INDONESIAN ACADEMIA HEALTH SCIENCES JOURNAL

The Relationship of Emotional Intelligence–Based Supervision to the Quality of Nursing Care Services: A Cross Sectional Studies

Nur Mukarromah[1*], Misutarno Misutarno[2]

[1] Faculty of Health Sciences, Universitas Muhammadiyah Surabaya, Indonesia
[2] Faculty of Health Sciences, Universitas Nahdlatul Ulama Surabaya, Indonesia

Corresponding Author
nurmukarromah@um-surabaya.ac.id

Abstract

The quality of nursing care services is influenced by managerial and interpersonal factors, including supervision practices. Emotional intelligence–based supervision is considered a relevant approach to support nurses in delivering effective and patient-oriented care. This study aimed to examine the relationship between emotional intelligence–based supervision and the quality of nursing care services. This study used a quantitative correlational design with a cross-sectional approachA total of 168 nurses were included using a cluster-based sampling approach by work unit. Data were collected using structured questionnaires that measured emotional intelligence–based supervision and the quality of nursing care services. Both variables were categorized into good, fair, and poor levels for analysis. Descriptive statistics were used to describe respondent characteristics and variable distributions. The relationship between variables was analyzed using cross-tabulation, Chi-square test, and correlation analysis. The results showed that most respondents who experienced good emotional intelligence–based supervision also demonstrated good quality of nursing care services. In contrast, respondents who reported poor supervision tended to have poorer service quality. Statistical analysis indicated a significant relationship between emotional intelligence–based supervision and the quality of nursing care services, with a moderate positive correlation. These findings suggest that better supervision characterized by empathy, emotional regulation, supportive communication, and constructive guidance is associated with better nursing care quality. In conclusion, emotional intelligence–based supervision plays an important role in improving the quality of nursing care services. Strengthening supervisors' emotional intelligence competencies may support better nursing management and service outcomes.

Keywords: *emotional intelligence, supervision, nursing care quality, nursing management, cross-sectional study*

INTRODUCTION

Nursing service quality is one of the main indicators of hospital care quality because nurses are the health professionals who interact with patients most frequently and play a direct role in meeting patients' physical, psychological, communicative, and safety needs. High-quality nursing care is determined not only by technical competence but also by nurses' ability to build therapeutic relationships, provide empathetic responses, and maintain consistency of care in complex clinical situations. Khademi et al. (2021) found that nurses' emotional intelligence was positively associated with the quality of nursing care from both nurses' and patients' perspectives. This finding suggests that nursing service quality is strongly influenced by interpersonal and emotional factors in clinical practice.

In the context of nursing management, supervision is an essential function to ensure that care is delivered according to standards, safely, effectively, and in a patient-oriented manner. Good supervision serves not only as a mechanism of control but also as a process of guidance, reflection, feedback, and professional capacity building for nurses. Mazumder et al. (2021) reported a positive relationship between clinical supervision and the quality of nursing care among nurses in Bangladesh. In addition, Lin et al. (2021) showed that supportive supervision among nurses in long-term care facilities is closely related to care quality. Evidence syntheses have also indicated that clinical supervision contributes to improving nursing practice and strengthening more person-centred care delivery (Ernawati et al., 2022; Edgar et al., 2023).

On the other hand, emotional intelligence has increasingly been recognized as an important competency in modern nursing practice. Emotional intelligence includes the ability to recognize one's own emotions, regulate emotions, understand the emotions of others, and establish effective interpersonal relationships. In clinical settings, this competency is particularly important because nurses work in high-pressure environments characterized by intense communication demands and the need for rapid and accurate decision-making. Youn et al. (2022) found that emotional intelligence was one of the factors associated with enhanced person-centred care among intensive care unit nurses. Likewise, Galanis et al. (2024) showed that emotional intelligence is a critical competence positively related to nurses' work performance. These findings indicate that emotional intelligence is relevant not only at the individual level but also as a potential foundation for a more humane and effective supervisory approach.

Nevertheless, the implementation of supervision in practice still faces various challenges. Atashi et al. (2024) reported that barriers to effective clinical supervision among nurses include low motivation, inadequate human resources, unconducive working conditions, and weak organizational support. The study also emphasized that the goals of clinical supervision—such as improving care quality, enhancing service standards, promoting patient safety, and supporting nurses' professional development—are difficult to achieve when the work context is unsupportive. In this regard, an emotional intelligence–based supervision approach becomes highly relevant, as it may be understood as a supervisory model that emphasizes not only monitoring and evaluation but also self-awareness, empathy, supportive communication, emotional regulation, and interpersonal relationships throughout the guidance process. Such an approach may strengthen nurses' acceptance of supervision, enhance their motivation, and ultimately improve the quality of nursing services.

However, most previous studies have examined the relationship between supervision and service quality or between emotional intelligence and service quality separately. Evidence specifically investigating the relationship between emotional intelligence–based supervision and the quality of nursing care services, particularly in hospital settings, remains limited. Yet, integrating these two concepts is important to address the needs of healthcare organizations that require both high clinical quality and a supportive work environment. Therefore, this study is important to examine the relationship between emotional intelligence–based supervision and the quality of nursing care services using a cross-sectional design, thereby providing empirical support for the development of more effective supervisory strategies in nursing management.

METHODS

Study Design

This study employed a quantitative correlational design using a cross-sectional approach to examine the relationship between emotional intelligence–based supervision and the quality of nursing care services. The cross-sectional design enabled the simultaneous measurement of all study variables at a single point in time, allowing the identification of associations between emotional intelligence–based supervision and nursing care service quality within one statistical model. This

design is appropriate for testing the hypothesized relationship between variables and determining the extent to which emotional intelligence–based supervision is associated with the quality of nursing care services.

Study Participants

The target population comprised nurses working at one of the Hospital in Surabaya, East Java, Indonesia including inpatient wards, the intensive care unit (ICU), the emergency department, the operating room, and outpatient services. A cross-sectional survey was administered during the study period. A total of 168 nurses met the eligibility criteria and completed the questionnaire; therefore, the final analytical sample consisted of 168 respondents (n = 168), as recorded in the study dataset. Participants were recruited using a cluster-based approach by work unit, in which each hospital unit served as a cluster to ensure representation of nurses from different clinical settings. Within each cluster, nurses who met the inclusion criteria were invited to participate. Inclusion criteria were active nurses with a minimum of six months of work experience. Nurses who were on extended leave at the time of data collection were excluded.

Variable

The dependent variable in this study was the quality of nursing care services. The independent variable was emotional intelligence–based supervision. Emotional intelligence–based supervision was defined as a supervisory approach that integrates emotional intelligence components, including self-awareness, self-regulation, empathy, motivation, and interpersonal skills, in guiding, supporting, and evaluating nurses in clinical practice. The quality of nursing care services was defined as the extent to which nursing care is delivered effectively, safely, responsively, and in accordance with professional standards and patient needs. All variables were measured as continuous variables and later categorized for analytical purposes.

Instruments

Data were collected using structured and validated questionnaires. Emotional intelligence–based supervision was measured using a supervision assessment instrument consisting of multiple items reflecting supervisors' ability to provide guidance, emotional support, effective communication, empathy, constructive feedback, and interpersonal sensitivity in the supervision process. The quality of nursing care services was measured using a nursing service quality instrument covering aspects such as responsiveness, reliability, assurance, empathy, documentation accuracy, timeliness of care, and patient-centered nursing practice. All instruments employed a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). Prior to data collection, validity testing was conducted, yielding correlation coefficients within an acceptable range, indicating good item validity. Reliability testing demonstrated Cronbach's alpha values above 0.70 for all variables, confirming good internal consistency.

Data Analysis

Data analysis was performed using SPSS version 22. Descriptive statistics were used to summarize respondents' characteristics and the distribution of emotional intelligence–based supervision and quality of nursing care service variables. Cross-tabulation analysis was conducted to examine the distribution patterns between the independent and dependent variables. The association between emotional intelligence–based supervision and the quality of nursing care services was analyzed using the Chi-square test. The Chi-square value (χ^2), degrees of freedom (df), and p-value were reported to determine statistical significance. A significance level of $p < 0.05$ was applied.

Ethical Consideration

This study received ethical approval from the Health Research Ethics Committee under approval number 3039-KEPK. All participants received written information regarding the study objectives and procedures and provided informed consent prior to completing the questionnaire. Confidentiality was ensured by assigning numerical codes to participants, and all data were used solely for research purposes. The study was conducted in accordance with fundamental ethical principles, including respect for autonomy, beneficence, non-maleficence, and justice.

RESULTS

Table 1 presents the demographic characteristics of the respondents included in this study. Based on gender, most respondents were female, accounting for 104 participants (60.5%), while 65 respondents (37.8%) were male. This finding indicates that the nursing workforce in the study setting was predominantly female. In terms of age, the largest proportion of respondents was in the 25–30

years age group, with 90 participants (52.3%). This was followed by respondents aged 31–40 years, totaling 52 participants (30.2%), and those aged 20–25 years, with 25 participants (14.5%). Only 2 respondents (1.2%) were older than 40 years. These data suggest that the majority of nurses were in the early adult and productive working-age groups.

Regarding length of employment, most respondents had worked for 1–5 years, comprising 110 participants (64.0%). Meanwhile, 51 respondents (29.7%) had 6–10 years of work experience, and 7 respondents (4.1%) had 11–15 years of employment. This distribution shows that most participants had relatively short to moderate work experience. Based on educational level, the majority of respondents held a Bachelor of Nursing (Ners) degree, with 122 participants (70.9%). In addition, 43 respondents (25.0%) had a Diploma in Nursing, and 4 respondents (2.3%) had a Master's degree. This indicates that most respondents had a professional undergraduate nursing education background. In terms of marital status, most respondents were married, accounting for 111 participants (64.5%), while 58 respondents (33.7%) were unmarried. Overall, the respondents in this study were predominantly female, aged 25–30 years, had 1–5 years of work experience, held a Bachelor of Nursing (Ners) degree, and were married.

Table 1. Characteristics of Respondents in the Study on the Relationship of Emotional Intelligence–Based Supervision to the Quality of Nursing Care Services

Characteristics	Category	n	%
Gender	Female	104	60.5
	Male	65	37.8
Age	25–30 years	90	52.3
	31–40 years	52	30.2
	20–25 years	25	14.5
	>40 years	2	1.2
Length of Employment	1–5 years	110	64.0
	6–10 years	51	29.7
	11–15 years	7	4.1
Educational Level	Bachelor of Nursing (Ners)	122	70.9
	Diploma in Nursing	43	25.0
	Master's Degree	4	2.3
Marital Status	Married	111	64.5
	Unmarried	58	33.7

The majority of respondents were female (60.5%), while 37.8% were male. In terms of age distribution, most nurses were between 25–30 years old (52.3%), followed by those aged 31–40 years (30.2%). A smaller proportion were aged 20–25 years (14.5%), and only 1.2% were over 40 years old. Regarding length of employment, the majority had worked for 1–5 years (64.0%), while 29.7% had 6–10 years of experience, and 4.1% had 11–15 years of experience. In terms of educational level, most respondents held a Bachelor of Nursing (Ners) degree (70.9%), followed by a Diploma in Nursing (25.0%), and a small proportion had a Master's degree (2.3%). Concerning marital status, 64.5% of the nurses were married, whereas 33.7% were unmarried.

Table 2. Relationship Between Emotional Intelligence–Based Supervision and the Quality of Nursing Care Services (n = 168)

Emotional Intelligence–Based Supervision	Good Quality of Nursing Care Services n (%)	Fair Quality of Nursing Care Services n (%)	Poor Quality of Nursing Care Services n (%)	Total n (%)
Good	58 (75.3)	17 (22.1)	2 (2.6)	77 (100)
Fair	21 (38.2)	28 (50.9)	6 (10.9)	55 (100)
Poor	6 (16.7)	14 (38.9)	16 (44.4)	36 (100)
Chi-square p-value = 0.001 Correlation coefficient (r) = 0.562				

Based on the cross-tabulation analysis, respondents who received good emotional intelligence–based supervision tended to demonstrate good quality of nursing care services, with 58 respondents (75.3%) in this category. In contrast, among respondents who received poor emotional intelligence–based supervision, a higher proportion showed poor quality of nursing care services, namely 16 respondents (44.4%). Statistical analysis revealed a significant relationship between emotional intelligence–based supervision and the quality of nursing care services ($p = 0.001$), with a moderate correlation strength ($r = 0.562$).

DISCUSSION

The findings of this study indicate that there is a meaningful relationship between emotional intelligence–based supervision and the quality of nursing care services. This suggests that the better the implementation of supervision that emphasizes self-awareness, emotional regulation, empathy, interpersonal communication, and constructive support, the better the quality of nursing care services delivered by nurses. Conceptually, supervision based on emotional intelligence enables head nurses or supervisors not only to carry out monitoring functions but also to foster a supportive, reflective, and responsive work environment. This interpretation is consistent with previous studies showing that emotional intelligence is positively associated with the quality of healthcare services and nurses' work

performance (Oweidat et al., 2024; Galanis et al., 2024). Therefore, the emotional dimension within supervision may be understood as the supervisor's capacity to lead with empathy, emotional stability, and relational sensitivity, which ultimately contributes to better service quality.

These findings also reinforce the view that the quality of nursing care is determined not only by clinical competence and technical skills but also by the quality of professional relationships between supervisors and staff nurses. Effective supervision allows nurses to receive clear guidance, constructive feedback, a sense of psychological safety to express concerns, and emotional support in dealing with clinical workloads. Previous evidence has shown that clinical supervision can support more person-centred nursing practice and improve the overall quality of care delivery (Edgar et al., 2023; Ernawati et al., 2022). In this study, when emotional intelligence was integrated into the supervisory process, its role appeared to be broader because it not only encouraged adherence to standards but also strengthened work relationships, nurses' motivation, and their commitment to delivering high-quality care.

In addition, the pattern of distribution observed in the cross-tabulation suggests that nurses who experienced better emotional intelligence–based supervision were more likely to demonstrate better quality of nursing care services. This finding is in line with Mazumder et al. (2021), who reported that clinical supervision was associated with the quality of nursing care, and Lin et al. (2021), who found that supportive supervision contributed to better service quality in long-term care settings. Furthermore, studies on leadership in nursing management have highlighted that emotional intelligence is closely linked to more authentic, adaptive, and effective leadership practices. This supports the interpretation that supervisors with stronger emotional intelligence are more capable of creating a positive work environment that facilitates high-quality nursing care. In this sense, emotional intelligence should be seen not merely as a personal attribute, but as a leadership resource that can be translated into supervisory practices that enhance nursing service quality.

From a practical perspective, the results of this study imply that hospitals should strengthen the capacity of head nurses and supervisors in emotional intelligence–related competencies, such as empathy, assertive communication, emotional regulation, constructive feedback, and conflict management. This is important because barriers to effective supervision still exist in many healthcare settings, including limited resources, high workloads, weak organizational support, and underdeveloped supervisory cultures (Atashi et al., 2024). Therefore, developing an emotional intelligence–based supervision model may serve as a relevant nursing management strategy to improve the quality of care in a more sustainable way. However, this study has several limitations. First, the cross-sectional design does not allow causal conclusions to be drawn. Second, the use of self-report questionnaires may have introduced response bias. Third, because the study was conducted in a single hospital setting, the generalizability of the findings to other institutions should be interpreted with caution.

CONCLUSION

This study concludes that emotional intelligence–based supervision is related to the quality of nursing care services. Supervision that incorporates empathy, emotional regulation, self-awareness, supportive communication, and constructive guidance may contribute to better nursing service quality. These findings highlight the importance of integrating emotional intelligence into supervisory practices in nursing management to promote a more supportive work environment and improve the quality of care delivered by nurses. Therefore, hospitals should consider strengthening supervisors' emotional intelligence competencies as part of efforts to enhance nursing care services. Further studies with broader settings and more robust research designs are recommended to confirm and expand these findings.

REFERENCES

Atashi, V., Movahedi Najafabadi, M., Afshari, A., & Ghafari, S. (2024). *Barriers to effective clinical supervision from the perspective of nurses: A descriptive qualitative study*. *Nursing Open, 11*(1), e2028. https://doi.org/10.1002/nop2.2028

Edgar, D., Moroney, T., & Wilson, V. (2023). *Clinical supervision: A mechanism to support person-centred practice? An integrative review of the literature*. *Journal of Clinical Nursing, 32*(9–10), 1935–1951. https://doi.org/10.1111/jocn.16232

Ernawati, E., Damris, M., Revis, A., & Elrifda, S. (2022). *How effective is clinical supervision in nursing? A systematic review*. *Journal of Client-Centered Nursing Care, 8*(2), 69–78. https://doi.org/10.32598/JCCNC.8.2.426.1

Galanis, P., Katsiroumpa, A., Moisoglou, I., Derizioti, K., Gallos, P., Kalogeropoulou, M., &

Papanikolaou, V. (2024). *Emotional intelligence as critical competence in nurses' work performance: A cross-sectional study*. *Healthcare, 12*(19), 1936. https://doi.org/10.3390/healthcare12191936

Khademi, E., Abdi, M., Saeidi, M., Piri, S., & Mohammadian, R. (2021). *Emotional intelligence and quality of nursing care: A need for continuous professional development*. *Iranian Journal of Nursing and Midwifery Research, 26*(4), 361–367. https://doi.org/10.4103/ijnmr.ijnmr_268_19

Lin, L., Liu, X., McGilton, K. S., Yuan, Y., Li, H., Dong, B., Xie, C., Wang, H., Li, H., & Tian, L. (2021). *Level of nurse supportive supervision and its influencing factors in long-term care facilities*. *Geriatric Nursing, 42*(6), 1316–1322. https://doi.org/10.1016/j.gerinurse.2021.08.018

Mazumder, B., Suter, B. R., Begum, N., & Hiura, M. (2021). *Clinical supervision and quality of nursing care among nurses in Bangladesh*. *International Journal of Advances in Nursing Management, 9*(2), 169–175. https://doi.org/10.5958/2454-2652.2021.00038.X

Oweidat, I. O., Alzoubi, M. A. M., Abu Shosha, G., Ta'an, W., Khalifeh, A., Al-Mugheed, K., Alabdullah, A. A. S., & Abdelaliem, S. M. F. (2024). *Relationship between emotional intelligence and quality of healthcare among nurses*. *Frontiers in Psychology, 15*, 1423235. https://doi.org/10.3389/fpsyg.2024.1423235

Youn, H., Lee, M., & Jang, S. J. (2022). *Person-centred care among intensive care unit nurses: A cross-sectional study*. *Intensive and Critical Care Nursing, 73*, 103293. https://doi.org/10.1016/j.iccn.2022.103293

Almadani, N., & Alamri, M. (2024). *Emotional intelligence among female nursing leaders in a transformational era*. *Journal of Nursing Management, 2024*, 9973339. https://doi.org/10.1155/2024/9973339

Chen, X., et al. (2023). *Construction of nursing-sensitive quality indicators for the care of patients with prone position ventilation using the Delphi method*. *Nursing Open*. https://doi.org/10.1002/nop2.1960

Sérgio, M. S. S. B. B., Carvalho, A. L. R. F. de, & Pinto, C. M. C. B. (2023). *Perception of Portuguese nurses: Clinical supervision and quality indicators in nursing care*. *Revista Brasileira de Enfermagem, 76*(3), e20220656. https://doi.org/10.1590/0034-7167-2022-0656

Turjuman, F., & Alilyyani, B. (2023). *Emotional intelligence among nurses and its relationship with their performance and work engagement: A cross-sectional study*. *Journal of Nursing Management, 2023*, 5543299. https://doi.org/10.1155/2023/5543299

Guibert-Lacasa, C., & Vázquez-Calatayud, M. (2022). *Nurses' clinical leadership in the hospital setting: A systematic review*. *Journal of Nursing Management*.