

THE EFFECT OF THE IMPLEMENTATION OF SERVICE MANAGEMENT FUNCTIONS ON NURSES' PERFORMANCE AT BINJAI ARMY HOSPITAL

Sayra Nadhifa *, Nuraini, Yuniati

Fakultas Kesehatan Masyarakat, Institut Kesehatan Helvetia Medan

Jl. Kapten Sumarsono No.107, Kec. Sunggal, Kabupaten Deli Serdang, Sumatera Utara 20124, Indonesia

Email: sayranadhifa17@gmail.com

Abstract

The increasing demand for high-quality hospital services requires the effective implementation of service management functions to support nurses' performance as primary healthcare providers. Nurses' performance is a key indicator of hospital service success, as it directly influences the quality of care delivered. Therefore, this study aims to analyze the effect of hospital service management implementation on nurses' performance as a basis for improving service quality. This study employed a quantitative method with a cross-sectional design conducted from August 2025 to February 2026. The sample consisted of all nurses at Binjai Army Hospital, totaling 100 respondents. Data were analyzed using the Chi-square test and logistic regression. The results showed that most respondents rated planning (59%), organizing (60%), implementation (63%), and controlling (60%) as good, with an overall satisfaction level of 59%. Bivariate analysis indicated that all service management variables (planning, organizing, implementation, and controlling) had a significant effect on patient satisfaction ($p < 0.05$), with implementation identified as the most dominant factor. In conclusion, the implementation of hospital service management functions—planning, organizing, implementation, and controlling—significantly affects nurses' performance at Binjai Army Hospital. It is recommended that hospital management strengthen service management systems through the development of clear standard operating procedures, improved work coordination, routine supervision, and periodic evaluation to sustainably enhance nurses' performance.

Keywords: Planning, Organizing, Implementation, Controlling, Nurses' Performance

Introduction

Hospitals play a strategic role in improving public health status by delivering high-quality, safe, and patient-centered healthcare services. In the context of healthcare systems, service quality is not only determined by the availability of advanced medical technology and infrastructure but also by the effectiveness of service management and the performance of healthcare professionals, particularly nurses. Nurses represent the largest proportion of the healthcare workforce and provide continuous, 24-hour patient care, making their performance a critical determinant of overall service quality and patient outcomes (WHO., 2023).

Health is recognized as a fundamental human right and a key component of sustainable development. The World Health Organization defines health as a state of complete physical, mental, and social well-being, rather than merely the absence of disease. In Indonesia, this concept is reinforced by Law No. 17 of 2023 on Health, which emphasizes that health is a comprehensive condition enabling individuals to live productive and socially meaningful lives. Consequently, the government is responsible for ensuring equitable, accessible, and high-quality healthcare services for all citizens (Ministry of Health Republic of Indonesia, 2023).

As complex healthcare organizations, hospitals are required to deliver accurate, efficient, and patient-oriented services. Increasing public awareness and expectations regarding healthcare quality have intensified the demand for continuous improvement in service delivery. Patient satisfaction has become a key indicator in evaluating healthcare quality, reflecting the extent to which services meet or exceed patient expectations. Therefore, hospitals must continuously assess and improve their service management systems to maintain competitiveness and ensure optimal patient outcomes (Kotler et al., 2022).

Effective healthcare service delivery requires well-structured management processes. Service management in hospitals encompasses four main functions: planning, organizing, actuating (directing), and controlling. These management functions are essential in ensuring that healthcare services are delivered efficiently, tasks are clearly distributed, coordination is maintained, and performance is continuously monitored and evaluated. Poor implementation of these functions may lead to inefficiencies, role conflicts, decreased motivation, and ultimately reduced service quality (Robbins & Coulter, 2022).

In nursing services, the implementation of management functions plays a crucial role in shaping nurses' work environment and performance. Proper planning ensures adequate staffing and resource allocation, organizing facilitates clear task distribution, directing enhances motivation and adherence to standards, and controlling ensures that services meet established quality benchmarks. Nurse managers and head nurses are key actors in implementing these functions effectively within hospital settings (Huber, 2023).

Rumah Sakit Tentara Binjai is a Type C military hospital that provides healthcare services to military personnel, the general public, and participants of the national health insurance program (JKN). In recent years, the hospital has experienced fluctuations in patient visits, particularly among insured patients. Internal data indicate an increase in patient visits from approximately 1,850 in 2023 to 2,800 in 2024, followed by a decline to 2,673 visits in 2025. This trend suggests potential challenges in service delivery and management effectiveness.

Preliminary observations and interviews with nurses revealed several issues related to the implementation of service management functions, including high workload due to limited staffing, uneven task distribution, ineffective scheduling, and insufficient supervision. Additionally, challenges related to discipline, delays in nursing care delivery, and suboptimal performance evaluation were identified. These factors contribute to decreased motivation, work fatigue, and reduced effectiveness in nursing care, ultimately affecting nurses' performance.

Previous studies have also highlighted the relationship between service quality and patient satisfaction. For instance, research by Arifin and Suprayitno reported that 56.4% of patients were dissatisfied with healthcare services, indicating a significant gap in service quality that requires immediate attention. This evidence underscores the importance of strengthening service management practices to improve both patient satisfaction and healthcare outcomes.

Based on the above considerations, it is evident that the implementation of service management functions plays a vital role in enhancing nurses' performance. However, empirical evidence in the context of military hospitals, particularly in Indonesia, remains limited. Therefore, this study aims to analyze the effect of service management function implementation on nurses' performance at Rumah Sakit Tentara Binjai. The findings are expected to provide valuable insights for improving nursing management practices and overall healthcare service quality.

Methods

This study used a quantitative analytic design with a cross-sectional approach to examine the effect of service management function implementation on nurses' performance. The study was conducted at Rumah Sakit Tentara Binjai, Indonesia, from August 2025 to February 2026.

The population consisted of 100 nurses, all of whom were included as respondents using a total sampling technique (Sugiyono, 2022). Data were collected using a structured questionnaire measuring planning, organizing, implementation, and controlling (independent variables), and nurses' performance (dependent variable).

Instrument validity was confirmed using item-total correlation ($r > 0.444$), and reliability was established with Cronbach's alpha values ranging from 0.782 to 0.921. Data were analyzed using SPSS version 21. Univariate analysis described variable distributions, while bivariate analysis used the Chi-square test ($p < 0.05$). Variables with $p < 0.25$ were included in multivariate analysis using logistic regression to identify dominant factors influencing nurses' performance (Ghozali, 2021)..

Result

1. Respondent Characteristics

Most respondents were middle-aged (36–45 years), female, and diploma graduates. This indicates that the nursing workforce is dominated by experienced and female staff, which may influence service delivery and performance consistency.

Table 1. Characteristics of Respondents (n = 100)

Variable	Category	n	%
Age (years)	25	18	18.0
	26–35	27	27.0
	36–45	45	45.0
	>45	10	10.0
Gender	Male	37	37.0
	Female	63	63.0
Education	Diploma (D3)	49	49.0
	Bachelor (S1)	37	37.0
	Professional (Ners)	14	14.0
Employment Status	Civil servant	48	48.0
	Contract	31	31.0
	Government contract (P3K)	21	21.0

2. Univariate Analysis

The majority of respondents perceived that service management functions were implemented well, particularly implementation (63%). Similarly, most nurses demonstrated good performance (59%), suggesting a generally positive organizational environment.

Table 2. Distribution of Service Management Functions and Nurses' Performance

Variable	Category	n	%
Planning	Poor	41	41.0
	Good	59	59.0
Organizing	Poor	40	40.0
	Good	60	60.0
Implementation	Poor	37	37.0
	Good	63	63.0
Controlling	Poor	40	40.0
	Good	60	60.0
Nurses' Performance	Poor	41	41.0
	Good	59	59.0

3. Bivariate Analysis

All service management variables showed significant associations with nurses' performance ($p < 0.05$). Implementation demonstrated the strongest relationship, as nearly all respondents with good implementation reported good performance (58%), while poor implementation was largely associated with poor performance (36%).

Table 3. Association Between Service Management Functions and Nurses' Performance

Variable	Category	Poor Performance n (%)	Good Performance n (%)	Total	p-value
Planning	Poor	28 (28.0)	13 (13.0)	41	0.000
	Good	13 (13.0)	46 (46.0)	59	
Organizing	Poor	25 (25.0)	15 (15.0)	40	0.001
	Good	16 (16.0)	44 (44.0)	60	
Implementation	Poor	36 (36.0)	1 (1.0)	37	0.000
	Good	5 (5.0)	58 (58.0)	63	
Controlling	Poor	25 (25.0)	15 (15.0)	40	0.001
	Good	16 (16.0)	44 (44.0)	60	

4. Multivariate Analysis

Logistic regression analysis identified implementation as the most dominant factor influencing nurses' performance ($p = 0.000$). Nurses working under good implementation conditions were approximately 446 times more likely to have good performance compared to those under poor implementation. Although organizing showed a positive effect, it was not statistically significant in the final model ($p > 0.05$).

Table 4. Final Logistic Regression Analysis

Variable	B	p-value	OR (Exp B)	95% CI
Organizing	1.669	0.067	5.309	0.892–31.595
Implementation	6.100	0.000	445.949	44.174–4501.949

Discussion

The findings of this study demonstrate that the implementation of service management functions planning, organizing, implementation, and controlling has a significant influence on nurses' performance at Rumah Sakit Tentara Binjai. Among these variables, implementation emerged as the most dominant factor affecting nurses' performance. This highlights the critical role of operational The results showed that planning is significantly associated with nurses' performance. Effective planning enables the allocation of appropriate resources, including staffing, scheduling, and service targets, which are essential for achieving optimal performance. According to Stephen P. Robbins and Mary Coulter (2022), planning provides direction and reduces uncertainty in organizational activities, thereby improving employee performance. In the context of nursing, inadequate planning such as poor scheduling and lack of staff involvement can lead to increased workload and reduced efficiency, ultimately affecting performance outcomes (Robbins & Coulter, 2022).

Organizing was also found to have a significant relationship with nurses' performance in the bivariate analysis, although it was not statistically significant in the final multivariate model. This suggests that while organizational structure and task distribution are important, their impact may be mediated by other factors such as leadership and implementation quality. Clear job descriptions, effective coordination, and proper delegation are essential elements of organizing that contribute to improved work performance (Huber, 2023).

Implementation (actuating) was identified as the most dominant factor influencing nurses' performance, with a very high odds ratio. This finding indicates that the actual execution of plans, including leadership support, communication, and adherence to standard operating procedures (SOPs), plays a crucial role in determining performance outcomes. This is consistent with previous studies showing that effective leadership and supervision significantly enhance nurses' motivation, compliance, and productivity (Marquis & Huston, 2021). In this study, weaknesses in implementation such as lack of adherence to SOPs and ineffective communication were associated with poorer Controlling (supervision) was also significantly associated with nurses' performance in the bivariate analysis. Effective supervision ensures that nursing activities are conducted according to established standards and allows for timely identification and correction of errors. Continuous monitoring and evaluation are essential for maintaining service quality and improving performance (WHO., 2023). However, its non-significance in the multivariate model suggests that controlling alone may not be sufficient without strong implementation practices.

Overall, these findings are consistent with management theory, which emphasizes that the integration of planning, organizing, actuating, and controlling functions is necessary for achieving organizational effectiveness (Al-Hamdan et al., 2021). In healthcare settings, particularly hospitals, the

successful implementation of these functions directly influences service quality and patient outcomes. The dominance of implementation in this study indicates that even well-designed plans and structures may not yield optimal results without effective execution (WHO., 2022).

This study also aligns with previous research indicating that nurse performance is influenced by organizational factors such as workload, supervision, and management practices (Aiken et al., 2021). High workload and inadequate staffing, as identified in the preliminary findings, can negatively impact nurses' ability to perform effectively. Therefore, improving service management functions should be a priority for hospital administrators (West MA et al., 2022).

From a practical perspective, hospital management should focus on strengthening the implementation of service management functions through clear communication, consistent supervision, and adherence to SOPs (Labrague et al., 2021). Additionally, involving nurses in planning processes and improving coordination across units may further enhance performance (Duffield et al., 2021).

Conclusion

This study demonstrates that the implementation of service management functions—planning, organizing, implementation, and controlling—significantly influences nurses' performance at Rumah Sakit Tentara Binjai. Among these functions, implementation emerged as the most dominant factor affecting performance, indicating that effective execution of service management plays a critical role in achieving optimal nursing outcomes.

Although planning, organizing, and controlling were also significantly associated with nurses' performance in bivariate analysis, their influence was less dominant in the multivariate model. These findings suggest that well-structured plans and organizational systems alone are insufficient without strong implementation in practice.

Improving nurses' performance therefore requires strengthening service management systems, particularly in terms of execution, supervision, and adherence to standard operating procedures. Hospital management is encouraged to enhance coordination, provide consistent supervision, and conduct regular evaluations to ensure sustainable improvements in service quality.

Future research is recommended to explore additional factors such as leadership style, workload, and organizational culture that may further influence nurses' performance in hospital settings.

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