

Path-Goal Leadership Style and Its Relationship with Nurse Motivation and Performance: A Cross-Sectional Study

Erny Batewa¹, Agusta Dian Ellina¹, Yuly Peristiowati¹

¹ Universitas STRADA Indonesia, East Java, Indonesia

Correspondence to

Erny Batewa;

Batewaerny@gmail.com

Received: May 27, 2025

Accepted: December 18, 2025

Online: December 23, 2025

DOI URL

<https://doi.org/10.55018/ihc.v12.11>

ABSTRACT

Background: Nursing services aim to provide optimal care through effective planning, organization, and employee management. Nurses play a key role in health services at hospitals, health centers, and other facilities. Objective: The study analyzed the relationship between the leadership of the head of the family and the work motivation and performance of nurses, based on the Path-goal theory, at the Regional General Hospital of Banggai Regency.

Methods: This study employed an observational-analytic design with a cross-sectional approach, involving 146 inpatient nurses. A simple random sampling technique was used to recruit participants. Inclusion criteria included nurses working in inpatient units for at least 6 months and willing to participate, whereas nurses currently on leave, in training, or assigned to non-clinical administration were excluded. The independent variable was the head nurse's leadership style, while the dependent variables were nurse motivation and performance. Data collection and reporting followed the STROBE (Strengthening the Reporting of Observational Studies in Epidemiology) guideline. Data were analyzed using the Spearman rho test with a significance level of $\alpha = 0.05$

Result: The results showed that directive leadership was not associated with nurse motivation ($p = 0.570$) or performance ($p = 0.257$). However, supportive leadership significantly influenced motivation ($p < 0.001$) and performance ($p = 0.049$). Participative leadership also demonstrated a positive effect on motivation ($p < 0.001$) and performance ($p = 0.035$). Similarly, achievement-oriented leadership was associated with higher motivation ($p < 0.001$) and better performance ($p = 0.031$).

Conclusion: In conclusion, directive leadership does not affect the motivation or performance of nurses at Banggai District Hospital. Conversely, supportive, participative, and achievement-oriented leadership significantly enhances both motivation and performance.

Keywords: Head Of Room Leadership; Motivation; Performance; Path-Goal Theory

© The Author(s) 2025.
This article is licensed under a
CC BY, published by Lembaga
Chakra Brahmada Lentera.

Implications for Research, Practice, or Policy

- Supportive, participative, and achievement-oriented leadership styles may enhance nurse motivation and performance, potentially improving the quality of care.
- Nursing managers in LMICs can integrate evidence-based leadership approaches to strengthen team cohesion and clinical efficiency.
- Hospitals can update leadership development programs to align managerial behaviors with staff needs, promoting sustainable workforce performance.

INTRODUCTION

Nursing services have an operational scope to plan, regulate, and mobilize employees in providing the best nursing services to patients through nursing care. The process of implementing nursing services is through the efforts of nurses to provide nursing care, treatment, and a sense of comfort to families and communities ([Edna Cadmus et al., 2024](#)). Nurses are one of the implementers of health services in the hospital. In providing the best nursing services to patients, it is a standard as a target and a tool to control the service. Other factors are the nurse's resources, wages received, available facilities, work environment, awareness of work objectives, harmonious human relationships, division of duties and responsibilities, work interests, job characteristics, management policies, personality and leadership style used by leaders ([Efkelin et al., 2023](#); [Hassan et al., 2016](#)).

Leadership is how it involves an individual's efforts to influence others to provide professional, direct and individualized nursing services. The role of leadership is as an intermediary where the main responsibility of the nurse manager is to plan, organize, motivate and control the work of nurses and other health support personnel in providing nursing services ([Atikah et al., 2022](#)). Many definitions of leadership reflect the assumption that leadership involves a process of social influence that, in this case, is deliberately exerted by one person over another to structure activities and

relationships within a group or organization ([Triadi et al., 2021](#)). There is an approach that can be used by a leader to understand the success of the leadership, in the context that we focus on and on what the leader is doing. The approach is a leadership style. Leadership style is a way for leaders to approach or be used to understand the success of a job. An effective or good leadership style is a leadership style that can adjust to the maturity of subordinates, namely, situational leadership styles, so that they can increase the work motivation of subordinates. Motivation is the encouragement, effort and desire that exists in humans that activate, empower and direct behavior to carry out tasks well within the scope of their work ([Mulyatiningsih & Sasvari, 2021](#)).

Ineffective communication from head nurses—such as insufficient guidance, limited feedback, and lack of recognition—can lead to boredom, dissatisfaction, frustration, and emotional disengagement among staff nurses. These conditions are further influenced by individual factors (e.g., age and tenure) and psychosocial aspects such as interpersonal relationships. Conceptually, leadership style influences nurse motivation, which in turn affects job performance. Supportive and participative leadership fosters psychological safety, recognition, and involvement in decision-making, thereby enhancing motivation and ultimately improving performance. Conversely, poor leadership communication and the absence of rewards undermine motivation and weaken

performance outcomes. This conceptual pathway suggests that motivation functions as an intermediary mechanism linking leadership behaviors to work effectiveness. In nursing management, this highlights the importance of selecting leadership approaches that align with situational needs, provide clear direction, and encourage staff participation. Strengthening motivation through effective leadership is essential not only for optimal workforce performance but also for ensuring quality patient care, as motivated nurses are more engaged, responsive, and committed to delivering safe and compassionate services ([Amalia et al.](#), 2015).

Nurses are human resources who contribute to providing health services both in hospitals, health centers and other health facilities. In addition to the largest number, nurses are also a profession that provides continuous service for 24 hours to clients. Therefore, nursing services have a great contribution in determining the quality of public services, especially in the health sector. The professionalism of nursing services provided is essentially the nursing services provided in accordance with the quality standards of nursing services ([Yaghoubi et al.](#), 2013). Factors that affect nurse performance include the work motivation of nurses and also the leadership behavior of the head of the room.

METHODS

Study Design

This study employed a cross-sectional analytic design with a correlational approach to examine the relationship between leadership style, motivation, and performance among inpatient nurses. A cross-sectional method was appropriate because it enabled the measurement of variables simultaneously within the same population, allowing the identification of associations without manipulating conditions or requiring longitudinal follow-up. This design was chosen

based on the study objective, which aimed to assess whether variations in leadership were related to differences in motivation and performance, rather than to establish causality. The research adhered to the STROBE (Strengthening the Reporting of Observational Studies in Epidemiology) guideline to ensure methodological transparency and reporting quality. ([Nursalam](#), 2020; [Saenong](#), 2024; [Susanto](#), 2024).

Participants

The study was conducted in an inpatient care setting of a regional hospital in Indonesia. The target population consisted of nurses working in inpatient units. Inclusion criteria were staff nurses who had worked for at least six months in the inpatient ward and agreed to participate. Exclusion criteria included nurses assigned to administrative roles, trainees, and those on leave or undergoing external training. Probability sampling using a simple random sampling technique was applied to ensure equal opportunity for selection among eligible nurses. The minimum required sample size was calculated through power analysis for correlational research, assuming a moderate effect size, alpha level of 0.05, and statistical power of 0.80, which indicated the need for at least 120 participants. To enhance precision and account for potential nonresponse, 146 nurses were included in the study.

Instrument

The independent variable of this study was the leadership style of the head nurse, measured using the Path-Goal Leadership Questionnaire, which consists of 20 items covering directive, supportive, participative, and achievement-oriented dimensions. Responses were rated on a 5-point Likert scale ranging from 1 ("strongly disagree") to 5 ("strongly agree"), with higher scores indicating stronger perceptions of each leadership style. The dependent variables were

motivation and performance. Nurse motivation was assessed using a standardized Nurse Work Motivation Scale consisting of 24 items scored on a 5-point Likert scale; total scores were categorized as low (<60%), moderate (60–80%), or high (>80%). Nurse performance was measured using a 21-item Performance Evaluation Checklist based on hospital competency indicators, also rated on a 5-point Likert scale. Higher total scores indicated better performance, which was classified into low (<60%), adequate (60–80%), and high (>80%) categories.

Data Collection

Participant recruitment was conducted by approaching eligible inpatient nurses during shift briefings and through unit announcements. Nurses who met the inclusion criteria were invited to participate, provided with written study information, and asked to sign informed consent forms prior to data collection. Data were collected through self-administered questionnaires facilitated by trained research assistants who were not part of the hospital's managerial structure to reduce social desirability bias. To minimize selection and response bias, anonymity was ensured, questionnaires were completed privately, and sealed envelopes were used for return. Data collection took place from 4 to 28 November 2024 at the Regional General Hospital of Banggai District, South Sulawesi Province. After collection, the data were checked for completeness prior to processing and analysis.

Data Analysis

Data were analyzed using IBM SPSS Statistics version 26. Descriptive statistics were applied to summarize participant characteristics, including frequencies, percentages, means, and standard deviations. Before hypothesis testing, the normality of continuous variables was assessed, and because the data were not normally distributed, the Spearman rho non-parametric

correlation test was used to examine associations between leadership style, motivation, and performance. The level of statistical significance was set at $\alpha = 0.05$, and all correlation coefficients were reported with their corresponding 95% confidence intervals. ([Susanto, 2024](#)).

Ethical Consideration

In this research, the researcher uses ethical aspects including: Informed consent, anonymity, confidentiality, beneficence, non-maleficence, veracity and justice ([Purnomo & Bramantoro, 2018](#)). Received ethical qualifications from the Health Research Ethics Committee of STRADA Indonesia University, Number 0123492/EC/KEPK/I/11/2024.

RESULTS

Table 1 illustrates that most respondents were aged 30–55 years, predominantly female, held a Diploma (DIII) level of education, and had a length of work experience of 5–10 years.

Table 1. Demographic Characteristics of Respondents (n = 146)

Demographic Variable	Category	Frequency (n)	Percentage (%)
Age	20–30 years	34	23.3
	>30–55 years	106	72.6
	>55 years	6	4.1
Gender	Male	47	32.2
	Female	99	67.8
Education Level	Diploma (DIII)	82	56.2
	Bachelor's Degree (S1)	57	39
	Master's Degree (S2)	7	4.8
Length of Work	1–5 years	38	26
	5–10 years	70	47.9
	>10 years	38	26

Table 1 presents the correlation between leadership styles and nurses' work motivation. The results indicate that directive leadership shows no significant association with motivation ($r = 0.047$; $p = 0.570$), implying that motivational levels remain unaffected by directive approaches. Conversely, supportive leadership demonstrates a strong and statistically significant positive correlation with motivation ($r = 0.839$; $p < 0.001$). A similar pattern is observed for participative leadership ($r = 0.881$; $p < 0.001$) and achievement-oriented leadership ($r = 0.872$; $p < 0.001$), both showing very strong positive correlations. These findings suggest that leadership styles characterized by support, involvement in decision-making, and performance orientation are highly influential in enhancing nurses' motivation.

Table 1. Correlation Between Leadership Styles and Nurses' Work Motivation

Leadership Style	r (Spearman)	p-value
Directive	0.047	0.57
Supportive	0.839	0
Participative	0.881	0
Achievement-oriented	0.872	0

Note: Statistical analysis was performed using Spearman's Rho correlation test with a significance level of $\alpha = 0.05$.

Table 2 summarizes the correlation between leadership styles and nurses' performance. As shown, directive leadership does not exhibit a significant relationship with performance ($r = 0.094$; $p = 0.257$). In contrast, supportive leadership shows a weak but statistically significant positive correlation ($r = 0.163$; $p = 0.049$). Participative leadership also displays a weak yet significant association with performance ($r = 0.174$; $p = 0.035$), as does achievement-oriented leadership ($r = 0.179$; $p = 0.031$). Although the magnitude of correlations is low, these results indicate that supportive,

participative, and achievement-oriented leadership styles contribute positively, albeit modestly, to improving nurses' performance.

Table 2. Correlation Between Leadership Styles and Nurses' Performance

Leadership Style	r (Spearman)	p-value
Directive	0.094	0.257
Supportive	0.163	0.049
Participative	0.174	0.035
Achievement-oriented	0.179	0.031

Note: Statistical analysis was performed using Spearman's Rho correlation test with a significance level of $\alpha = 0.05$.

DISCUSSION

Based on the study findings, nearly half of the respondents perceived the leadership style of the ward head as generally appropriate. Cross-tabulation also indicated that a substantial proportion of respondents who perceived directive leadership tended to demonstrate high levels of motivation. However, the inferential analysis showed no statistically significant association between directive leadership and nurse motivation. This suggests that nurses already possess adequate professional competence and intrinsic motivation. Consequently, when leadership becomes overly directive, it may be perceived as excessive or even counterproductive, leading subordinates to feel resistant rather than supported. The absence of a significant relationship indicates that nurses are capable of maintaining motivation and performing effectively without intensive supervision or rigid leadership approaches. This highlights the potential importance of more participatory or adaptive leadership styles in fostering motivation within nursing practice.

The study revealed that most respondents perceived the ward heads as demonstrating a highly supportive leadership style. A similarly high proportion of respondents reported strong

motivation levels. Statistical analysis confirmed a significant association between supportive leadership and nurse motivation. These findings align with leadership theory, which posits that supportive leaders are approachable, express concern for their subordinates, and foster positive interpersonal relationships. Prior literature also suggests that supportive leadership enhances group unity and cohesiveness. Such an approach may be particularly valuable when employees seek opportunities for growth but are confronted with routine or simple work demands. When their developmental needs are unmet, employees may experience frustration or dissatisfaction, and supportive leadership can serve as an important mechanism for maintaining motivation and psychological well-being. The research evidence by House & Mitchell (1974) in [Ageeli et al. \(2022\)](#) strongly shows that employees who perform such unsatisfactory tasks tend to respond positively to supportive leadership attitudes.

The findings revealed that supportive leadership was significantly associated with higher work motivation, suggesting that when leaders are approachable, attentive, and encouraging, subordinates feel valued and become more motivated to perform effectively. Likewise, participatory leadership was also perceived positively and demonstrated a significant relationship with motivation, indicating that when ward heads involve staff in decision-making and consider their input, nurses experience greater satisfaction and commitment to their work. These results align with leadership theory, which emphasizes the motivational influence of supportive and participatory approaches, particularly in contexts where employees undertake non-routine tasks and benefit from inclusion, acknowledgment, and psychological support from their leaders. Leadership style where they expect their advice and ideas before making a

decision ([Mala et al., 2022](#)). Subordinate participation also influences decision-making by leaders.

The results demonstrated that participatory leadership enhances subordinate motivation, as this style encourages involvement, negotiation, and consultation, making staff feel valued and integral to the organizational environment. When employees are included in decision-making, they perceive themselves as important contributors, which stimulates enthusiasm and motivation to perform well. Similarly, the findings indicated that achievement-oriented leadership was widely perceived as strong and showed a significant relationship with nurse motivation. This leadership style emphasizes goal attainment, high performance expectations, and continuous improvement, which can encourage employees to strive for excellence. Collectively, the results suggest that participatory and achievement-oriented leadership approaches play a crucial role in fostering motivation among nurses, particularly by promoting autonomy, recognition, and performance-driven culture.

House Theory in [Ageeli et al. \(2022\)](#) states that individual behavior is driven by the need for achievement or the need to achieve. Achievement-oriented leadership is hypothesized to increase effort and satisfaction if the work is unstructured (e.g., complex and not repetitive) by increasing confidence and expectation of completing a challenging task and goal. Higher job satisfaction is obtained when performing good work performance. The results of this study prove that a performance-oriented leadership style is able to increase the motivation of subordinates. With this style, a structured, disciplined and neat work atmosphere will be created, so that it is hoped that a comfortable work atmosphere will be created, and in the end, good work performance will be created. The task will be carried out well.

The study indicated that although a considerable number of respondents perceived the ward head's directive leadership as moderate, statistical analysis revealed no significant relationship between directive leadership and nurse performance. According to leadership theory, directive leaders provide explicit guidance to subordinates who are assumed to require support due to limited capability. However, the findings suggest that this assumption may not apply in this context, as nurses demonstrated strong performance regardless of directive supervision. This implies that respondents possess adequate competence, autonomy, and professional understanding of their roles, enabling them to perform effectively without intensive instructions. Consequently, directive leadership may offer limited added value in settings where staff already exhibit high capability and job familiarity. Based on the results of the above study, it is known that of the 146 respondents, most of the respondents stated that the supportive leadership style of the head of the room is high, namely 99 respondents (67.8%). Based on the results of the study, it is also known that out of 146 respondents, most of the respondents stated that the performance of nurses was good, namely 94 respondents (64.4%). Based on the results of the statistical test, it is known that the value of Sig. (2-tailed) The value = $0.049 < 0.05$, so H_0 is rejected, which means that the leadership of the head of the supportive room is related to the performance of nurses at the Banggai Regency Hospital. This is in line with the research of Raharjo and Nafisah, (2006), with the results of their research proving that supportive leadership has a positive effect on employee performance. This implies that employee performance can be improved if supportive leadership is maintained and improved. This shows that supportive leadership greatly affects employee performance. The results of this hypothesis test reinforce the results of the empirical research

(Ageeli et al., 2022) which stated that there is a positive correlation between leadership attitudes, leadership behavior and employee performance.

The results showed that there was a significant relationship between supportive leadership and nurse performance. This leadership proves that a supportive leadership style is able to make subordinates have a high work ethic at work. Subordinates feel that in this leadership, the leader is a supportive, easy to meet and pay attention to so that subordinates will work well and have good performance as well. Based on the results of the study, it is known that out of 146 respondents, most of the respondents stated that the participatory leadership style of the head of the room is high, namely 103 respondents (70.5%). Based on the results of the study, it is also known that out of 146 respondents, most of the respondents stated that the performance of nurses was good, namely 94 respondents (64.4%). Based on the results of the statistical test, it is known that the value of Sig. (2-tailed) is $p\text{-value} = 0.035 < 0.05$, so H_0 is rejected, which means that the leadership of the participatory room head is related to the performance of nurses at the Banggai Regency Hospital. House Theory in Yulk at Pasaribu et al. (2022) said that participatory leadership is a leadership style in which leaders expect suggestions and ideas from subordinates before making decisions. If subordinates have a high locus of control and have good abilities, then participatory leadership is very appropriate. Subordinate participation also influences decision-making by leaders.

The findings showed that participatory leadership enhances subordinate performance, as this approach encourages involvement, negotiation, and consultation, allowing nurses to feel valued and integral to the decision-making process. When staff perceive themselves as important contributors in clinical and managerial matters, they develop a stronger

sense of responsibility and are more likely to deliver optimal performance. The study also revealed a significant association between achievement-oriented leadership and nurse performance. This style, which emphasizes high standards, goal attainment, and continuous improvement, appears to motivate nurses to strive for excellence in their work. Overall, the results highlight that participatory and achievement-oriented leadership practices foster improved performance by promoting ownership, accountability, and a strong professional commitment among nurses.

This is in line with the research of [Malik \(2013\)](#) where the results of their research on the relationship between achievement-oriented leadership style and performance based on research using path goal leadership theory on performance, the results show that performance-oriented leadership has a significant positive effect on performance. The results of this study are also in accordance with previous research on leadership style variables having a positive and significant influence on job satisfaction variables. The results of this study prove that a performance-oriented leadership style is able to improve the performance of subordinates. With this style, a structured, disciplined and neat work atmosphere will be created so that it is hoped that a comfortable work atmosphere will be created and in the end good work performance will be created.

Practical Applications of the Findings

The findings suggest that certain leadership styles practiced by head nurses may have practical relevance for enhancing nurses' motivation and performance within hospital settings. Leadership approaches perceived as supportive, participative, and achievement-oriented appear to align with higher levels of motivation and better performance outcomes among nurses, indicating their potential usefulness in daily managerial practices.

Conversely, directive leadership shows limited practical contribution in this context. These results may inform hospital management and nursing leaders in prioritizing leadership behaviors that foster engagement, professional development, and effective work performance among nursing staff.

Limitations

This study may be limited by its cross-sectional design, which restricts interpretation to observed associations without supporting causal inferences. The use of self-reported questionnaires may introduce response bias, as perceptions of leadership, motivation, and performance are subject to individual interpretation. In addition, the study was conducted in a single regional public hospital, which may limit the generalizability of the findings to other institutional settings. The reliance on correlational analysis also suggests that the results should be interpreted with caution regarding the strength and direction of relationships.

CONCLUSION

The study concludes that directive leadership has no association with nurse motivation or performance, suggesting that nurses are able to function effectively without highly prescriptive supervision. In contrast, supportive, participatory, and achievement-oriented leadership styles are significantly associated with higher levels of motivation and better performance among nurses. These findings indicate that leadership approaches characterized by encouragement, involvement in decision-making, and high performance expectations play an important role in fostering motivation and enhancing work outcomes in nursing settings.

Acknowledgment

Thank you to various parties who made this research a success, especially the Banggai Regency Hospital which has given permission for the research site.

Contributors

Erny Batewa: Conceptualization, Methodology, Investigation, Data curation, Formal analysis, Writing – original draft.

Agusta Dian Ellina: Supervision, Validation, Writing – review & editing.

Yuly Peristiowati: Supervision, Validation, Writing – review & editing.

Funding

No external funding was received for the conduct of this study.

Conflicts of interest

Not declared.

References

Ageeli, R. E., Alsop, S. K., Almadouh, A. M., Alahmary, M. D., Alenazy, S. M., Alqahtani, A. M., Alrowaidhan, S. M., Alkhamshi, A. M., Alenezi, F. B., Alanazi, N. B., Alzaid, G. M., Alshammari, M. H., Al-Shammari, S. M. M., & al mlale, S. mohammad. (2022). Relationship Between Transformational Leadership And Innovative Work Behavior In Nursing Staff. *Journal of Population and Therapeutics and Clinical Pharmacology*. <https://doi.org/10.53555/jptcp.v29i01.5024>

AMalia, E., Akmal, D., & Sari, Y. (2015). Hubungan Pre Dan Post Conference Keperawatan Dengan Pelaksanaan Asuhan Keperawatan. *JURNAL KESEHATAN PERINTIS*.

Atikah, N., Kamil, H., & Marlina, (2022). The Relationship Between Path-Goal

Leadership Style and Work Motivation of Nurses at Pidie Regional Hospital. In *International Journal of Research and Innovation in Social Science*. www.rsisinternational.org

Cote, R. (2017). A Comparison of Leadership Theories in an Organizational Environment. *International Journal of Business Administration*, 8(5), 28. <https://doi.org/10.5430/ijba.v8n5p28>

Edna Cadmus, B., Dempsey, C., Boston-Leary, K., & Bates, M. (2024). Nursing Leadership Scope and Standards and Pathway to Excellence. *Nursing Management*. www.nursingmanagement.com

Efkelin, R., Utami, R. A., & Mailintina, Y. (2023). Relationship Between Leadership and Nurse Performance in The Orchid and Gladiola Room, Husada Hospital, Jakarta. *Jurnal Kesehatan Holistic*, 7(1), 1–7. <https://doi.org/10.33377/jkh.v7i1.131>

Hassan, H., Asad, S., & Hoshino, Y. (2016). Determinants of Leadership Style in Big Five Personality Dimensions. *Universal Journal of Management*, 4(4), 161–179. <https://doi.org/10.13189/ujm.2016.040402>

House, R. J., & Mitchell, T. R. (1974). *Path-goal theory of leadership*. *Journal of Contemporary Business*, 3(4), 81–97.

Mala, A. R., Abdullah, A. H., & Nento, S. (2022). The Influence of Supportive Leadership Behavior and Organizational Support on The Job Satisfaction of Followers. *AL-TANZIM: Jurnal Manajemen Pendidikan Islam*, 6(4), 1247–1261. <https://doi.org/10.33650/al-tanzim.v6i4.3528>

Malik, S. H. (2013). Relationship between Leader Behaviors and Employees' Job Satisfaction: A Path-Goal Approach. In *Soc Sci Pakistan Journal of Commerce and Social Sciences* (Vol. 7, Issue 1).

- Mulyatiningsih, S., & Sasyari, U. (2021). Gaya Kepemimpinan Yang Efektif Dalam Meningkatkan Keselamatan Pasien. *Jurnal Ilmiah Keperawatan Altruistik (JIKA)*, 4(1).
- Nursalam. (2020). *Metodologi Penelitian Ilmu Keperawatan (Edisi 5)*. Salemba Medika.
- Pasaribu, S. B., Goestjahjanti, F. S., Srinita, S., Novitasari, D., & Haryanto, B. (2022). The Role of Situational Leadership on Job Satisfaction, Organizational Citizenship Behavior (OCB), and Employee Performance. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.896539>
- Purnomo, W., & Bramantoro, T. (2018). *Pengantar Metodologi Penelitian Bidang Kesehatan*. Airlangga University Press.
- Raharjo, S., & Nafisah, D. (2006). *Pengaruh kepemimpinan terhadap kinerja perawat di rumah sakit*. *Jurnal Manajemen Pelayanan Kesehatan*, 9(2), 65–72.
- Saenong, M. T. (2024). *Metodologi penelitian kesehatan : teori, praktis disertai contoh*. CV. Eureka Media Aksara.
- Susanto, N. (2024). *Metodologi dan aplikasi besar sampel penelitian kesehatan*. CV Gosyen Publishing.
- Triadi, Y., Lestari, F., & Saputra, B. (2021). Analisis Persepsi Perawat Pelaksana Tentang Gaya Kepemimpinan Kepala Ruangan Terhadap Kinerja Perawat. *Hang Tuah Nursing Journal*. <https://jom.htp.ac.id/index.php/jkh>
- Yaghoubi, M., Javadi, M., Rakhsh, F., & Bahadori, M. (2013). A study of determining factors affecting the performance of nurses based on the achieve model in selected hospital of Isfahan (Iran). *Journal of Education and Health Promotion*, 2(1), 49. <https://doi.org/10.4103/2277-9531.119033>
- Yukl, G. (2013). *Leadership in organizations* (8th ed.). Pearson Education.