

## Determinants of Excellent Service Performance in Nurses: A Cross-Sectional Study

Rita Sariani Saragih<sup>1</sup>, Martha Irene Kartasurya<sup>2</sup>, Antono Surjoputro<sup>3</sup>, Dwi Indah Iswanti<sup>4\*</sup>

<sup>1,2,3</sup> Master of Public Health Science Program, Faculty of Public Health, Diponegoro University, Semarang, Indonesia

<sup>4</sup> Nursing Department, Faculty of Nursing and Health Science, Universitas Karya Husada Semarang, Semarang, Indonesia

\*Corresponding author: [dwi.indah.iswanti@unkaha.ac.id](mailto:dwi.indah.iswanti@unkaha.ac.id)

### ABSTRACT

**Background:** The low performance of nurses' services is a hotly discussed problem with several complaints from patients as health service users. Many factors affect the performance of excellent service both internally and externally.

**Purpose:** to analyze the determinants of what factors support nurses in performing excellent service performance.

**Methods:** quantitative design with cross-sectional approach. The sample size was 87 nurses from the entire population with D3 and NERS education, at least 6 months working in 6 surgical medical rooms with total sampling technique. The measurement instrument is a checklist and questionnaire consisting of statement items with 4 Likert scales. Validity and reliability tests on 30 respondents, the results  $r_{count} > r_{table}$  0.361 with Cronbach alpha  $> 0.6$ . Descriptive, Pearson product-moment correlation and logistic regression were used to analyze the data with  $\alpha=0.05$ .

**Results:** The variables of perception of workload ( $p=0.004$ ; Exp (B)=4.591), perception of leadership ( $p=0.012$ ; Exp (B)=3.729), and motivation ( $p=0.018$ ; Exp (B)=3.579) simultaneously affect the performance of excellent service by 33.5%.

**Conclusion:** The determinant factor of nurses' excellent service performance is workload. Efforts are needed to increase work motivation, through suitability of salary/benefits received, positive policies from management, supervision, human relations, working conditions, and good organizational culture.

**Keywords:** cross-sectional study, determinants, excellent service performance, nurses

Received February 10, 2025; Revised March 12, 2025; Accepted April 6, 2025

DOI: <https://doi.org/10.30994/jnp.v8i3.627>



The Journal of Nursing Practice, its website, and the articles published there in are licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

**BACKGROUND**

Nurses are one of the professions in the hospital in providing health services. Nurses are human resources in hospitals whose numbers dominate health workers as a whole (Ulfah, Ezdha, and Hamid 2020). Nurses are important in health services because the services provided are continuous for 24 hours (Ismar Agustin 2016). The quality of nursing services is a meaningful component of a patient-oriented healthcare system (Ruang and Inap 2021). It is necessary to pay attention to the performance of nurses in performing tasks to provide health services to patients (Hasanah and Maharani 2022). Professional nurse performance to patients will create a sense of security and satisfaction for patients. Nurses are staff who contact for 24 hours continuously and have direct contact with patients and there are still some complaints from patients saying there are nurses who are less friendly and less fast. Many factors can cause nurses not to provide services by excellent service standards.

Goldsten's research (2017) at the Hospital Emergency Department in Gauteng, South Africa, explains that low nurse performance is still a hotly discussed problem. While research at Bethesda GMIM Tomohon General Hospital in 2015, showed that motivation, leadership supervision, and nurse compensation were still low. Research by Mukhtar et al (2019) on nurse performance in Sudan Hospital is also still low. Research at Pematang Siantar Army Hospital is also still low. Mogopa's research (2017) on the performance of Irina C nurses at Prof. DR. R. Kandou Manado Hospital also explained that nurse performance was still low. Syamsul's research (2017) shows that there is a significant influence of dual conflict, work stress, and burnout on the performance of female nurses at Prof. Dr. H.M. Anwar Makkatatu Hospital, Bantaeng Regency (Dewi, Utami, and Lubis 2021). From the inpatient satisfaction survey by the nursing committee at Mardi Rahayu Hospital in November 2022, there are still rooms where the value of nurse service is 88%, the value is below the target of 90%. The number of patient complaints is still quite high, namely in December 2022 as many as 25 complaint problems. January 2023 as many as 16 complaint problems, February 2023 as many as 13 complaints, and March 2023 as many as 16 complaint problems.

According to Gibson, several factors contribute to nurse performance, namely: individual variables, psychological variables, and organizational variables. Motivation, compensation, leadership style, and job satisfaction are other factors that affect nurse performance. Motivation that is raised continuously by nurses will affect performance. Compensation is a reward for nurses to motivate nurses to achieve the expected performance (Fadhilatul Hasnah and Dian Paramitha Asyari 2022). Sri Lenggo Geni (2019) in his research states that the variables that affect nurse performance are work motivation, leadership, and work climate (Dewi, Utami, and Lubis 2021).

For nurses who experience a decrease in the quality of their performance, there is a possibility that several problems will arise in service. The workload of nurses is so large that if it is not balanced with appreciation or motivation from colleagues and leaders, it can result in the performance of nurses not being maximized (Ismar Agustin 2016). A high nurse workload can cause fatigue. The Department for Professional Employees (2013) explains that additional patients per nurse increase the risk of fatigue, resulting in a 15% decrease in job satisfaction (Ulfah et al. 2020). Many internal and external factors affect the excellent service performance of nurses so that is necessary to examine which factors contribute most so that appropriate interventions can be formulated to improve excellent service performance.

**OBJECTIVE**

The purpose of this study is to analyze the determinants of what factors support nurses in performing excellent service performance.

## **METHODS**

### **Design and Samples**

Quantitative research type, cross-sectional design method, analytical because it aims to identify factors associated with excellent service performance of nurses, including education, length of service, work motivation, organizational culture, perceived rewards workload, and leadership as seen to excellent service performance.

The population is 87 nurses who work in third-class inpatient rooms in Private Hospital "Mardi Rahayu" in Kudus, namely: 6 medical-surgical inpatient rooms. The sample size took the entire number of nurses totaling 87 people, with details: Room K (24 people), Room E (20 people), Room B (10 people), Kr Room (9 people), Ice Room (8 people) and Room I (16 people). The sampling technique used total sampling with inclusion criteria: Nurses with D3 Nursing and Ners education, at least 6 months of work, and willing to be respondents. The exclusion criteria for this study were the orientation nurse and the head of the room. Patients who were sampled to fill out the questionnaire of excellent service performance variables were taken randomly using simple random sampling in the 6 medical surgical inpatient rooms.

### **Research instrument and Data Collection**

Measurement of research variables using a checklist and questionnaire guidelines adapted from relevant theoretical concepts and instrument testing was carried out on 30 respondents. Demographic characteristics using a checklist sheet in the form of gender and age options in years. Education variables are measured by a checklist sheet in the form of D3 and NERS options. Length of service is measured by filling in units of years. The performance motivation questionnaire consists of 5 statements with a Likert scale: disagree to agree strongly, score 5-20, the validity test results obtained  $r$  count 0.673-0.954 ( $> r$  table = 0.361), and reliability with Cronbach alpha 0.907. The organizational culture questionnaire consists of 5 statements with a Likert scale: disagree to strongly agree, score 5-20, the validity test results obtained  $r$  count 0.895-0.977 ( $> r$  table = 0.361), and reliability with Cronbach alpha 0.964. The perceived reward questionnaire consists of 5 statements with a Likert scale: disagree to strongly agree, score 5-20, the validity test results obtained  $r$  count 0.549-0.876 ( $> r$  table = 0.361), and reliability with Cronbach alpha 0.858. The workload questionnaire consists of 5 statements with a Likert scale: disagree to strongly agree, score 5-20, the validity test results obtained  $r$  count 0.782-0.868 ( $> r$  table = 0.361), and reliability with Cronbach alpha 0.931. The leadership questionnaire consists of 5 statements with a Likert scale: disagree to strongly agree, score 5-20, the validity test results obtained  $r$  count 0.743-0.873 ( $> r$  table = 0.361), and reliability with Cronbach alpha 0.846. Furthermore, the excellent service performance questionnaire, including reliability, tangibles, responsiveness, assurance, and empathy, consists of 25 statement items with a Likert scale; never-very often, score 25-100, the validity test results obtained  $r$  count 0.378-0.748 ( $> r$  table = 0.361) and Cronbach alpha 0.927.

Data collection on demographic characteristics, education, length of service, work motivation, organizational culture, perceived rewards, workload, and leadership was carried out on nurses in 6 class 2 and 3 surgical medical rooms totaling 87 people and excellent service performance was filled in by patients as users of excellent service services. Data collection takes 1 month from February - March 2024 Respondents both nurses and patients after getting an explanation of the research signed informed consent and researchers paid attention to ethical principles.

### Data Analysis

Data processing using SPSS version 26 (IBM Corp. 2019). Demographic characteristics, education, and length of service were analyzed descriptively with frequency distribution. Variables of work motivation, organizational culture, perceived rewards, workload, leadership, and excellent service performance with central tendency: mean and standard deviation. The relationship between independent and dependent variables was analyzed using Pearson correlation test. Bivariate results were followed by multivariate analysis using logistic regression test with 95% significance level ( $p < 0.05$ ).

### Ethical Consideration

This research has passed the ethical review by the health ethics committee at the faculty of public health, Diponegoro University with number 074/454/KEP on February 13, 2024. Researchers maintain the confidentiality of respondents by writing initials and informed consent is given to guarantee freedom and voluntarily without coercion to be willing to become research respondents.

## RESULTS

**Table 1.** Nurse Characteristics (n=87)

Variables	Indicator	Frequency (f)	Percentage (%)
Gender	Female	66	75.9
	Male	21	24.1
Age	Early adulthood (20-30 years old)	87	100.0
	Mid-adulthood (31-40 years old)	45	51.7
	Late adult (41-56 years old)	25	28.7
Education	D3	64	73.6
	Ners	23	26.4
Length of service	≤ 10 Years	58	66.7
	> 10 Years	29	33.3

The results of the study in Table 1 explain the description of the characteristics of nurses, most of whom are female as many as 66 (75.9%), aged in the early adult category as many as 45 (51.7%), 64 have a D3 education (73.6%) and 58 have a length of service of ≤ 10 years (66.7%).

**Table 2.** Overview of Work Motivation, Perception of Organizational Culture, Perception of Rewards, Workload, Leadership, and Excellent Service Performance (n=87)

Variables	Category	Frequency (f)	Percentage (%)
Work Motivation	Not good	36	41,4
	Good	51	58,6
Perceived Organizational Culture	Not good	41	47,1
	Good	46	52,9
Perceived Reward	Not good	43	49,4
	Good	44	50,6
Workload	Weight	43	49,4
	Light	44	50,6
Leadership	Not good	48	55,2
	Good	39	44,8
Excellent Service	Not good	46	52,9
	Good	41	47,1

The results of the study in Table 2 explain that nurses have work motivation, perceptions of organizational culture and rewards are mostly good with light workloads. while nurses still perceive the leadership style of the head of the room and the performance of excellent service money provided is still not good.

**Table 3.** Relationship between Level of Education, Length of Service, Work Motivation, Perception of Organizational Culture, Perception of Rewards Leadership, Workload with Excellent Service Performance (n=87)

Variable	Excellent Service Performance						Pearson Correlation ( <i>p-value</i> )	OR (95% CI)
	Not Good		Good		Total			
	n	%	n	%	n	%		
<b>Educational Level</b>								
D3	34	53,1	30	46,9	64	100,0	1,000	1,0 (0,4-2,7)
Ners	12	52,2	11	47,8	23	100,0		
<b>Length of Service</b>								
≤ 10 Years	31	53,4	27	46,6	58	100,0	1,000	1,0 (0,4-2,6)
> 10 Years	15	51,7	14	48,3	29	100,0		
<b>Workload</b>								
Weight	29	67,4	14	32,6	43	100,0	0,013	3,2 (1,3-7,9)
Light	17	38,6	27	61,4	44	100,0		
<b>Leadership</b>								
Not good	33	68,8	15	31,3	48	100,0	0,002	4,4 (1,7-10,8)
Good	13	33,3	26	66,7	39	100,0		
<b>Perceived Reward</b>								
Not good	22	51,2	21	48,8	43	100,0	0,919	0,8 (0,4-2,0)
Good	24	54,5	20	45,5	44	100,0		
<b>Work Motivation</b>								
Not good	26	72,2	10	27,8	36	100,0	0,005	4,0 (1,6-10,1)
Good	20	39,2	31	60,8	51	100,0		
<b>Perceived Organization Culture</b>								
Not good	22	53,7	19	46,3	41	100,0	1,000	1,0 (0,4-2,4)
Good	24	52,2	22	47,8	46	100,0		

Table 3 shows that there is a relationship between work motivation (p-value 0.005), leadership (p-value 0.002), and workload with excellent service performance provided by nurses (p-value 0.013). While there is no relationship between education level (p-value=1.000), length of service (p-value=1.000), perception of organizational culture (p-value=1.000), and rewards (p-value=0.919) with excellent service performance provided by nurses.

**Table 4.** Factor Analysis of Determinants of Excellent Service Performance

Variable	Logistic regression (p-value)	Exp (B)	Likelihood	Hosmer and Lemeshow (Sig.)	Nagelkerke R Square	CI	
						Lower	Upper
Perception of Workload	0,004	4,591	95,173	1,053	0,335	1.636	12.882
Perception of Leadership	0,012	3,729				1.335	10.422
Motivation	0,018	3,579				1.243	10.307

Table 4 outlines that the variables of perception of workload, perception of leadership, and motivation simultaneously affect the performance of excellent service by 33.5%. The results of the analysis obtained the Odds Ratio (OR) of the variable perception of workload is 4.5, meaning that nurses with perceptions of heavy workload have a 4.5 times greater chance of having poor excellent service performance compared to nurses with perceptions of light workload. Meanwhile, if the perception of leadership is improved, the nurse's excellent service performance increases by 3.7 times and if the nurse's motivation is improved, the excellent service performance increases by 3.5 times.

## DISCUSSION

The results of the study explain that there is a relationship between work motivation, leadership, workload, and excellent service performance. This is by previous research conducted by Astuti and Lesmana (2018) showing that work motivation has a positive and significant effect on employee performance (Sari et al. 2022). Furthermore, research by Mose (2020) that leadership has a positive and significant effect on employee performance. (Sari et al. 2022). Reinforced by the theoretical concept that the workload given by nurses must be by their duties, availability of manpower, and competence if it is not balanced with their abilities, it will gradually cause problems with the performance of the services provided (Rohman and Ichsan 2021). Efforts to improve and maintain the work motivation of nurses can affect excellent service performance, through several things, namely: the suitability of salaries and benefits received, positive policies made by management, supervision, human relations, working conditions (working hours; physical environment) and a good organizational culture (Saragih and Iswanti 2024).

The workload given to employees, in this case nurses, must be balanced with their abilities and competencies. In addition, good management of work organization is needed such as: working time, rest time, rotating work, night work, wage system, organizational structure model, delegation of duties and authority. Excellent service can be provided if the available nurses can do the work with the appropriate workload. In addition, maintaining and maintaining a participative leadership style persuasively. Where the leader can create



harmonious cooperation and foster a sense of loyalty and participation of subordinates. Leaders motivate subordinates to feel part of the company where they work.

Work motivation and leadership of the head of the room partially affect the performance of excellent service and simultaneously work motivation, workload, and leadership of the head of the room affect the performance of excellent service. Where work motivation is a predictor of excellent service performance. The results of the study are in line with Afandi (2018) where one of the factors that can affect performance is work interest or work motivation (Pangesti 2022), Astuti and Lesmana (2018) also states that work motivation has a positive and significant effect on employee performance (Sari et al. 2022).

The clinical performance of nurses is influenced by external factors, one of which is leadership style (Mandagi, Umboh, and Rattu 2015). The head of the room who is the direct supervisor for nurses in addition to being able to foster work motivation and have effective leadership also needs to supervise and monitor the excellent service provided by his subordinates. This aims to ensure that the services provided are by standards that can ensure the safety, comfort, and satisfaction of patients or families as health service users. Workload also needs to be considered to be adjusted to the availability and competence of nurses, so that the high motivation of individuals, persuasive leadership of the head of the room, and the appropriate workload can create excellent service performance.

The results of the study also found no relationship between level of education, length of service, perceptions of organizational culture, and awards with excellent service performance provided by nurses. This can occur because many internal and external factors can affect excellent service performance, such as demographic characteristics (gender and race), supervision and monitoring, work environment, building high work motivation, workload according to competence, and participatory leadership of the head of the room.

To improve the performance of excellent service, there is a need for training for nurses to be able to improve their competence. The head of the room who is the direct supervisor for the nurse is expected to be able to foster work motivation and have participatory leadership through supervision and monitoring of the excellent service provided. Workload also needs to be considered to be adjusted to the availability and competence of nurses, so that high motivation, persuasive leadership of the head of the room, and the appropriate workload can create excellent service performance. Future research can explore other factors that can affect excellent service performance, such as demographic characteristics (gender and race), supervision and monitoring, and work environment. The limitation of this study is that data collection cannot be collected simultaneously on the same day, so it takes about 1 month because the nurse's work system is shift. The questionnaire still uses paper and is given directly, so it cannot be accessed and filled in at any time and wherever it is by nurses.

## **CONCLUSION**

Workload is the most influential factor and a predictor of excellent service performance. Hospital management is expected to make efforts to improve the process of excellent service performance by increasing work motivation, through the suitability of salaries and benefits received, positive policies from management, supervision, human relations, working conditions (working hours; physical environment), and good organizational culture.

## **ACKNOWLEDGMENT**

Thank you to nurses and patients at Mardi Rahayu Kudus Hospital who are willing to become research respondents and assist in the process of collecting research data.

**CONFLICTS OF INTEREST**

None

**REFERENCES**

- Afandi. (2018). *Pengaruh Lingkungan Kerja Dan Motivasi Terhadap Kinerja Pegawai Pada Kantor Unit Pelaksana Teknis Latihan Kerja* (The Effect of Work Environment and Motivation on Employee Performance at the Work Training Technical Implementation Unit Office). Ekon Bisnis.
- Astuti, Rini, and Oki Prima Anugrah Lesmana. (2018). "Pengaruh Motivasi Dan Beban Kerja Terhadap Kinerja Perawat Pada Rumah Sakit Umum Mitra Medika Medan" (The Effect of Motivation and Workload on Nurse Performance at Mitra Medika General Hospital Medan). *Jurnal Ilman* 6(2):42–50.
- Dewi, Linda Sari, Tri Niswati Utami, and Masnelly Lubis. (2021). "Faktor Yang Mempengaruhi Kinerja Perawat Pelaksana Ruang Rawat Inap Di Rumah Sakit Sri Pamela (Factors Affecting the Performance of Implementing Nurses in the Inpatient Room at Sri Pamela Hospital)." *Jurnal Kesehatan Tambusai* 2(4):241–47. doi: 10.31004/jkt.v2i4.3112.
- Fadhilatul Hasnah, and Dian Paramitha Asyari. (2022). "Faktor-Faktor Yang Mempengaruhi Kinerja Karyawan Di Rumah Sakit : Systematic Review (Factors Affecting Employee Performance in Hospitals: A Systematic Review)." *JUKEJ : Jurnal Kesehatan Jompa* 1(1):89–97. doi: 10.55784/jkj.vol1.iss1.209.
- Hasanah, Rani, and Chatila Maharani. (2022). "Faktor-Faktor Yang Berhubungan Dengan Kinerja Perawat (Factors associated with nurse performance)." *Indonesian Journal of Public Health and Nutrition* 2(1):75–82.
- IBM Corp. (2019). "IBM SPSS Statistics for Windows, Version 26.0."
- Ismar Agustin. (2016). "Analisis Sistem Penghargaan Dan Beban Kerja Terhadap Kinerja Perawat Pelaksana Rumah Sakit Pada Masa Pandemi Covid -19 (Analysis of the Reward System and Workload on the Performance of Hospital Executive Nurses during the Covid Pandemic -19)." 5:1–23.
- Mandagi, Fergie M., Jootje M. L. Umboh, and Joy A. M. Rattu. (2015). "Analisis Faktor – Faktor Yang Berhubungan Dengan Kinerja Perawat Dalam Menerapkan Asuhan Keperawatan Di Rumah Sakit Umum Bethesda Gmim (Analysis of Factors Associated with Nurse Performance in Implementing Nursing Care at Bethesda Gmim General Hospital)." *Jurnal E-Biomedik* 3(3). doi: 10.35790/ebm.3.3.2015.10479.
- Pangesti, Puspita Nanda. (2022). "Pengaruh Disiplin Kerja (Effect of Work Discipline). Puspita Nanda Pangesti, Fakultas Ekonomi Dan Bisnis UMP, 2022." 27–57.
- Rohman, Malik Abdul, and Rully Mochammad Ichsan. 2021. "Pengaruh Beban Kerja Dan Stres Kerja Terhadap Kinerja Karyawan Pt Honda Daya Anugrah Mandiri Cabang Sukabumi Malik (The Effect of Workload and Work Stress on Employee Performance Pt Honda Daya Anugrah Mandiri Sukabumi Malik Branch)." *Jurnal Mahasiswa Manajemen* 2(1):1–22.
- Ruang, Di, and Rawat Inap. (2021). "Jurnal Keperawatan Mersi." X:1–6.
- Saragih, Rita Sariani, and Dwi Indah Iswanti. (2024). "Analisis Beban Kerja Dan Persepsi Imbalan Terhadap Kinerja Pelayanan Prima Perawat Diruang Rawat Inap." 1(November):1–6.



- Sari, Lusita, Sri Yuni Widowati, Fakultas Ekonomi, and Universitas Semarang. (2022). "Penakaran Akar Determinan Kinerja Karyawan (Root Determinants of Employee Performance) 1,2." 10(1):17–24.
- Ulfah, Awaliyah, Ayudytha Ezdha, and Abdurrahman Hamid. (2020). "Analisa Hubungan Burnout Dan Beban Kerja Perawat Di Rumah Sakit Pekanbaru Medical Center (Analysis of the Relationship between Burnout and Workload of Nurses at Pekanbaru Medical Center Hospital)." *Jurnal Kesehatan Saelmakers PERDANA* 3(2):301–8.