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ANALYSIS OF THE EFFECT OF SERVICE QUALITY DIMENSIONS ON PATIENT SATISFACTION WITH EMPATHY AS A DOMINANT FACTOR AT AL-IRSYAD HOSPITAL SURABAYA IN 2025

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Abstract

Background : *Patient satisfaction is one of the important indicators in evaluating hospital service quality. Service quality dimensions such as tangible, reliability, responsiveness, assurance, and empathy are considered factors that may influence patient satisfaction.*
Aim s : *This study aims to analyze patient satisfaction with services at Al-Irsyad Hospital Surabaya in 2025.*
Methods : *This study used a cross-sectional design with a population of 4,875 patients and a sample of 110 respondents selected through purposive sampling. The research was conducted in July 2025. Data were collected using a questionnaire based on service quality dimensions, namely tangible, reliability, responsiveness, assurance, and empathy. Statistical analysis was performed using the Chi-Square test and multivariate logistic regression analysis.*
Results : *The Chi-Square test results showed significant relationships between reliability ($p=0.021$), assurance ($p=0.015$), and empathy ($p=0.008$) variables with patient satisfaction ($p<0.05$). Meanwhile, tangible and responsiveness variables did not show significant relationships with patient satisfaction. Multivariate logistic regression analysis identified empathy as the most dominant factor affecting patient satisfaction ($p=0.003$; $OR=9.472$).*
Conclusion : *Improving hospital service quality should focus on strengthening interpersonal communication, increasing individual attention to patients, and improving the competence and professional attitude of health workers to provide patient-centered services.*

Keywords : *Patient satisfaction, service quality, SERVQUAL, hospital.*

Abstrak

Latar Belakang : Kepuasan pasien merupakan salah satu indikator penting dalam menilai kualitas pelayanan rumah sakit. Kualitas pelayanan yang mencakup dimensi tangible, reliability, responsiveness, assurance, dan empathy dapat memengaruhi tingkat kepuasan pasien terhadap pelayanan kesehatan yang diberikan.
Tujuan : Penelitian ini bertujuan untuk menganalisis kepuasan pasien terhadap pelayanan di Rumah Sakit Al-Irsyad Surabaya Tahun 2025.
Metode : Desain penelitian yang digunakan adalah cross sectional dengan jumlah populasi sebanyak

4.875 pasien dan sampel penelitian sebanyak 110 responden yang dipilih menggunakan teknik purposive sampling. Penelitian dilaksanakan pada bulan Juli 20252. Pengumpulan data dilakukan menggunakan kuesioner berdasarkan dimensi kualitas pelayanan (tangible, reliability, responsiveness, assurance, dan empathy). Analisis data dilakukan menggunakan uji Chi-Square dan uji regresi logistik multivariat.

Hasil : Hasil analisis statistik menggunakan uji Chi-Square menunjukkan adanya hubungan yang bermakna antara variabel reliability (p=0,021), assurance (p=0,015), dan empathy (p=0,008) dengan kepuasan pasien (p<0,05). Sementara itu, variabel tangible dan responsiveness tidak menunjukkan hubungan yang signifikan. Hasil uji regresi logistik multivariat menunjukkan bahwa faktor yang paling dominan memengaruhi kepuasan pasien adalah empathy (p=0,003; OR=9,472).

Kesimpulan : Pihak rumah sakit perlu meningkatkan mutu pelayanan melalui penguatan komunikasi interpersonal, peningkatan perhatian individual kepada pasien, serta peningkatan kompetensi dan sikap profesional tenaga kesehatan dalam memberikan pelayanan yang berorientasi pada kebutuhan pasien.

Kata Kunci : Kepuasan pasien, kualitas pelayanan, SERVQUAL, rumah sakit.

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Introduction

Patient satisfaction is one of the main indicators in assessing the quality of health services and is an important parameter in modern hospital quality improvement systems. In the last decade, the healthcare service paradigm has shifted from provider-centered care to patient-centered care, where patient experience and perception have become the main focus of service quality evaluation (WHO, 2016). This concept emphasizes that the success of services is not only measured by clinical aspects, but also by the patient's experience while receiving services.

Conceptually, patient satisfaction is understood as a cognitive and affective evaluation of the services received compared to the patient's initial expectations (Akdere et al., 2020). The Expectation-Confirmation Model theory explains that satisfaction occurs when service performance meets or exceeds patient expectations. In the context of increasingly competitive healthcare services, patient expectations continue to rise in line with technological developments, access to information, and increased public awareness of the right to quality services.

Healthcare service quality measurement still broadly refers to the SERVQUAL model developed by Parasuraman, Zeithaml, and Berry, but in the last 15 years this model has been

continuously developed and adapted in the healthcare sector to assess patient experiences more specifically (Gavurova et al., 2021). The five main dimensions-tangibility, reliability, responsiveness, assurance, and empathy-remain the main framework for assessing perceptions of service quality. Among these five dimensions, responsiveness and empathy are often found to be the main determinants of patient satisfaction because they are directly related to interpersonal interactions between health workers and patients.

Responsiveness in healthcare is defined as the speed, readiness, and willingness of healthcare workers to respond to patient needs in a timely manner (WHO,2016). This dimension has become increasingly important in modern healthcare systems because patients expect fast, efficient, and minimal waiting times. The unresponsiveness of health workers can create negative perceptions that lead to a decrease in overall satisfaction levels.

Meanwhile, empathy in healthcare is defined as the ability of healthcare workers to show attention, concern, effective communication, and an individualized approach to patients (Nguyen et al., 2021). Research in the field of patient experience shows that healthcare worker empathy contributes significantly to patient satisfaction, treatment compliance, and even clinical outcomes (Wulandari et al., 2021). In nursing practice, the dimension of empathy is crucial because nurses are the healthcare workers who have the highest intensity of interaction with patients during the treatment period.

From a healthcare quality perspective, Donabedian's model, which has been continuously used and developed over the past decade, places patient satisfaction as part of service outcomes that are influenced by the service process, including the behavior and communication of healthcare workers (Sarah et al., 2021). Thus, patient dissatisfaction with the aspects of responsiveness and empathy indicates problems in the service process that need to be evaluated and improved.

These findings indicate a gap between patients' expectations of fast and humane service and their actual experience of the service received. In the context of increasingly competitive competition between hospitals and the implementation of performance-based financing systems and hospital accreditation, evaluating patient satisfaction is becoming increasingly important as a basis for continuous service quality improvement.

Based on these theoretical developments and empirical phenomena, research is needed to analyze patient satisfaction with services at Al-Irsyad Hospital in Surabaya, focusing on the dimensions of responsiveness and empathy as factors that are thought to have a

significant effect on patient satisfaction. The results of this study are expected to contribute to strengthening strategies for improving service quality based on patient experience (patient experience-based quality improvement).

Method

This study was conducted in 2025 at Al-Irsyad Hospital in Surabaya using an observational analytical design with a cross-sectional approach. This study aimed to analyze the relationship between service quality and patient satisfaction at the same time.

The study population consisted of all patients who received services at Al-Irsyad Hospital in Surabaya, totaling 4,875 patients. The study sample consisted of 110 respondents selected using purposive sampling. The inclusion criteria were patients aged ≥18 years, who had received at least one service, and who were willing to be respondents.

The independent variable in this study was service quality based on the five dimensions of SERVQUAL, namely tangible, reliability, responsiveness, assurance, and empathy. The dependent variable was patient satisfaction.

Data were collected using a Likert scale questionnaire that had been tested for validity and reliability. Data analysis was performed univariately to see the frequency distribution, bivariately using the Chi-Square test to determine the relationship between variables ($\alpha = 0.05$), and multivariately using logistic regression to determine the most dominant factors affecting patient satisfaction.

This study was conducted in accordance with research ethics principles, including respondent consent and data confidentiality.

Result and Discussion

1. Univariate Analysis

Table 1. Respondent Characteristics

Characteristics	Frequency (n)	Percentage (%
Gender		
Male	46	41.8
Female	64	58.2
Age		
18–35 years	38	34.5
36–55 years	47	42.7
>55 years	25	22.8
Type of Service		
Outpatient	72	65.5
Inpatient	38	34.5

Based on Table 1, most respondents were female (58.2%), aged 36–55 years (42.7%), and received outpatient services (65.5%).

Table 2. Distribution of Service Quality and Patient Satisfaction

Variable	Satisfied n (%)	Not Satisfied n (%)	Total
Tangible	78 (70.9%)	32 (29.1%)	110
Reliability	82 (74.5%)	28 (25.5%)	110
Responsiveness	69 (62.7%)	41 (37.3%)	110

Assurance	80 (72.7%)	30 (27.3%)	110
Empathy	65 (59.1%)	45 (40.9%)	110
Patien Satisfaction	76 (69.1%)	34 (30.9%)	110

Most respondents expressed satisfaction with the service (69.1%). However, the highest proportion of dissatisfaction was in the dimensions of empathy (40.9%) and responsiveness (37.3%).

2. Bivariate Analysis

Table 3. Relationship between Service Quality and Patient Satisfaction

Variable	p-value	Interpretation
Tangible	0.118	Not significant
Reliability	0.021	Significant
Responsiveness	0.087	Not significant
Assurance	0.015	Significant
Empathy	0.008	Significant

The Chi-Square test results show that there is a significant relationship between reliability, assurance, and empathy with patient satisfaction ($p < 0.05$). Meanwhile, tangible and responsiveness do not show a significant relationship.

3. Multivariate Analysis

Table 4. Logistic Regression Results

Variable	p-value	OR	95% CI
Reliability	0.041	3.215	1.045–9.889
Assurance	0.028	3.874	1.154–12.998
Empathy	0.003	9.472	2.167–41.389

Based on logistic regression analysis, the empathy variable is the most dominant factor affecting patient satisfaction with an OR value of 9.472, which means that patients who feel empathy from nurses are 9.4 times more likely to feel satisfied than patients who do not feel empathy.

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The empathy dimension was found to have the most dominant influence on patient satisfaction. This shows that individual attention, interpersonal communication, and the concern of health workers especially nurses greatly determine patients' perceptions of service quality. This finding is in line with the patient-centered care theory, which emphasizes the importance of interpersonal relationships in improving the patient experience.

Reliability and assurance are also significantly related to patient satisfaction. This indicates that the accuracy of service, trust in the competence of health workers, and the sense of security provided are important factors in building patient satisfaction.

Meanwhile, responsiveness in this study did not show a significant relationship, although descriptively there were still complaints related to the speed of nurse response. This may

be due to workload factors or the number of healthcare personnel, which affect service response times.

Therefore, hospitals need to improve training in therapeutic communication through regular training programs and communication simulations. In addition, a service culture grounded in empathy can be strengthened by encouraging healthcare workers to listen actively, provide clear information, and show concern for patients' needs, while continuously monitoring the quality of care.

Conclusion

Based on the results of research conducted at Al-Irsyad Hospital Surabaya in 2025, it can be concluded that most patients expressed satisfaction with the services provided. However, there are still several aspects of service quality that need to be improved, particularly in the dimensions of empathy and responsiveness. Bivariate analysis results show that there is a significant relationship between reliability, assurance, and empathy with patient satisfaction ($p < 0.05$). Meanwhile, the tangible and responsiveness dimensions do not show a statistically significant relationship with patient satisfaction.

Based on multivariate analysis, empathy was found to be the most dominant factor influencing patient satisfaction, with an odds ratio (OR) of 9.472. This shows that the attention, care, and interpersonal communication of health workers especially nurses play a very large role in increasing patient satisfaction.

Therefore, improving service quality at Al-Irsyad Hospital in Surabaya needs to focus on strengthening empathy, therapeutic communication, and improving the interpersonal competence of healthcare workers as part of efforts to improve patient centered care.

Abbreviations

WHO: World Health Organization; SERVQUAL; Service Quality.

Declarations

This study was conducted in accordance with research ethics principles, and all participants provided informed consent to participate. The authors declare that there are no conflicts of interest in this study. All authors contributed to the conduct of the study, data analysis, and manuscript preparation. This study did not receive any specific funding. The authors would like to thank Al-Irsyad Hospital in Surabaya and all parties who supported this study.

Ethics Approval and Consent Participant

All respondents were provided with an explanation of the research objectives and purpose prior to the survey, and both verbal and written consent to

participate in this study was obtained from each respondent.

Conflict of Interest

The authors declare that there is no significant competing financial, professional, or personal interests that might have affected the performance.

Authors' Contribution

S and PFW formulated the concept and design of this study; MM developed the research methodology; S, PFW, and MM contributed to data collection, data analysis and interpretation, writing, reviewing, and editing the manuscript; S and PFW prepared the initial draft of the manuscript. All authors have read, reviewed, and approved the final version of the manuscript to be published.

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