is in accordance with David McClelland in Mangkunegara (2015) that employees who have low work performance are due to not have personal responsibility in doing a job or activity. However, these non-nursing activities still take up the nurses' time. This situation is a dilemma for nurses because by doing non-nursing activities as they need to spend time on these activities which can reduce their time for performing nursing services. Therefore, they work less optimally and it affects their work performance and quality in providing nursing services.

Nurse performance is a measure of success in achieving nursing service goals. The good performance of each nurse who works at Puskesmas has to be maintained to be used as an example for other nurses to continue to improve their performance and provide quality nursing care. Rudi (2012) defines nursing service as a form of professional service that becomes an integral and non-separated part of the overall health service effort and it also becomes one of the determinants of the quality and image of the hospital. This can be a motivation for all nurses to continue to improve the image and quality of Puskesmas to be the best one and trusted by the community (Biff et al., 2020).

## CONCLUSION

Most nurses have a high workload with a total of 16 respondents (41%). Most nurses have a fairly good performance with a total of 22 respondents (56.4%). There is a relationship between the workload and the performance of puskesmas nurses with a value of 0.000 at a significance level of 0.05 and has a negative correlation. It means that the higher the workload, the lower the nurse's performance. On the other hand, if the nurse has a low workload, the performance will be higher.

## REFERENCES

- I. Adatara, P., Amooba, P. A., Afaya, A., Salia, S. M., Avane, M. A., Kuug, A., Maalman, R. S. E., Atakro, C. A., Attachie, I. T., & Atachie, C. (2021). Challenges experienced by midwives working in rural communities in the Upper East Region of Ghana: a qualitative study. *BMC Pregnancy and Childbirth*. <https://doi.org/10.1186/s12884-021-03762-0>

## The Relationship between Heavy Workload and the Nurse's Performance

- II. Biff, D., de Pires, D. E. P., Forte, E. C. N., Trindade, L. de L., Machado, R. R., Amadigi, F. R., Scherer, M. D. D. A., & Soratto, J. (2020). Nurses' workload: Lights and shadows in the family health strategy. *Ciencia e Saude Coletiva*. <https://doi.org/10.1590/1413-81232020251.28622019>
- III. Destiani, W., Mediawati, A. S., & Permana, R. H. (2020). The Mental Workload Of Nurses In The Role Of Nursing Care Providers. *Jnc*.
- IV. Dwinijanti, L., Adhikara, M. F. A., & Kusumapradja, R. (2020). Job satisfaction and turnover intention among public sector nurses: Is workload and burnout the issue? *JEMA: Jurnal Ilmiah Bidang Akuntansi Dan Manajemen*. <https://doi.org/10.31106/jema.v17i1.4951>
- V. Elizar, E., Lubis, N. L., & Yuniati, Y. (2020). PENGARUH STRES KERJA, BEBAN KERJA DAN KEPUASAN KERJA TERHADAP KINERJA PERAWAT DI RUANG RAWAT INAP RSUD DATU BERU TAKENGON. *JUMANTIK (Jurnal Ilmiah Penelitian Kesehatan)*. <https://doi.org/10.30829/jumantik.v5i1.6809>
- VI. Holland, P., Tham, T. L., Sheehan, C., & Cooper, B. (2019). The impact of perceived workload on nurse satisfaction with work-life balance and intention to leave the occupation. *Applied Nursing Research*. <https://doi.org/10.1016/j.apnr.2019.06.001>
- VII. Jameson, B. E., Engelke, M. K., Anderson, L. S., Endsley, P., & Maughan, E. D. (2018). Factors Related to School Nurse Workload. *Journal of School Nursing*. <https://doi.org/10.1177/1059840517718063>
- VIII. Kemenkes RI, D. P. (2020). Kementerian Kesehatan Republik Indonesia. *Kementerian Kesehatan RI*, 5(1), 1–114. <https://www.kemkes.go.id/article/view/1909300001/penyakit-jantung-penyebab-kematian-terbanyak-ke-2-di-indonesia.html>
- IX. Kemenkes RI, Kementrian Kesehatan RI, 2018, & Indonesia, K. K. (2018). Data Informasi Kesehatan Indonesia 2018. *Profil Kesehatan Indonesia*.
- X. Lee, A., Cheung, Y. S. L., Joynt, G. M., Leung, C. C. H., Wong, W. T., & Gomersall, C. D. (2017). Are high nurse workload/staffing ratios associated with decreased survival in critically ill patients? A cohort study. *Annals of Intensive Care*. <https://doi.org/10.1186/s13613-017-0269-2>
- XI. Macphee, M., Dahinten, V. S., & Havaei, F. (2017). The impact of heavy perceived nurse workloads on patient and nurse outcomes. *Administrative Sciences*. <https://doi.org/10.3390/admsci7010007>
- XII. Ponnet, L., Willems, S., Vyncke, V., Bousquat, A. E. M., Viana, A. L. d. Á., Mello, G. A., & Demarzo, M. (2019). Evaluation of the quality of Primary Health Care services for children: reflections on the feasibility of using the Brazilian version of the Primary Care Assessment Tool as a routine assessment tool. *Einstein (Sao Paulo, Brazil)*. [https://doi.org/10.31744/einstein\\_journal/2019A04333](https://doi.org/10.31744/einstein_journal/2019A04333)
- XIII. Pourteimour, S., Yaghmaei, S., & Babamohamadi, H. (2021). The relationship between mental workload and job performance among Iranian nurses providing care to COVID-19 patients: A cross-sectional study. *Journal of Nursing Management*. <https://doi.org/10.1111/jonm.13305>
- XIV. PPNI. (2017). Buku Standar Kode Etik Keperawatan Tahun 2017-2020. *Buku Standar Kode Etik Keperawatan*.
- XV. PPNI. (2018). Standar Luaran Keperawatan Indonesia: Definisi dan Kriteria Hasil Keperawatan, Edisi 1. Jakarta : DPP PPNI. In *Dpp Ppni*.
- XVI. PPNI. (2019). SLKI. In *Standar Luaran Keperawatan Indonesia*.
- XVII. Pundati, T. M., Tamtomo, D., & Sulaeman, E. S. (2018). Motivation, Competence, Workload, and Their Association with Nurse Performance in Dr. Arif Zaenudin Hospital, Surakarta. *Journal of Health Policy and Management*. <https://doi.org/10.26911/thejhpm.2018.03.02.01>
- XVIII. Qureshi, S. M., Purdy, N., & Neumann, W. P. (2021). Developing a modelling approach to quantify quality of care and nurse workload — Field validation study. *Operations Research for Health Care*. <https://doi.org/10.1016/j.orhc.2021.100301>
- XIX. Rahmadhani, W., Rohmansyah, N. A., Soe, T. K., & Suyanto, J. (2021). The Indicators of Nurse's Perspective in Health Management System and Hospital Safety in Gombong Region Hospitals, Indonesia. *JMMR (Jurnal Medicoeticolegal Dan Manajemen Rumah Sakit)*. <https://doi.org/10.18196/jmmr.v10i1.11174>
- XX. RI, K. (2018). profil Kemenkes RI. In *Kementerian Kesehatan RI* (p. 1). <https://www.depkes.go.id/article/view/18030500005/waspadai-peningkatan-penyakit-menular.html%0Ahttp://www.depkes.go.id/article/view/17070700004/program-indonesia-sehat-dengan-pendekatan-keluarga.html>
- XXI. Riklikiene, O., Didenko, O., Ciutiene, R., Daunoriene, A., & Ciarniene, R. (2020). Balancing nurses' workload: A case study with nurse anaesthetists and intensive care nurses. *Economics and Sociology*. [449 Volume 02 Issue 06 June 2022](https://doi.org/10.14254/2071-</a></p></div><div data-bbox=)

## The Relationship between Heavy Workload and the Nurse's Performance

789X.2020/13-2/1

- XXII. Rosyidawati, D., Noor, N. B., & Zulkifli, A. (2020). The Influence of Workload, Job Satisfaction and Work Motivation on Nurse Performance in Hospital Inpatient Installation. *Journal of Asian Multicultural Research for Social Sciences Study*.  
<https://doi.org/10.47616/jamrsss.v1i2.60>
- XXIII. Rusdi, A. R. N., Russeng, S. S., Salmah, A. U., Wahyu, A., Mallongi, A., & Yanti, I. H. (2020). The influence of workload on the nurses performance at Ambon general hospital. *Enfermeria Clinica*.  
<https://doi.org/10.1016/j.enfcli.2019.10.114>
- XXIV. Ryusuke, O., & Sanica, I. G. (2021). Determinant of Nurse Performance in the Era of the COVID-19 Pandemic in Bali. *Matrik: Jurnal Manajemen, Strategi Bisnis Dan Kewirausahaan*.  
<https://doi.org/10.24843/matrik:jmbk.2021.v15.i01.p05>
- XXV. Setiawan, M. S., & Rahayu, S. (2020). Effect of Competence, Workload, Leadership on Nurse Performance. *JOURNAL EDUCATIONAL OF NURSING(JEN)*.  
<https://doi.org/10.37430/jen.v3i2.75>
- XXVI. Silitonga, E., Saragih, M., & Sipayung, R. (2020). HUBUNGAN BEBAN KERJA DENGAN MOTIVASI KERJA PERAWAT DALAM MELAKSANAKAN ASUHAN KEPERAWATAN. *Jurnal Keperawatan Priority*.  
<https://doi.org/10.34012/jukep.v3i2.978>
- XXVII. Siti Juhairiyah, Febriyanty, D., Nitami, M., & Puspitaloka, E. (2022). Relationship between workload and nurse performance at the Rawamangun Special Surgery Hospital in 2021. *KESMAS UWIGAMA: Jurnal Kesehatan Masyarakat*.  
<https://doi.org/10.24903/kujkm.v7i2.1168>
- XXVIII. SmithBattle, L., L'Ecuyer, K. M., Meyer, G., & Shatto, B. (2021). The quest for workload equity in nurse faculty teaching. *Nursing Outlook*.  
<https://doi.org/10.1016/j.outlook.2020.06.007>
- XXIX. Yosiana, Y., Hermawati, A., & Mas'ud, M. H. (2020). The Analysis of Workload and Work Environment on Nurse Performance with Job Stress as Mediation Variable. *Journal of Socioeconomics and Development*.  
<https://doi.org/10.31328/jsed.v3i1.1326>
- XXX. Zhang, M., zhang, P., Liu, Y., Wang, H., Hu, K., & Du, M. (2021). Influence of perceived stress and workload on work engagement in front-line nurses during COVID-19 pandemic. *Journal of Clinical Nursing*. <https://doi.org/10.1111/jocn.15707>