

The Relationship Between Interprofessional Collaboration and the Quality of Health Services at Nurul Hasanah Hospital, Kutacane

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Interprofessional coordination (collaboration among doctors, nurses, pharmacists, and other healthcare professionals) is an important pillar in achieving quality medical care and patient safety in hospitals. High-quality healthcare services in the modern era cannot be achieved individually, but rather through structured synergy among healthcare professionals. This study aims to analyze the relationship between interprofessional collaboration and healthcare service quality at Nurul Hasanah Hospital, Kutacane. This study employed a descriptive-analytic correlational design with a cross-sectional approach. The study sample consisted of 300 respondents in the inpatient wards of Nurul Hasanah Hospital, Kutacane, with the interprofessional coordination variable measured based on the perspectives of healthcare professionals (N=150) and the healthcare service quality variable measured based on the perspectives of patients (N=150) treated by the healthcare team. The data were analyzed using univariate and bivariate analyzes with the Chi-Square test at a significance level $\alpha = 0.05$. The results showed that interprofessional collaboration was categorized as good in 56.7% of respondents, while healthcare service quality was rated as good by 53.3% of patients. The bivariate analysis demonstrated a significant relationship between interprofessional collaboration and healthcare service quality, with a p-value of 0.001 ($p < 0.05$). The dimensions of open communication and shared goals were crucial factors closely associated with the reliability and assurance of healthcare services. Therefore, the management of Nurul Hasanah Hospital, Kutacane, is expected to continuously improve interprofessional collaboration training programs and foster a collaborative work environment to promote excellent and sustainable healthcare service quality.

Keywords: Interprofessional Collaboration, Service Quality, Healthcare Professionals

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1. Introduction

The quality of healthcare services in hospitals is a key indicator of the effectiveness of the healthcare system and the success of clinical governance. Khatrī et al. (2023) noted that healthcare services are increasingly complex, with the quality of care no longer dependent on the capabilities of individual clinicians but rather on the coordination of interprofessional and multidisciplinary services where healthcare professionals interact and collaborate as a unified team. Hannawa et al. (2022) noted that efforts to improve the quality of healthcare services are closely related to the success of collaborative communication between healthcare professionals, communication with patients and patient companions, healthcare worker motivation, and the frequency of errors. According to Geese & Schmitt (2023), improving coordination and collaboration between healthcare professionals is fundamental to minimizing medical errors and increasing patient satisfaction.

Interprofessional collaboration involves effective communication and teamwork (doctors, nurses, pharmacists, nutritionists, and other health workers) to ensure a smooth patient care process (Meneses-lariva et al., 2025). A study by El-awaisi et al. (2024) found that barriers to interprofessional collaboration were due to a lack of communication skills, inadequate professional competence, and power imbalances. A study by Dib & Belrhiti (2025) found that challenges to interprofessional collaboration included poor

communication, lack of knowledge and shared decision-making, and imbalances in hierarchy and power within healthcare facilities.

Nurul Hasanah Kutacane Hospital is one of the private hospitals providing primary referral services in Southeast Aceh Regency, serving the wider community. Demand for high-quality services continues to increase along with increasing patient expectations for medical reliability and staff friendliness. According to Bonaconsa et al. (2025), inpatient services involve highly dynamic multidisciplinary interactions. Healthcare workers (specialists, ward nurses, clinical pharmacists, and nutritionists) who collaborate well will improve communication consistency, build relationships between service providers, and improve accessibility and face-to-face communication (Cadel et al., 2022). Therefore, evaluating interprofessional collaboration from the perspective of healthcare workers, and its impact on the quality of service perceived subjectively by patients, is crucial to research.

Based on a preliminary study conducted at Nurul Hasanah Hospital Kutacane through observation and interviews, it was shown that patient care involves various professions, such as doctors, nurses, midwives, pharmacists, and other health workers. However, interprofessional coordination still faces several obstacles, such as delays in delivering information, inconsistent communication, and differences in understanding regarding patient care plans. This has the potential to affect the quality of care, especially in aspects of accuracy, speed, continuity, and responsiveness of care to patients. Good coordination between professions is needed so that services can be provided in an integrated manner and according to patient needs. Based on these conditions, researchers are interested in conducting research on the Relationship between Interprofessional Coordination and the Quality of Patient Care at Nurul Hasanah Hospital Kutacane.

2. Literature Review and Problem Statement

Concept of Interprofessional Collaboration

Interprofessional collaboration is a form of cooperation between various healthcare professionals, such as doctors, nurses, pharmacists, nutritionists, and other healthcare professionals, in providing integrated services to patients. This collaboration emphasizes effective communication, clear division of roles and responsibilities, shared decision-making, and a shared goal in providing healthcare services. In a hospital setting, interprofessional collaboration is necessary because patient needs are generally complex and require the involvement of more than one profession. Good cooperation between professionals can reduce communication errors, improve coordination of medical procedures, expedite the care process, and support patient safety. Therefore, interprofessional collaboration is a crucial component in creating effective, safe, and patient-oriented healthcare services.

Quality of Health Services

The quality of healthcare services is the level of a healthcare facility's ability to provide services that meet established needs, expectations, and standards. Service quality is not only related to treatment outcomes but also encompasses the service process patients receive during their hospital stay. Several dimensions frequently used to assess service quality include reliability, responsiveness, assurance, empathy, and tangibles. Quality service is characterized by the provision of appropriate, prompt, safe, friendly, and consistent service. The level of service quality can also influence patient satisfaction and trust in the hospital. Therefore, improving the quality of healthcare services requires support from competent human resources and a work system that integrates various healthcare professions.

The Relationship between Interprofessional Collaboration and the Quality of Health Services

Interprofessional collaboration is closely linked to the quality of healthcare services because coordination between professionals determines the effectiveness of patient care. Open and clear communication between doctors, nurses, pharmacists, and other healthcare professionals allows for accurate and complete information regarding a patient's condition. This reduces the risk of errors in treatment, improves decision-making accuracy, and expedites patient care. Conversely, a lack of communication and coordination between professionals can lead to delays in care, misinformation, overlapping tasks, and a degraded patient experience. With shared goals and a clear division of responsibilities, each healthcare professional can optimally fulfill their role, resulting in a more coordinated and sustainable care process. Therefore, the better the interprofessional collaboration implemented in a hospital, the greater the opportunity for quality healthcare.

Implementation of Interprofessional Collaboration in Hospital Services

Implementation of interprofessional collaboration in hospitals can be carried out through various activities, such as interprofessional communication, team meetings, patient case discussions, integrated information sharing, and joint service evaluations. Effective collaboration requires support from hospital management through policies, training, clear division of tasks, and the creation of a work environment that supports interprofessional cooperation. Every healthcare worker needs to understand the competencies and responsibilities of other professions to build mutual respect and strengthen coordination in providing services. In the context of Nurul Hasanah Kutacane Hospital, the implementation of interprofessional collaboration is a crucial part of supporting service quality improvement, particularly through open communication, shared goals, coordinated actions, and ongoing service evaluation. This implementation is expected to improve teamwork effectiveness, patient safety, patient satisfaction, and the overall quality of healthcare services.

3. Method

This research is a descriptive correlational analytical study with a cross-sectional approach conducted in the inpatient ward of Nurul Hasanah Kutacane Hospital, Southeast Aceh Regency, from April 6 to July 13, 2026. The cross-sectional approach was chosen because the measurement of interprofessional coordination variables as independent variables and the quality of health services as dependent variables were carried out simultaneously during the research period to analyze the correlational relationship between variables (Creswell & Creswell, 2023). The study population consisted of two groups, namely all health workers actively working in the inpatient ward, including doctors, nurses, pharmacists, and nutritionists, and adult patients aged ≥ 18 years who were hospitalized for at least three days in the same ward. The sampling technique used total sampling, namely the entire population that met the inclusion criteria were used as research samples (Sugiyono, 2024), with a total of 300 respondents consisting of 150 health workers and 150 patients.

The research instrument consisted of a questionnaire consisting of two main sections. Questionnaire A was used to measure interprofessional coordination from the perspective of healthcare workers and was adapted from Relational Coordination (RC), which encompasses the dimensions of open communication, timely communication, mutual respect, shared goals, shared problem-solving, and shared responsibilities. It consisted of 20 items using a 4-point Likert scale. Questionnaire B was used to measure the quality of healthcare services from the patient's perspective by modifying the SERVQUAL scale, which encompasses the dimensions of tangibles, reliability, responsiveness, assurance, and empathy (Parasuraman et al., 2021). A higher score indicated better interprofessional coordination and healthcare service quality. Furthermore,

the final score was categorized as good if the score was greater than the mean and poor if the score was less than the mean. Prior to use, the instrument was tested for validity and reliability on 30 healthcare workers and 30 patients at H. Sahudin Kutacane Regional Hospital. The results of the validity test show that all items have a calculated r -value $\geq r$ -table (0.361), so all items are declared valid. The reliability test using Cronbach's Alpha produces a value of $\alpha = 0.84$ for the interprofessional coordination questionnaire and $\alpha = 0.89$ for the patient service quality questionnaire, so that both instruments are declared reliable because they have a value $\alpha \geq 0.70$ (Hair et al., 2022).

Data collection was conducted after the researcher obtained written permission from the Director of Nurul Hasanah Kutacane Hospital and obtained research ethics approval. Before completing the questionnaire, the researcher explained the purpose, benefits, procedures, and guarantee of data confidentiality to all respondents. Respondents who agreed to participate were asked to provide their consent by signing an informed consent form in accordance with applicable research ethics principles (World Medical Association, 2024). The collected data were then analyzed univariately to describe the characteristics of the respondents and the distribution and percentage of each research variable. Furthermore, bivariate analysis was performed using the Chi-Square test at the significance level $\alpha = 0.05$ to determine whether or not there is a relationship between interprofessional coordination and the quality of health services for patients in the inpatient ward of Nurul Hasanah Kutacane Hospital (Field, 2024).

4. Results and Discussion

Result

Based on the results of data collection on 150 health worker respondents and 150 patient respondents in the inpatient ward of Nurul Hasanah Kutacane Hospital, it is explained in detail as follows:

Table 1. Frequency Distribution of Respondent Characteristics of Health Workers and Patients

No	Characteristics		Category	Health workers		Patient	
				f	%	f	%
1	Age	18 – 25 years old		34	22.7	28	18.7
		26 – 45 years old		82	54.7	65	43.3
		> 45 years		34	22.7	57	38.0
2	Gender	Man		41	27.3	62	41.3
		Woman		109	72.7	88	58.7
3	Education / Profession	Elementary / Middle / High School (Patient)		-	-	82	54.7
		Diploma III (D3)		87	58.0	44	29.3
		Bachelor (S1) / Doctor Profession		63	42.0	24	16.0
Total				150	100.0	150	100.0

Table 1 shows the characteristics of healthcare worker and patient respondents at Nurul Hasanah Kutacane Hospital. Most healthcare worker respondents were aged 26–45 years (54.7%), female (72.7%), and had a Diploma III education (58.0%). Meanwhile, most patient respondents were aged 26–45 years (43.3%), female (58.7%), and had a primary/middle/high school education (54.7%).

Table 2. Frequency Distribution of Interprofessional Collaboration

No	Dimensions of Interprofessional Collaboration	Category	Frequency (f)	Percentage (%)
1	Open Communication	Good	92	61.3
		Not enough	58	38.7
2	Respect and Mutual Trust	Good	88	58.7
		Not enough	62	41.3
3	Shared Goals	Good	95	63.3
		Not enough	55	36.7
4	Collaborative Problem Solving	Good	81	54.0
		Not enough	69	46.0
5	Division of Responsibilities	Good	78	52.0
		Not enough	72	48.0
In general:				
	Interprofessional Collaboration	Good	85	56.7
		Not enough	65	43.3

Table 2 shows that in general, interprofessional collaboration at Nurul Hasanah Kutacane Hospital is in the good category by the majority of health workers and specifically, the shared goals dimension has the highest percentage in the good category.

Table 3. Frequency Distribution of Health Service Quality

No	Dimensions of Health Service Quality	Category	Frequency (f)	Percentage (%)
1	Physical Evidence (Tangibles)	Good	74	49.3
		Not enough	76	50.7
2	Reliability	Good	82	54.7
		Not enough	68	45.3
3	Responsiveness	Good	79	52.7
		Not enough	71	47.3
4	Assurance	Good	91	60.7
		Not enough	59	39.3
5	Empathy	Good	86	57.3
		Not enough	64	42.7
In general:				
	Quality of Service	Good	80	53.3
		Not enough	70	46.7

Table 3 shows that the quality of patient services is generally in the good category and specifically, the assurance dimension is considered the best by patient respondents at Nurul Hasanah Kutacane Hospital.

Table 4. Relationship between Interprofessional Collaboration and Service Quality

Interprofessional Collaboration	Quality of Service				Total		P-value
	Good		Not enough		f	%	
	f	%	f	%			
Good	62	72.9	23	27.1	85	100.0	0.001
Not enough	18	27.7	47	72.3	65	100.0	
Total	80	53.3	70	46.7	150	100.0	

Table 4 shows that respondents who received care from a healthcare team with good interprofessional collaboration mostly perceived the quality of care as good. Meanwhile, patients treated by a healthcare team with poor collaboration mostly perceived the quality of care as poor at Nurul Hasanah Hospital, Kutacane.

The Chi-Square statistical test results obtained a p-value of 0.001 ($p < 0.05$). This indicates a significant relationship between interprofessional collaboration among healthcare workers and the quality of healthcare services experienced by patients in the inpatient ward of Nurul Hasanah Kutacane Hospital.

Discussion

The analysis results in Table 4 show a significant relationship between interprofessional coordination and the quality of healthcare services in the inpatient ward of Nurul Hasanah Hospital, Kutacane (p -value = 0.001). These results align with previous studies. Danaher et al. (2023), the dimensions of effective communication between healthcare professionals, the ability of a flexible and well-organized care system, are the foundation of quality healthcare services. Bychkovska et al. (2024), high interprofessional collaboration and information regarding the patient's clinical condition without communication barriers can improve the capacity of primary healthcare services to address the complex needs of patients with chronic conditions. Conversely, poor interprofessional collaboration leads to duplication of instructions, delays in treatment, and medication errors, which can potentially shape negative patient perceptions of the quality of care.

The results of the study, as shown in Table 2, show that the shared goals dimension has the highest percentage in the good category (63.3%). This indicates that healthcare workers at Nurul Hasanah Hospital, Kutacane, share a common vision in prioritizing patient recovery and safety. However, the division of responsibilities dimension is still insufficient (48.0%). This difference is due to the lack of clear boundaries of clinical privilege and formal written collaborative standard operating procedures (SOPs). This condition is due to the unbalanced workforce ratio in Southeast Aceh. Merode et al. (2024), health workers cannot independently prevent organizational complexity that could potentially disrupt the implementation of care tasks and the quality of health services. This depends on the ability of nurses to coordinate activities that require the availability of resources.

The quality of healthcare services in Table 3 was generally assessed as good (53.3%), particularly in the assurance dimension. This demonstrates limited internal coordination, yet patients have high confidence in the professional competence of healthcare workers at Nurul Hasanah Hospital, Kutacane. However, the tangibles dimension was rated as lacking by 50.7% of respondents. According to Msacky (2024), patient complaints regarding the comfort of inpatient treatment rooms, inadequate supporting facilities, and the

cleanliness of the physical environment are common reflections of the challenges faced by private hospitals in rural areas. Pradelli et al. (2025), the quality of interpersonal relationships and safety of care built through interprofessional collaboration can improve the performance of multidisciplinary teams in clinical practice, especially in acute care settings.

Based on the results of this study, the management of Nurul Hasanah Kutacane Hospital can reform the clinical communication system. Soed et al., (2025) The implementation of standardized patient handover methods such as SBAR (Situation, Background, Assessment, Recommendation) and regular interprofessional clinical rounds are solutions to address coordination and collaboration weaknesses. Therefore, the development of an integrated clinical pathway that supports the division of clinical responsibilities between doctors, nurses, pharmacists, and nutritionists is clearly formulated to achieve optimal and sustainable patient care.

5. Conclusion

The conclusion of this study is that the majority of healthcare workers at Nurul Hasanah Kutacane Hospital rated interprofessional coordination in the inpatient ward as Good (56.7%), while the majority of patients rated the quality of healthcare services as Good (53.3%), where the dimensions of assurance and empathy were rated very high, while the tangibles aspect was identified as lacking. The results of the bivariate analysis showed a significant relationship between interprofessional coordination and the quality of healthcare services (p -value = 0.001). Based on these results, it is recommended that the management of Nurul Hasanah Kutacane Hospital draft and ratify internal regulations regarding interprofessional collaborative practice guidelines and integrated clinical pathways to detail the division of roles and responsibilities of each healthcare profession and make gradual improvements to the physical infrastructure in the inpatient ward to improve the tangibles dimension of patient comfort.

6. Reference

1. Bonaconsa, C., Charani, E., Bergh, D. Van Den, Joubert, I., & Mendelson, M. (2025). Exploring the influence of communication and team dynamics relating to infection care on intensive care unit patient discussions: Insights from sociograms and team reflexivity. *Journal of Critical Care*, 89, 155127. <https://doi.org/10.1016/j.jcrc.2025.155127>
2. Cadel, L., Sandercock, J., Marcinow, M., Guilcher, S. J. T., & Kuluski, K. (2022). A qualitative study exploring hospital-based team dynamics in discharge planning for patients experiencing delayed care transitions in Ontario, Canada. *BMC Health Services Research*, 22, 1–11. <https://doi.org/10.1186/s12913-022-08807-4>
3. Danaher, T. S., Berry, L. L., Howard, C., Moore, S. G., & Attai, D. J. (2023). Improving how clinicians communicate with patients: An integrative review and framework. *Journal of Service Research*, 26(4), 493–510. <https://doi.org/10.1177/10946705231190018>
4. Dib, K., & Belrhiti, Z. (2025). Unpacking the black box of interprofessional collaboration within healthcare networks: A scoping review. *BMJ Open*, 15(6), 1–33. <https://doi.org/10.1136/bmjopen-2025-101702>
5. El-Awaisi, A., Yakti, O. H., Elboshra, A. M., Jasim, K. H., & Aboalward, A. F. (2024). Facilitators and barriers to interprofessional collaboration among health professionals in primary healthcare centers in Qatar: A qualitative exploration using the “Gears” model. *BMC Primary Care*, 25, 1–14. <https://doi.org/10.1186/s12875-024-02537-8>

6. Geese, F., & Schmitt, K. (2023). Interprofessional collaboration in complex patient care transition: A qualitative multi-perspective analysis. *Healthcare*, 11(3), 1–14. <https://doi.org/10.3390/healthcare11030359>
7. Hannawa, A. F., Wu, A. W., Kolyada, A., Potemkina, A., & Donaldson, L. J. (2022). The aspects of healthcare quality that are important to health professionals and patients: A qualitative study. *Patient Education and Counseling*, 105(6), 1561–1570. <https://doi.org/10.1016/j.pec.2021.10.016>
8. Khatri, R., Endalamaw, A., Erku, D., Wolka, E., Nigatu, F., & Zewdie, A. (2023). Continuity and care coordination of primary health care: A scoping review. *BMC Health Services Research*, 23, 1–13. <https://doi.org/10.1186/s12913-023-09718-8>
9. Meneses-La-Riva, M. E., Fernández-Bedoya, V. H., Suyo-Vega, J. A., Ocupa-Cabrera, H. G., Grijalva-Salazar, R. V., & Ocupa-Meneses, G. D. (2025). Enhancing healthcare efficiency: The relationship between effective communication and teamwork among nurses in Peru. *Nursing Reports*, 15(2), 1–13. <https://doi.org/10.3390/nursrep15020059>
10. Merode, F. Van, Groot, W., & Somers, M. (2024). Slack is needed to solve the shortage of nurses. *Healthcare*, 12, 1–22. <https://doi.org/10.3390/healthcare12020220>
11. Pradelli, L., Risoli, C., Summer, E., Bellini, G., Mozzarelli, F., Anderson, G., Guasconi, M., Artioli, G., & Bonacaro, A. (2025). Healthcare professional perspective on barriers and facilitators of multidisciplinary team working in acute care setting: A systematic review and meta-synthesis. *BMJ Open*, 15, 1–16. <https://doi.org/10.1136/bmjopen-2024-087268>
12. Soed, N., Ludin, S. M., Nurulakla, S., Abdullah, S., & Al-Zahrawi, R. (2025). Exploring the impact of the SBAR on nursing handover: A scoping review. *The Malaysian Journal of Nursing*, 17(July), 233–245. <https://doi.org/10.31674/mjn.2025.v17i01.024>
13. Saragih, I. D., Hsiao, C.-T., Fann, W.-C., Hsu, C.-M., Saragih, I. S., & Lee, B.-O. (2024). Impacts of interprofessional education on collaborative practice of healthcare professionals: A systematic review and meta-analysis. *Nurse Education Today*, 136, 106136. <https://doi.org/10.1016/j.nedt.2024.106136>
14. Molero, A. H., Sabo, K. G., Lahole, B. K., Wengoro, B. F., et al. (2025). Prevalence of interprofessional collaboration towards patient care and associated factors among nurses and physician in Ethiopia, 2024: A systematic review and meta-analysis. *BMC Nursing*, 24, 210. <https://doi.org/10.1186/s12912-025-02847-x>
15. Gregoriou, P. L., Charalambous, A., Rousou, E., Papastavrou, E., & Merkouris, A. (2025). Attitudes of physicians and nurses toward interprofessional collaboration: A systematic literature review. *Mater Sociomed*, 37(1), 64–73. <https://doi.org/10.5455/msm.2025.37.64-73>
16. Shi, Y., Li, H., Yuan, B., et al. (2025). Effects of multidisciplinary teamwork in non-hospital settings on healthcare and patients with chronic conditions: A systematic review and meta-analysis. *BMC Primary Care*, 26, 110. <https://doi.org/10.1186/s12875-025-02814-0>
17. Rauf, A., & Muhammad, N. (2024). Healthcare service quality: A systematic review based on PRISMA guidelines. *International Journal of Quality & Reliability Management*, 42(3), 837–850. <https://doi.org/10.1108/IJQRM-12-2023-0403>
18. Guan, T., Chen, X., Li, J., & Zhang, Y. (2024). Factors influencing patient experience in hospital wards: A systematic review. *BMC Nursing*, 23, 527. <https://doi.org/10.1186/s12912-024-02054-0>
19. Kang, Y., Guan, T., Chen, X., & Zhang, Y. (2024). Patient-reported experience measures in adult inpatient settings: A systematic review. *Journal of Nursing Management*, 2024, 5166392. <https://doi.org/10.1155/jonm/5166392>

20. Wahyuningsih, A., & Firmanda, G. I. (2025). The role of interprofessional communication in enhancing the quality of hospital health services: A scoping review. *JMMR (Jurnal Medicoeticolegal dan Manajemen Rumah Sakit)*, 14(2). <https://doi.org/10.18196/jmmr.v14i2.570>