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Research Article

INFLUENCE OF SERVICE QUALITY AND DRUG AVAILABILITY ON PATIENT SATISFACTION THROUGH PATIENT TRUST MEDIATION

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Abstract

Research Objective: This study intends to investigate and explain the impact of service quality and medicine availability on patient satisfaction, both directly and indirectly, using patient trust as a mediating variable at RSUD Natuna's Pharmacy Installation. Research Type: This study is quantitative explanatory research. Data were collected through questionnaires distributed to 100 outpatient respondents. The data analysis technique used was Structural Equation Modeling (SEM) based on Partial Least Squares (PLS), implemented in SmartPLS. Research Findings: The results indicate that service quality positively impacts patient trust and satisfaction. The availability of drugs has been demonstrated to boost patient trust, although it has no significant direct impact on patient satisfaction. Furthermore, patient trust was found to positively affect satisfaction and to successfully mediate the relationship between service quality and satisfaction. However, trust cannot mediate the relationship between medicine availability and patient satisfaction, as low medicine stock acts as a physical barrier that cannot be compensated for by the emotional factor of trust alone.

Keywords: Medicine Availability, Patient Satisfaction, Patient Trust, RSUD Natuna, Service Quality

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INTRODUCTION

Hospitals play a fundamental role in modern healthcare systems as institutions responsible for providing comprehensive medical services aimed at improving public health and quality of life. In Indonesia, the implementation of Law Number 17 of 2023 concerning Health emphasizes that hospitals must not only focus on curative treatment but also integrate promotive, preventive, rehabilitative, and palliative services while prioritizing patient safety and service quality.

Along with the increasing public awareness of healthcare standards, hospitals are required to strengthen managerial efficiency, professional competence, and patient-centered care to maintain public trust and satisfaction. Service quality has therefore become an essential indicator of hospital performance and sustainability in the healthcare sector.

RSUD Natuna, a Type C regional public hospital located in the border island region of Natuna Regency, serves as the primary healthcare referral center for the surrounding community. According to the 2024 hospital profile, RSUD Natuna recorded 72,507 patient visits, including 39,432 outpatient visits, indicating a high level of public dependence on its healthcare services.

Despite achieving "Paripurna" accreditation status and obtaining high Community Satisfaction Index (IKM) and Public Service Quality Perception Index (IPKP) scores of 94.24 and 92.20, respectively, the hospital continues to face operational challenges related to healthcare delivery, particularly in pharmaceutical services and drug availability. Geographic isolation and logistical limitations in the archipelagic region often create obstacles in maintaining adequate medicine supplies and timely prescription fulfillment.

The quality of healthcare services is theoretically explained through the SERVQUAL model developed by Parasuraman et al. (1988), which measures service quality based on five dimensions, namely tangibles, reliability, responsiveness, assurance, and empathy. In hospital pharmaceutical services, quality is reflected not only in technical competence but also in communication effectiveness, patient education, and responsiveness toward patient needs.

In addition to service quality, drug availability represents a critical component in determining patient satisfaction because effective treatment cannot be achieved without adequate pharmaceutical supplies. Quick (1997) explained that drug availability depends on efficient supply chain management involving selection, procurement, distribution, and proper utilization of medicines. However, empirical findings at RSUD Natuna revealed that prescription fulfillment and drug stock availability remain relatively low, with an average score of 2.07, indicating a gap between patient needs and pharmaceutical availability.

Previous studies have demonstrated that both service quality and drug availability significantly influence patient satisfaction and loyalty. Nurmiwiyati et al. (2020) found that drug availability had a substantial effect on outpatient satisfaction, while Hambawudi (2023) reported that service quality and drug availability collectively contributed 42,5% toward patient satisfaction.

Nevertheless, the relationship among these variables is often influenced by psychological factors, particularly patient trust. Mayer et al. (1995) defined trust as confidence in the competence, integrity, and benevolence of healthcare providers. Studies conducted by Chang et al. (2013), Shie et al. (2022) and Akhtar et al. (2025) confirmed that patient trust significantly mediates the relationship between service quality and patient satisfaction. However, research investigating the mediating role of patient satisfaction remains limited, especially in geographically isolated regional hospitals.

Based on these conditions, this study is important to conduct because it aims to examine the relationships among service quality, drug availability, patient trust, and patient satisfaction at RSUD Natuna using a more comprehensive analytical approach. Unlike routine IKM and IPKP evaluations, this research employs patient trust as a mediating variable and applies Structural Equation Modelling (SEM) to analyze the structural relationships among variables.

The study is expected to provide a deeper understanding of healthcare service dynamics in border island hospitals and generate strategic recommendations for improving healthcare quality, pharmaceutical management, and sustainable patient-centered services at RSUD Natuna.

RESEARCH METHOD

Research Design

This study employed a quantitative research approach based on the positivist paradigm, which assumes that social phenomena can be objectively measured and empirically tested through observable data. (Sugiyono, 2019). The research aimed to examine the causal relationships among service quality, drug availability, patient trust, and patient satisfaction at RSUD Natuna. A structured questionnaire using a five-point Likert scale was utilized to transform subjective perceptions into measurable numerical data suitable for statistical analysis.

Based on its objectives, this study applied both explanatory and descriptive research designs. The explanatory design was intended to analyze the causal influence of service quality (X1) and drug availability (X2) on patient satisfaction (Y), with patient trust (Z) functioning as a mediating variable. Meanwhile, the descriptive design aimed to provide a systematic overview of the respondents' characteristics and the level of each research variable. This study also adopted a cross-sectional design, in which all data were collected simultaneously within a relatively short period. Data were collected through a survey method using questionnaires distributed to outpatient pharmacy patients at RSUD Natuna.

This research was conducted at the Outpatient Pharmacy Installation of RSUD Natuna, located on Jalan H. Ali Murtopo, Ranai, Bunguran Timur District, Natuna Regency, Riau Islands Province. RSUD Natuna was selected because it serves as the primary referral hospital in the Natuna archipelago region and directly handles outpatient prescription services. The study was conducted during the 2025 research period. The conceptual framework and formulation of research hypotheses are presented as follows Parasuraman et al. (1994), Tjiptono (2011), Mayer et al. (1995), Zeithaml and Bitner (2003):

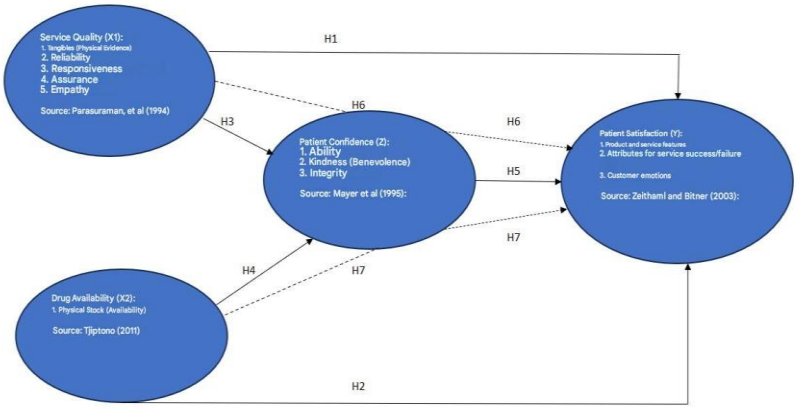

Figure 1. Conceptual Framework

Hypotheses:

H1: Service Quality on Patient Satisfaction
H2: Drug Availability on Patient Satisfaction
H3: Service Quality on Patient Trust
H4: Drug Availability on Patient Trust
H5: Patient Trust on Patient Satisfaction
H6: Patient trust mediates the influence of service quality on patient satisfaction
H7: Patient trust mediates the effect of drug availability on patient satisfaction.

Research Target/Subject

The research subjects were outpatient pharmacy patients at RSUD Natuna who redeemed prescriptions during the data collection period. Respondents included patients or family members collecting medicines prescribed by physicians, aged at least 18 years old, capable of providing informed consent, and able to communicate effectively. The population of this study consisted of 39,432 outpatient visits recorded in 2024.

Table 1. Number of Outpatient Visits by Clinic at RSUD Natuna in 2024

No	Type Of Visit	Number Of Visits
1	Returning Patients	38.544
2	New Patients	888
Total		39.432

Source: Processed secondary data, 2026

The sampling technique used was non-probability sampling with purposive and accidental sampling approaches. Respondents were selected based on predetermined inclusion criteria and accessibility during the survey process. The sample size was calculated using the Slovin formula with a 10% margin of error, resulting in 100 respondents.

$$n = \frac{39.432}{1+39.432.0,12} = \frac{39.432}{1+39.432 \,.\, 0,01} = \frac{39.432}{1+394,32} = \frac{39.432}{395,32} \approx 99,8 \text{ or } 100 \text{ respondents}$$

Research Procedure

The research procedure began with identifying the research problem and constructing a conceptual framework based on previous theories and empirical studies. Subsequently, research instruments were developed according to the operational definitions of variables. Data was collected by handing out questionnaires to patients at the outpatient pharmacy unit. After the questionnaires were completed, the collected data underwent editing, coding, tabulation, and scoring processes before statistical analysis was performed.

This study utilized Structural Equation Modeling based on Partial Least Squares (PLS-SEM) with SmartPLS version 4.0 as the primary analytical tool. PLS-SEM was selected because it is suitable for predictive and exploratory studies, does not require strict normality assumptions, and is effective for relatively small sample sizes (Hair et al., 2017).

Instruments and Data Collection Techniques

According to Hair et al. (2017), Primary data were collected using a structured questionnaire with a Likert-scale responses ranging from 1 (strongly disagree) to 5 (strongly agree). The questionaire measured four latent variables: service quality, drug availability, patient trust, and patient satisfaction. Secondary data were obtained from hospital documents, annual reports, and official statistical records related to outpatient services and pharmaceutical performance at RSUD Natuna.

Table 2. Likert Scale Measurement

Score Range	Interpretation
1.00-1.80	Strongly Disagree
2.81-2.60	Disagree
3.61-3.40	Less Agree
4.41-4.20	Agree
5.21-5.00	Strongly Agree

Source: Arikunto (2013)

Data Analysis Technique

Data analysis in this study consisted of descriptive and inferential statistical analysis. Descriptive statistics were used to describe respondent characteristics and summarize variable distributions through frequencies, percentages, means, and standard deviations. Inferential analysis was conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM) to test the proposed hypotheses and structural relationships among variables.

The analysis procedure included the evaluation of the outer model and inner model. The outer model assessment included convergent validity, discriminant validity, and reliability testing with factor loadings, Average Variance Extracted (AVE), Composite Reliability, and Cronbach's Alpha. Meanwhile, the inner model evaluation assesses the coefficient of determination (R^2), predictive relevance (Q^2), path coefficients, and hypothesis significance through bootstrapping procedures (Chin W, 1998).

Table 3. Reliability Coefficient Interpretation

Cronbach Alpha Value	Interpretation
0.800-1.000	Very High
0.600-0.799	High
0.400-0.599	Moderate
0.200-0.399	Low
0.000-0.199	Very Low

Source: Chin (1998)

RESULTS AND DISCUSSION

Respondent Characteristics

This section presents the demographic and social profile of respondents involved in the study at the Outpatient Pharmacy Installation of RSUD Natuna. The analysis includes gender, age, educational background, respondent status, visit history, and marital status. These characteristics are important to understand the background of respondents and to support the interpretation of patient perceptions regarding service quality, drug availability, trust, and satisfaction.

Table 4. Respondents Based on Gender

Gender	Frequency	Percentage
Male	43	43%
Female	57	57%
Total	100	100%

Source: Primary Data Processed, 2026

The results indicate that female respondents dominated the study with 57 respondents (57%), while male respondents accounted for 43 respondents (43%). This finding suggests that women tend to be more involved in utilizing healthcare services, either as patients or as family companions. Female respondents may also be more responsive in providing feedback through questionnaires. Therefore, women contributed significantly to the perceptions and evaluations obtained in this research.

Table 5. Respondents Based on Age

Age Group	Frequency	Percentage
< 30 Years	40	40%
31-40 Years	26	26%
41-50 Years	16	16%
> 51 Years	18	18%
Total	100	100%

Source: Primary Data Processed, 2026

The majority of respondents were aged 30 years or younger, totaling 40 respondents (40%). This indicates that most respondents belonged to the productive-age category, which is generally more active in accessing healthcare services. Respondents aged 31–40 years represented 26%, while respondents aged above 51 years represented 18%. The findings demonstrate that younger adults dominated the study population, although older respondents were still represented, allowing broader perspectives regarding healthcare services.

Table 6. Respondents Based on Educational Background

Educational Level	Frequency	Percentage
Elementary School	6	6%
Junior High School	8	8%
Senior High School	41	41%
Diploma III	11	11%
Diploma IV	3	3%
Bachelor Degree	30	30%
Master Degree	1	1%
Total	100	100%

Source: Primary Data Processed, 2026

Most respondents had a Senior High School educational background (41%), followed by Bachelor's degree holders (30%). This indicates that respondents generally possessed adequate educational qualifications to understand and evaluate healthcare services objectively. The variation in educational levels also enriched the perspectives regarding service quality, trust, and satisfaction toward hospital pharmacy services.

Table 7. Respondents Based on Patient or Family Status

Educational Level	Frequency	Percentage
Patient	64	64%
Patient’s Family	36	36%
Total	100	100%

Source: Primary Data Processed, 2026

The majority of respondents were patients themselves, accounting for 64% of the sample. This indicates that most responses reflected direct experiences with healthcare services. Meanwhile, 36% of respondents were family members accompanying patients, providing additional perspectives regarding the service process and hospital responsiveness. The combination of these respondent categories strengthened the comprehensiveness of the study findings.

Table 8. Respondents Based on Visit History

Visit Frequency	Frequency	Percentage
1 Visit	3	3%
2 Visits	16	16%
3 Visits	17	17%
4 Visits	3	3%
5 Visits	3	3%
> 5 Visits	58	58%
Total	100	100%

Source: Primary Data Processed, 2026

Most respondents had visited the hospital more than five times (58%), indicating that they had extensive experience with healthcare services at RSUD Natuna. Repeated interactions with healthcare services likely influenced respondents’ perceptions and evaluations more

deeply. Frequent users generally provide more reliable assessments regarding service quality, trust, and patient satisfaction because their opinions are formed through continuous service experiences.

Table 9. Respondents Based on Marital Status

Martial Status	Frequency	Percentage
Single	18	18%
Married	82	82%
Widow/Widower	0	0%
Total	100	100%

Source: Primary Data Processed, 2026

The majority of respondents were married, representing 82% of the total sample. This indicates that most healthcare users in the outpatient pharmacy unit were individuals with family responsibilities, where healthcare decisions are often influenced by family support and considerations. Married respondents may also have higher expectations regarding service reliability, trust, and healthcare outcomes. Meanwhile, single respondents accounted for 18%, while no respondents were categorized as widow/widower during the data collection period.

Convergent Validity Test

Convergent validity is determined by the correlation between indicator scores and construct scores. The factor loadings for latent variables and their indicators are expected to be greater than 0.7, and the average variance extracted (AVE) is expected to be greater than 0.5, as shown in the table below:

Table 10. Loading Factor Value

Variable	Indicator	Item	Outer Loadings	Description
Quality of Service	Reliability	X1.1.1	0,796	Valid
		X1.1.2	0,784	Valid
		X1.1.3	0,784	Valid
		X1.1.4	0,803	Valid
		X1.1.5	0,799	Valid
	Responsiveness	X1.2.1	0,861	Valid
		X1.2.2	0,780	Valid
		X1.2.3	0,815	Valid
		X1.2.4	0,797	Valid
	Assurance	X1.3.1	0,776	Valid
		X1.3.2	0,802	Valid
		X1.3.3	0,831	Valid
		X1.3.4	0,780	Valid
	Empathy	X1.4.1	0,802	Valid
		X1.4.2	0,800	Valid
		X1.4.3	0,811	Valid
		X1.4.4	0,768	Valid
		X1.4.5	0,782	Valid
	Tangible Evidence	X1.5.1	0,760	Valid
		X1.5.2	0,780	Valid
		X1.5.3	0,832	Valid
		X1.5.4	0,824	Valid
Medication	Physical Inventory	X2.1.1	0,940	Valid

Variable	Indicator	Item	Outer Loadings	Description
Availability		X2.1.2	0,922	Valid
		X2.1.3	0,942	Valid
Patient Trust	Competence	Z1.1	0,727	Valid
		Z1.2	0,766	Valid
		Z1.3	0,831	Valid
	Kindness	Z2.1	0,717	Valid
		Z2.2	0,736	Valid
	Integrity	Z3.1	0,822	Valid
		Z3.2	0,799	Valid
		Z3.3	0,783	Valid
Patient Satisfaction	Product and Service Features	Y1.1	0,856	Valid
	Atributes	Y2.1	0,888	Valid
		Y2.2	0,773	Valid
	Customer Emotions	Y3.1	0,887	Valid
		Y3.2	0,864	Valid

Source: Primary Data Processed, 2026

All indicators in this study are valid, as shown in the table above, because each indicator produced a factor loading value > 0.7. The AVE (Average Variance Extracted) is an additional measure used to assess validity. The AVE value must be greater than 0.5, as shown in the table below. The Drug Availability variable obtained the highest AVE value of 0.874, while the Patient Trust variable obtained the lowest AVE value of 0.606.

Table 11. Average Variance Extracted (AVE) Value

Variable	AVE
Patient Trust	0.606
Patient Satisfaction	0.730
Availability of Medications	0.874
Quality of Care	0.638

Source: Primary Data Processed, 2026

The table above shows that all of the AVE values for each variable are more than 0.5. Thus, the loading and AVE values match the criterion for convergent validity.

Table 12. Cronbach's Alpha & Composite Reliability Value

Variable	Cronbach's Alpha	Composite Reliability
Patient Trust	0.907	0.910
Patient Satisfaction	0.907	0.910
Availability of Medications	0.928	0.928
Quality of Care	0.973	0.973

Source: Primary Data Processed, 2026

According to the table above, all indicators for each variable satisfied the reliability test standards, with Cronbach's Alpha values more than the minimal requirement (> 0.6), as well as the reliability threshold of > 0.7. Thus, we may infer that all variables in this study are credible, allowing the analysis to move to the inner model stage.

Table 13. R-Square Value

Variable	R-Square
Patient Trust	0.346
Patient Satisfaction	0.494

Source: Primary Data Processed, 2026

In the table above, the R-Square value for the Patient Trust variable is 0.346, indicating that the Service Quality variable and the Drug Availability variable account for 34.6 percent of the variance in the Patient Trust variable. The R-Square value for the Patient Satisfaction variable of 0.494, indicating that the Service Quality and Drug Availability variables account for 65.4 percent of the remaining variation.

Table 14. F-Square Value

Variable	Patient Satisfaction	Patient Trust
Drug Availability	0.031	0.088
Service Quality	0.226	0.367
Patient Trust	0.156	

Source: Primary Data Processed, 2026

Based on the table above, the Drug Availability variable has an effect of 0.031 (weak), and the Patient Trust variable has an effect of 0.088 (weak). The Service Quality variable has an effect of 0.226 (moderate), and the Patient Trust variable has an effect of 0.367 (strong). The Patient Trust variable has an effect of 0.156 (moderate). Figure 2 depicts the same model created as a consequence of data analysis using SmartPLS software.

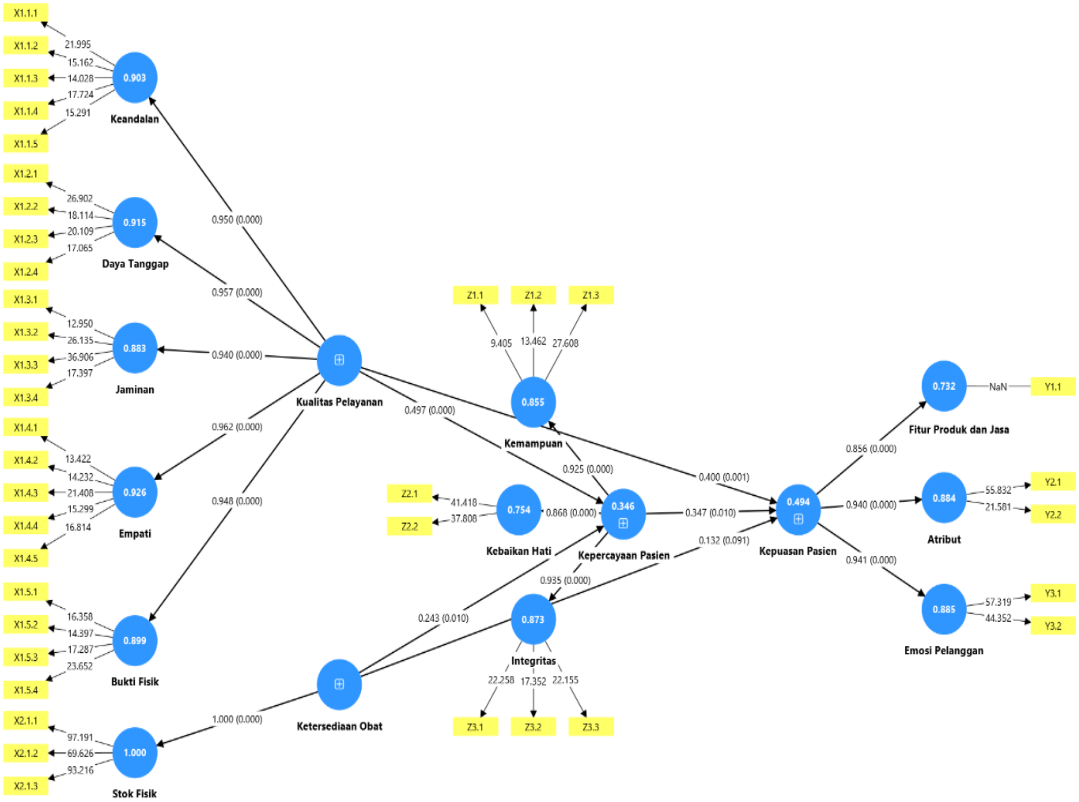

Figure 2. Conceptual Framework

The structural model, often referred to as the internal model, represents the relationships between latent variables in this study. As seen in Figure 2, the coefficients listed on the relationship paths between variables, indicators, and items reflect the R-square (R2) value.

Table 15. Hypothesis Test

Hypothesis	Variable	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values	Result	
H1	Service Quality → Patient Trust	0,497	0,494	0,094	5,283	0,000	Significant	Accepted
H2	Drug Availability → Patient Trust	0,243	0,235	0,094	2,590	0,010	Significant	Accepted
H3	Service Quality → Patient Satisfaction	0,400	0,402	0,122	3,289	0,001	Significant	Accepted
H4	Drug Availability → Patient Satisfaction	0,132	0,127	0,078	1,688	0,091	Not Significant	Rejected
H5	Patient Trust → Patient Satisfaction	0,347	0,349	0,135	2,575	0,010	Significant	Accepted
H6	Service Quality → Patient Trust → Patient Satisfaction	0,172	0,174	0,079	2,188	0,029	Significant	Accepted
H7	Drug Availability → Patient Trust → Patient Satisfaction	0,084	0,085	0,053	1,608	0,108	Not Significant	Rejected

Source: Primary Data Processed, 2026

Influence of Service Quality on Patient Trust

The results of the Partial Least Squares-Structural Equation Modeling (PLS-SEM) analysis indicate that service quality has a positive and significant effect on patient trust at Natuna Regional General Hospital, suggesting that the higher the quality of service provided, the greater the level of patient trust in the hospital. This finding is supported by various previous studies and research by Hambawudi (2023), Aziz et al. (2025) also demonstrates that service quality, particularly in pharmacy services, substantially influences patient satisfaction, which forms the basis for trust. Furthermore, Pribadi et al. (2021) emphasize that the quality of pharmaceutical services significantly influences patient trust and satisfaction, while Viegas et al. (2022) and Suhermin & Hermawati (2021) demonstrate that the quality of pharmaceutical telehealth services can enhance patient trust and loyalty. Thus, the findings of this study confirm that service quality qualities such as reliability, empathy, responsiveness, assurance, and tangibility are critical in establishing patient trust in hospital services.

Influence of Drug Availability on Patient Trust

Based on the research findings, the availability of medications at the Outpatient Pharmacy of Natuna Regional General Hospital is still considered suboptimal, even though

patient trust in the hospital is relatively high. This situation indicates a gap between the quality of medical care interactions and the pharmaceutical logistical support received by patients. The main issue lies in the pharmacy's ability to fully and consistently meet medication requests, resulting in patients still experiencing stock shortages when needed. Although patients continue to trust the competence, integrity, and service of medical staff, medication unavailability has the potential to lower perceptions of the hospital's overall service quality. These findings align with studies by Hambawudi (2023), Nurmiwiyati et al. (2020), and Ali et al. (2022), which states that medication availability is a critical factor in building trust, satisfaction, loyalty, and perceptions of the credibility of healthcare institutions.

Influence of Service Quality on Patient Satisfaction

Based on the research findings, the quality of service at the Outpatient Pharmacy of Natuna Regional General Hospital was generally rated as very good and aligned with patient satisfaction levels, which fell into the "good" category. This indicates that the services provided have met patients' expectations during their use of pharmaceutical services. Nevertheless, there are still several aspects that require attention, particularly regarding staff professionalism and the timeliness of service, as some patients still consider these two aspects to be suboptimal. Additionally, perceptions of medication quality and service are influenced by the consistency of care provided by pharmacy staff. On the other hand, adequate physical facilities serve as a key strength capable of fostering patient comfort and a positive experience. These findings are supported by studies by Hambawudi (2023) and Nurmiwiyati et al. (2020), which states that service quality, particularly the aspects of reliability and assurance, has a positive impact on patient satisfaction. Research by Ali et al. (2022) and Santoso et al. (2026) also confirms that communication, professionalism, and assurance of pharmaceutical service safety are important factors in improving patient satisfaction.

Influence of Drug Availability on Patient Satisfaction

Based on the research findings, the availability of medications at the Outpatient Pharmacy of RSUD Natuna is still considered suboptimal, particularly in terms of the completeness of the inventory and its capacity to meet patient needs. Nevertheless, patient satisfaction levels remain in the "good" category, indicating that satisfaction is influenced not only by medication availability but also by the quality of service, staff friendliness, and hospital facilities. These findings suggest that patients in island regions tend to have a higher tolerance for medication logistics limitations compared to patients in urban areas. Empirically, these results differ from the studies by Hambawudi (2023), which found that medication availability substantially influences patient satisfaction. However, these results align with the studies by Nurmiwiyati et al. (2020) and Ali et al. (2022), which state that the interaction between service and the quality of the relationship between healthcare workers and patients can minimize the negative impact of medication shortages on overall patient satisfaction.

Influence of Patient Trust on Patient Satisfaction

The results of the study indicate that patient trust plays a significant role in shaping patient satisfaction at the Outpatient Pharmacy of Natuna Regional General Hospital. High levels of trust in the integrity, professionalism, and competence of healthcare staff encourage patients to feel safer, more comfortable, and more confident in the care they receive, thereby increasing patient satisfaction. However, there are still several aspects that require attention, particularly regarding feelings of safety and comfort during treatment, as well as perceptions of the hospital's concern for patients with financial constraints. These conditions indicate that patients' emotional experiences and perceptions of service fairness still need to be strengthened through improved communication, enhanced facility comfort, and greater transparency in service policies. These findings align with the research by Hambawudi (2023), and Nurmiwiyati (2020), which states that patient trust is a key factor in enhancing satisfaction with healthcare services. These findings are also supported by international research by Ali et al. (2022) and Harun et al. (2025), which emphasizes that the integrity, competence, and

compassion of healthcare workers are essential foundations for fostering sustainable patient satisfaction.

Influence Patient Trust Mediates the Effect of Service Quality on Patient Satisfaction

Based on the research findings, patient trust was found to mediate the effect of service quality on patient satisfaction at the Outpatient Pharmacy of RSUD Natuna. This finding indicates that good service quality does not directly lead to satisfaction but first builds patients' trust in the professionalism, reliability, and safety of the services received. Staff professionalism, service accuracy, and the hospital's ability to instill a sense of safety are key factors in strengthening patient trust. Conversely, doubts regarding service consistency and assurances of professionalism have the potential to undermine patient satisfaction. On the other hand, adequate physical facilities can create a positive impression, thereby enhancing patients' trust and emotional satisfaction. These findings align with the research by Hambawudi (2023), Nurmiwiyati et al. (2020), Ali et al. (2022), as well as Harun et al. (2025) and AlOmari & Hamid (2022), which confirms that patient trust plays a crucial role as a mediator between service quality and patient satisfaction in healthcare services.

Influence Patient Trust Mediates the Effect of Drug Availability on Patient Satisfaction

Based on the research findings, patient trust has not yet been able to mediate the effect of drug availability on patient satisfaction at Natuna Regional General Hospital. This indicates that drug availability is still perceived as a logistical aspect that directly impacts satisfaction, but it is not yet strong enough to functionally build patient trust. The pharmacy's limited ability to meet medication requests and the incomplete medication stock are the primary barriers creating a gap in patients' perceptions of hospital service quality. Although patients rate hospital services and facilities as good, limited medication stock continues to raise doubts about the continuity of treatment, preventing patients from feeling fully safe and comfortable. These findings align with the research by Nurmiwiyati et al. (2020), Pribadi et al. (2021), Ali et al. (2022), Hambawudi (2023), and Chang et al. (2013) which states that medication availability has a more direct effect on satisfaction than through the mediation of patient trust.

CONCLUSION

Based on the results of this study, it can be concluded that service quality at RSUD Natuna plays an important role in strengthening patient trust. Dimensions of service quality, such as reliability, responsiveness, assurance, empathy, and tangible evidence, were proven to be the main factors influencing patients' trust perceptions toward the hospital. Although the overall service quality was assessed positively, several aspects still require improvement, particularly staff professionalism and consistency in fulfilling service commitments. In addition, drug availability was found to have a strong relationship with patient trust. Patients' certainty in obtaining complete medications reflects the hospital's competence from the patients' perspective. However, the low score of drug availability indicates that patient trust is currently influenced more by the quality of healthcare personnel than by pharmaceutical logistics support.

The findings also revealed that service quality significantly contributes to patient satisfaction at RSUD Natuna. Friendly, informative services supported by adequate physical facilities were able to create satisfying service experiences for patients, particularly in the pharmacy unit. In contrast, drug stock availability did not show a significant effect on patient satisfaction. This finding suggests that patients in island and border areas tend to have a higher level of tolerance toward limited drug availability as long as healthcare staff continue to provide high-quality services. Furthermore, patient trust was identified as a fundamental emotional predictor underlying patient satisfaction. Patients who trust the hospital's medical integrity and competence tend to demonstrate more stable satisfaction perceptions.

Furthermore, the study confirmed that patient trust acts as a mediating variable in the relationship between service quality and patient satisfaction. This indicates that professional

and high-quality services first enhance patient trust before ultimately leading to optimal satisfaction. However, patient trust failed to mediate the relationship between drug availability and patient satisfaction. The hospital's inability to fully meet patients' medication needs weakened the mediating role of trust in connecting drug availability with satisfaction. The inconsistency between adequate medical facilities and limited drug stock became one of the main barriers preventing the mediation effect from occurring.

Based on these findings, the management of RSUD Natuna is recommended to strengthen the culture of service excellence by improving staff professionalism and enhancing communication systems with patients. The pharmacy department should also improve its drug planning and procurement systems to increase prescription fulfillment rates. In addition, transparency regarding drug availability and proactive patient education should be enhanced to maintain patient trust. The hospital is further encouraged to improve patients' sense of safety and comfort by providing better service, greater privacy, and clearer information about healthcare financial assistance. For future researchers, this study may be expanded by incorporating variables such as geographical accessibility and patient health literacy to gain a deeper understanding of patient satisfaction behavior in Indonesia's island and border regions.

DECLARATION OF AI AND AI ASSISTED TECHNOLOGIES IN THE WRITING PROCESS

The authors used ChatGPT by OpenAI during the preparation of this manuscript in order to assist with language editing, paraphrasing, grammar improvement, and translation. After using this tool, the authors carefully reviewed and revised the content as necessary and take full responsibility for the final content of the publication.

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AUTHOR CONTRIBUTIONS

Author 1: Conceptualization; Methodology; Project administration; Supervision; Writing - review and editing.

Author 2: Data curation; Investigation; Formal Analysis; Writing – Original draft.

Author 3: Data curation; Investigation; Validation.

Author 4: Methodology; Formal analysis; Visualization; Writing - original draft.

Author 5: Supervision; Validation; Resources; Writing – review and editing.

DECLARATION OF COMPETING INTEREST

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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