



## Factors Influencing Nurses Performance in Implementing the Professional Nursing Practice Model

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### ABSTRACT

**Introduction:** Nursing performance plays a pivotal role in determining the quality of healthcare services, especially in the application of professional nursing models. Several factors, both internal and external, influence nursing performance, including job satisfaction, work culture, workload, supervision, and experience. Understanding these relationships is essential for improving the quality of care in healthcare facilities, particularly in hospitals.

**Objective:** To analyze the relationship between various factors, including job satisfaction, work culture, workload, supervision, and experience, with nurses' performance in implementing the Professional Nursing Practice Model.

**Methods:** This study employed a quantitative descriptive approach with a cross-sectional design. The sample consisted of 30 inpatient nurses selected through total sampling. Data were collected using structured questionnaires and analyzed using the chi-square test.

**Results:** Most respondents were female, held a D3 education level, and had five years of work experience. The chi-square test revealed significant relationships between job satisfaction ( $p = 0.004$ ), work culture ( $p = 0.002$ ), workload ( $p = 0.004$ ), supervision ( $p = 0.001$ ), experience ( $p = 0.007$ ), and the implementation of the Professional Nursing Practice Model.

**Conclusion:** There is a significant relationship between job satisfaction, work culture, workload, supervision, experience, and the application of the Professional Nursing Practice Model, as evidenced by p-values less than 0.05. Improving these factors can enhance nurse performance and overall quality of care in hospitals.

**Keywords:** nurse performance, professional nursing, job satisfaction, work culture

## **Introduction**

The primary focus of hospital medical services lies in nursing, as it plays a critical role in shaping patient satisfaction. Poor quality services provided by hospitals directly affect patient satisfaction levels. Therefore, excellent service quality cannot solely be measured by facilities, appearance, or technology but must also consider the behavior and performance of nurses. Efforts to improve hospital services must be accompanied by strategies to enhance the quality of nursing care (Hasanah et al., 2022).

The Professional Nursing Practice Model (PNPM) is one method to ensure high-quality nursing care. It is a measurable system with structured processes and professional values, enabling nurses to deliver professional and high-quality care in healthcare institutions, particularly in hospitals (Purwaningsih & Equator, 2022). Bloemhof et al. (2021) highlight that implementing structured interventions helps other hospitals develop strategies to improve nursing work environments. A professional practice model grounded in core principles can enhance nurses' work environments. Statistical analyses, including descriptive statistics and independent t-tests, were conducted to compare survey results before and after such interventions, demonstrating significant improvements.

Nurse performance refers to the actions performed by nurses in organizations according to their responsibilities and authorities. Effective performance not only satisfies service users but also improves the quality of nursing care. It serves as a benchmark for the quality of hospital services. Performance is influenced by factors beyond appearance, including internal and external environmental factors, as well as nursing-specific internal factors. Good and competent performance builds trust and satisfaction among patients and their families. However, according to the Indonesian National Nurses Association in Central Java, disparities in incentives and rewards between doctors, nurses, administrative staff, and hospital managers often result in conflicts, negatively impacting nurse performance. Addressing these issues and other contributing factors is essential to improving overall nursing care quality (Indahsari & Suroso, 2020).

This study investigates the factors influencing nurse performance in implementing the PNPM at PKU Muhammadiyah Purbalingga Hospital. The findings are expected to positively impact nursing care provision and support the continuous improvement of nursing services at the hospital.

## **Objective**

This study aimed to analyze the relationship between various factors, including job satisfaction, work culture, workload, supervision, and experience, with nurses' performance in implementing the Professional Nursing Practice Model.

## **Method**

The research employed a quantitative descriptive approach with a correlational design, utilizing a cross-sectional method. The population consisted of all nurses working in the inpatient department, and the sampling technique applied was total sampling, resulting in 30 respondents who were inpatient nurses. Data analysis was conducted through several stages: editing, coding, tabulation, and statistical testing. Univariate and bivariate statistical analyses were performed using SPSS software. The research instrument utilized was a questionnaire. The study was conducted from July 4 to July 12, 2023, at PKU Muhammadiyah Purbalingga General Hospital.

## Result

Table 1. Frequency of Respondent Characteristics

Variable	f	%
<b>Age</b>		
21-30 Years	26	86.7
31-40 Years	4	13.3
<b>Gender</b>		
Man	6	20.0
Woman	24	80.0
<b>Education</b>		
Diploma	19	63.3
Bachelor	3	10.0
Professional	8	26.7
<b>Working Period</b>		
<5 Years	26	86.7
>5 Years	4	13.3

Table 2. Frequency Distribution of Nurse Performance Factors

Variable	f	%
<b>Satisfaction</b>		
Low	13	43.3
High	17	56.7
<b>Work Culture</b>		
Low	19	63.3
High	11	33.3
<b>Workload</b>		
Low	20	66.7
High	10	33.3
<b>Supervisi</b>		
Low	14	46.7
High	16	53.3
<b>Experience</b>		
Low	18	60.0
High	12	40.0

Table 3. Frequency Distribution of Professional Nursing Practice Models

Variable	f	%
<b>PNPM</b>		
Less	14	46.7
Good	16	53.3

The results of the study revealed that the majority of nurses were aged 21–30 years, predominantly female, with a D3 level of education, and a work experience of less than five years. Analysis of nurses' performance factors in implementing the Professional Nursing Practice Model (PNPM) indicated that 43.3% of respondents reported low satisfaction, while 56.7% reported high satisfaction. Regarding work culture, 63.3% of respondents rated it as low, and 36.7% rated it as high. For workload, 66.7% of respondents perceived it as low, while 33.3% perceived it as high. Supervision was rated low by 46.7% of respondents and high by 53.3%. Meanwhile, 60% of respondents reported high experience, and 40% reported low experience.

The implementation of PNPM was assessed as good by 53.3% of respondents, while 46.7% rated it as lacking. Statistical analysis showed that satisfaction was significantly related to the implementation of PNPM ( $p = 0.004$ ;  $p < 0.05$ ), with a relative risk (RR) value of 3.269 (95% CI: 1.320–8.099). This indicates that nurses with low satisfaction are 3.269 times more likely to report inadequate implementation of PNPM compared to those with high satisfaction.

Table 4. The Relationship Between Satisfaction and the Application of PNPM

Satisfaction	PNPM				p-value	RR
	Less		Good			
	f	%	f	%		
Low	10	76.9	3	23.1	0.004	3.269
High	4	23.5	13	76.5		

Table 5. The Relationship Between Work Culture and the Application of PNPM

Work Culture	PNPM				p-value	RR
	Less		Good			
	f	%	f	%		
Low	13	68.9	6	31.6	0.002	7.526
High	1	9.1	10	90.0		

Table 6. The Relationship Between Workload and the Application of PNPM

Workload	PNPM				p-value	RR
	Less		Good			
	f	%	f	%		
Low	13	65.0	7	35.0	0.004	6.500
High	1	10.0	9	90.0		

Table 7. The Relationship Between Supervision and the Application of PNPM

Supervision	PNPM				p-value	RR
	Less		Good			
	f	%	f	%		
Low	11	78.6	3	21.4	0.001	4.190
High	3	18.8	13	81.3		

Table 8. Relationship of Experience with the Application of PNPM

Experience	PNPM				p-value	RR
	Less		Good			
	f	%	f	%		
Low	12	66.7	6	33.3	0.007	4.000
High	2	16.7	10	83.3		

The results revealed a significant relationship between the implementation of PNPM and several factors, including satisfaction, work culture, workload, supervision, and nurse experience. Based on Table 4, in the group with lower PNPM implementation, 76.9% of respondents had low satisfaction, while in the higher PNPM group, 76.5% had high satisfaction. The chi-square test showed a p-value of 0.004 ( $p < 0.05$ ), indicating a significant relationship between satisfaction and PNPM implementation, with an RP value (95% CI) of 3.269 (1.320 – 8.099), meaning that low satisfaction increases the likelihood of reduced PNPM application by 3.269 times.

In Table 5, in the low PNPM group, 68.4% of respondents reported low work culture, while 90.0% in the high PNPM group had a high work culture. The chi-square test showed a p-value of 0.002 ( $p < 0.05$ ), indicating a significant relationship between work culture and PNPM implementation, with an RP value (95% CI) of 7.526 (1.133 – 49.997), suggesting that low work culture increases the likelihood of lower PNPM implementation by 7.526 times.

According to Table 6, in the low PNPM group, 65.0% of respondents had a low workload, while in the high PNPM group, 90.0% had a high workload. The chi-square test yielded a p-value of 0.004 ( $p < 0.05$ ), indicating a significant relationship between workload and PNPM implementation, with an RP value (95% CI) of 6.500 (0.985 – 42.897), implying that a low workload increases the likelihood of reduced PNPM application by 6.500 times.

In Table 7, 78.6% of respondents in the low PNPM group reported low supervision, compared to 81.3% in the high PNPM group with high supervision. The chi-square test showed a p-value of 0.001 ( $p < 0.05$ ), demonstrating a significant relationship between supervision and PNPM implementation, with an RP value (95% CI) of 4.190 (1.458 – 12.048), suggesting that low supervision increases the likelihood of reduced PNPM application by 4.190 times.

Lastly, Table 8 indicates that in the low PNPM group, 66.7% of respondents had low nurse experience, while in the high PNPM group, 83.3% had high nurse experience. The chi-square test showed a p-value of 0.007 ( $p < 0.05$ ), indicating a significant relationship between nurse experience and PNPM implementation, with an RP value (95% CI) of 4.000 (1.083 – 14.775), meaning that low nurse experience increases the likelihood of reduced PNPM application by 4.000 times.

## Discussion

The demographic characteristics of the respondents reveal important insights into factors that may influence nurse performance in implementing professional nursing practice models (PNPM). In terms of age, the majority of respondents were in the 21-30 age group, with 26 respondents. This age group is often associated with a higher level of energy and motivation to learn, which could positively impact the application of nursing practices. As

noted in previous studies, the age of a nurse can be correlated with work performance, as younger nurses may exhibit greater adaptability and enthusiasm in implementing new models or practices. Additionally, gender was predominantly female, with 24 respondents, which aligns with the broader nursing workforce demographics. While literature, such as the study by Indah Sari et al. (2019), suggests that women's traits of obedience and diligence at work can enhance performance, this study found no significant difference in performance based on gender, indicating that other factors, such as motivation and experience, may play a more crucial role.

The education level of the respondents indicated that most had a D3 Nursing education, with 19 respondents. According to the Law of the Republic of Indonesia No. 38 of 2014, nursing professionals are classified into vocational and professional nurses, with educational background influencing productivity and the ability to apply professional practices. Higher educational qualifications are typically linked to improved intellectual capabilities and, consequently, better performance in the workplace. Furthermore, length of work experience was predominantly under five years, with 26 respondents falling into this category. Noli et al. (2021) categorized work experience into three groups, but this study focused on those with less than five years of experience, as they represented the majority of the hospital's nursing staff. The limited work experience of most respondents suggests that while they may lack extensive experience, they are in a position to develop skills and improve their performance in applying PNPM. This relatively short work duration could influence the overall job satisfaction of nurses, as experience often contributes to greater confidence and competence in executing nursing tasks.

#### ***Identification of Nurse Performance Factors in Implementing PNPM***

The study identified several factors influencing nurse performance in implementing the Professional Nursing Practice Model (PNPM), including satisfaction, work culture, workload, supervision, and experience. Among these, satisfaction emerged as a significant factor, with 56.7% of respondents reporting high levels of job satisfaction. This finding aligns with previous research by Bloemhof et al. (2021), which highlights the positive impact of PNPM implementation on job satisfaction, work environment, and nursing quality. A satisfied workforce is essential for improving patient care and enhancing the overall effectiveness of nursing practices, as satisfied nurses are more likely to engage in the continuous development of professional practices, including PNPM.

#### ***Application of the Professional Nursing Practice Model***

In terms of PNPM application, the majority of inpatients reported good implementation of PNPM. However, despite the generally positive feedback, a significant portion of nurses still exhibited less effective application of PNPM. This finding is consistent with Setiawati et al. (2021), which suggests that while many nurses apply PNPM effectively, there remains a subset of nurses who do not fully adhere to its principles. For optimal PNPM application, nurses must respect professional values, maintain professional relationships, and follow management and compensation systems that align with nursing standards. The research underscores the importance of an organizational commitment to implementing PNPM in its entirety, ensuring that all nurses meet the required standards of care.

### ***The Relationship Between Nurse Satisfaction and PNPM Implementation***

The study also found a relationship between **nurse satisfaction** and the implementation of PNPM. While 10 respondents with low job satisfaction showed less effective PNPM implementation, 13 respondents with high satisfaction demonstrated good PNPM implementation. Chi-square testing confirmed a statistically significant relationship between satisfaction and PNPM effectiveness. This finding suggests that job satisfaction plays a crucial role in improving the quality of nursing care provided through PNPM. The implications for hospital management are clear: fostering a supportive work environment, providing adequate training, and recognizing nurse contributions are essential strategies for enhancing job satisfaction and improving PNPM application. These results are supported by Patoding and Sari (2022), who found a similar relationship between job satisfaction and the application of the professional nursing care method (MAKP) within nursing teams.

### ***The Relationship Between Work Culture and PNPM Implementation***

Regarding work culture, the study revealed that 13 nurses with a low work culture showed less effective PNPM implementation, while 10 nurses with a high work culture demonstrated better PNPM application. Panjaitan et al. (2014) emphasized that organizational structure, cohesiveness, group norms, and rewards are key factors in shaping a positive work culture. A constructive work culture can facilitate the implementation of PNPM by fostering collaboration, mutual respect, and adherence to professional standards. Therefore, enhancing the work culture within healthcare settings is essential for improving nurse performance and ensuring the effective application of nursing practices. A supportive and cohesive work environment is crucial for empowering nurses to consistently apply PNPM at high standards, thereby improving overall healthcare outcomes.

### ***Workload Relationship with PNPM Implementation***

The study's findings indicate that workload plays a significant role in the implementation of the Professional Nursing Practice Model (PNPM). Thirteen nurses with a low workload demonstrated less effective PNPM application, while nine nurses with a higher workload exhibited better implementation. The relationship between workload and PNPM is crucial because professional assistance and manageable workload are essential for nurses to perform their roles effectively and achieve the necessary skills. Excessive workload, however, often leads to increased stress, anxiety, and lower job satisfaction, which negatively impacts the quality of nursing care provided. As Mayasari (2023) notes, a high workload can adversely affect both the physical and psychological well-being of nurses, potentially reducing their ability to apply PNPM effectively and deliver high-quality patient care.

### ***The Relationship Between Nurse Supervision and PNPM Implementation***

The study also examined the relationship between nurse supervision and PNPM implementation. It was found that 11 nurses with low supervision demonstrated less effective PNPM application, while 13 nurses with higher supervision exhibited better performance in implementing PNPM. This highlights the critical role of supervision in improving the quality of nursing care. According to Anggeria & Maria (2018), effective supervision should focus on enhancing the quality of nursing services rather than solely identifying mistakes or irregularities. Proper supervision can provide nurses with the guidance, feedback, and support

necessary to apply PNPM more effectively, thus contributing to better patient outcomes and overall nursing performance.

### ***The Relationship Between Nurse Experience and PNPM Implementation***

In terms of nurse experience, the study found that nurses with low experience were less effective in implementing PNPM, while those with higher experience demonstrated better application. This finding supports research by Fabiana Meijon Fadul (2021), which indicates that nurse experience and work period are directly related to the level of knowledge and the ability to apply PNPM. Nurses with more experience typically have a deeper understanding of nursing practices and can apply PNPM more effectively. However, as Dear (2010) points out, some nurses experience challenges in implementing PNPM, which can lead to suboptimal nursing care. Therefore, it is essential to recognize the importance of continuous training and development to enhance the knowledge and skills of nurses, especially those with less experience, to improve the quality of care in the PNPM framework.

### **Conclusion**

Factors influencing the implementation of the Professional Nursing Practice Model (PNPM) included high nurse satisfaction (56.7%), low work culture (63.3%), low workload (66.7%), high supervision (53.3%), and low nurse experience (60.0%). Most respondents reported good PNPM application (53.3%). The study found significant relationships between nurse satisfaction, work culture, workload, supervision, experience, and the effective implementation of PNPM. These findings highlight the importance of a supportive work environment, proper supervision, manageable workloads, and continuous professional development for improving PNPM implementation. Hospital management should consider these factors when evaluating PNPM practices. Further research is recommended to explore additional variables that may influence the successful application of PNPM in nursing care.

### ***Ethical consideration***

The ethics permit is at the University of Muhammadiyah Purwokerto with the ethics number KEPK/UMP/64/VI/2023.

### ***Conflict of interest***

The researchers stated that there is no conflict of interest related to the implementation and publication of the results of this research. The entire research process, from planning, data collection, analysis, to report preparation, was carried out independently without any influence or pressure from any third party. A commitment to research ethics is upheld throughout the research process, ensuring transparency, accuracy and honesty in reporting results. Respondents' participation was voluntary with informed consent, and their confidentiality and privacy were maintained in accordance with applicable research ethics standards. With this statement, researchers hope that the research results can be trusted and used as a valid reference for the development of science and health practices related to ethnomedicine and reproductive health.



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## **Authors' contribution**

Each author makes an equal contribution to all parts of the research. All authors have reviewed and approved the final draft critically and are responsible for the index and similarity of the manuscript.

## **References**

1. Anggeria, E., & Maria. (2018). The Relationship between Supervision and the Implementation of Nursing Care in the Inpatient Room on the 10th Floor of Royal Prima General Hospital Medan in 2017. *JUMANTIK Journal*, 3(2), 85–86. <http://jurnal.uinsu.ac.id/index.php/kesmas/article/view/1939/1550>
2. Bloemhof, J., Knol, J., Rijn, M. Van, & Buurman, B. M. (2021). *The implementation of a professional practice model to improve the nurse work environment in a Dutch hospital : A quasi- - experimental study*. September, 4919–4934. <https://doi.org/10.1111/jan.15052>
3. Fabiana Meijon Fadul. (2021). Factors Related to the Level of Nurses' Knowledge on the Application of the Professional Nursing Practice Model in the Inpatient Room of Dr. M. Haulussy Hospital. *Journal of Health Research Maluku Husada*, 1(April), 7–13.
4. Indah sari, R. N., Windyastuti, S., & Widyaningsih, T. S. (2019). The relationship between nurse workload and the role of pediatric nurses in play therapy assistance. *Jkep*, 4(2), 104–113. <https://doi.org/10.32668/jkep.v4i2.261>
5. Indahsari, V. Y. P., & Suroso, J. (2020). Factors Affecting Nurse Performance in Providing Health Education Phenomenological Study at Puskesmas I Sokaraja. *Muhammadiyah Journal of Nursing*, 1(1), 272–278.
6. Mayasari, E. (2023). The Effect of Job Satisfaction on the Desire to Change Jobs in Startup Companies. *Equator Journal Of Management and Entrepreneurship*, 11(02), 76–91.
7. Noli, F. J., Sumampouw, O. J., & Ratag, B. T. (2021). Age, working period and complaints of low back pain in tofu factory workers. *Indonesian Journal of Public Health and Community Medicine*, 2, 15–21.
8. Panjaitan, R. U., Keliat, B. A., & Besral, B. (2014). Perception of Implementing Nurses About Organizational Culture and Performance. *Indonesian Journal of Nursing*, 17(1), 30–38. <https://doi.org/10.7454/jki.v17i1.376>
9. Patoding, S., & Sari, W. (2022). The relationship between the application of the team's professional nursing care method (MAKP) and nurses' job satisfaction. *Mega Buana Journal of Nursing*, 1(2), 64–72.
10. Purwaningsih, D. F., & Katulistiwa, P. (2022). *Ealution Of The Implementation Of The Standard Professional Nursing Practice Model (PNPM) At Buluye Napoae Moutong Hospital*. 03(2), 26–30.
11. Rohmiyati, A. (2010). *Phenomenological Study: Nurses' Experience in Implementing PNPM at Dr. Amino Gondhohutomo Regional Mental Hospital Semarang*.
12. Setiawati, S., Rohayani, L., & Akmaludin, I. (2021). Knowledge of Implementing Nurses with the Application of the Nursing Care Model for Internal Medicine and Surgery Professionals. *Journal of Telenursing (JOTING)*, 3(2), 423–428. <https://doi.org/10.31539/joting.v3i2.2095>