The Influence of Rate, Service Quality, Core Service Benefit, and Place Utility on Patient Satisfaction

Ni Ketut Rupini¹, Neni Nuraeni^{2*}, Sarfilianty Anggiani³

221022403002@std.trisakti.ac.id, 21022403001@std.trisakti.ac.id, sarfilianty@trisakti.ac.id
Faculty of Economics and Business, Universitas Trisakti, Jakarta

*Corresponding Author

Abstract

The healthcare service industry continuously strives to enhance patient satisfaction, a key indicator for evaluating service quality and competitiveness. These imperative challenges hospitals to provide services that not only meet quality standards but are also economically accessible to the broader community. Drawing upon the expectancy-disconfirmation theory (EDT) and ServQual model, this study aims to analyze how patient expectations and perceptions regarding tariff, service quality, core service benefits, and location utility influence their overall satisfaction. Using a quantitative approach, data were collected from a sample of 110 inpatients receiving general care at Dr. Sitanala National Public Hospital (RSUP Dr. Sitanala) in Tangerang. Structured questionnaires were distributed via Google Forms to purposively sampled patients who met specific criteria. Data analysis was conducted using SmartPLS 3.0 software. The findings reveal that tariffs have a negative and non-significant effect on patient satisfaction, suggesting that while cost is a consideration, it may not significantly disconfirm expectations or is outweighed by other factors. Conversely, service quality, core service benefits, and location utility each have a positive and significant impact on patient satisfaction, aligning with EDT's premise that perceived performance meeting or exceeding expectations in these areas leads to higher satisfaction. This study offers important insights for future research, particularly by examining these variables collectively within an EDT framework and highlights the diverse dimensions influencing patient satisfaction in healthcare.

Keywords: Rates, Service Quality, Core Service Benefits, Place Utility, Customer Satisfaction

This work is licensed under a <u>Creative Commons Attribution 4.0 International License</u>.

Introduction

Hospitals are complex organizations that involve multiple components, including doctors, nurses, and management. These stakeholders play a crucial role in delivering services to patients with high-level needs. The impacts of globalization, technological advancements, shifts in scientific knowledge, socio-economic changes, and intense competition collectively represent significant challenges faced by healthcare service providers.

Patient satisfaction has become a key indicator for assessing the quality of healthcare services. This situation presents hospitals with the challenge of providing services that not only meet quality standards but are also economically accessible to the broader population. Satisfaction refers to an individual's feelings or behaviors associated with a specific product or service following its consumption (De Souza et al., 2022). It can be defined as emotional responses such as joy or comfort resulting from a cognitive

evaluation of one's thoughts, experiences, and events (Ai et al., 2022). Customer satisfaction is a term used to describe the extent to which customers are pleased with a product, service, or provider capabilities (Akil & Ungan, 2022).

Based on the above definitions, it can be concluded that patient satisfaction refers to the feelings of pleasure or disappointment experienced by patients, based on their memories and experiences, when comparing their expectations with the actual outcomes received from healthcare services. Indicators of patient satisfaction include compliance with requirements, speed and accuracy of service, clarity of information and procedures, and perceived competence (Swathi, K.S., Barkur, G., & Somu, G., 2023).

Table 1. Number of Inpatient and Outpatient Patient at Dr. Sitanala National Public Hospital. Tangerang, from 2022 to 2024

Year	Outpatient			Increase/Decrease
2022	63,933	8,262	72,195	Increase
2023	90,128	15,673	105,801	Increase
2024	94,394	18,089	112,483	Increase

Resource: RSUP Dr. Sitanala (2025)

Based on the data presented in Table 1, from 2022 to 2024, both inpatient and outpatient numbers at RSUP Dr. Sitanala in Tangerang have shown an increasing trend. Between 2022 and 2023, there was a significant increase. From 2023 to 2024, the number of patients continued to rise, although the growth was not as pronounced. This is reflected in the number of outpatients in 2022, which reached 63,933, with inpatients numbering 8,262, resulting in a total of 72,195 patients. In 2023, the number of outpatients rose significantly to 90,128.

In 2023, the number of outpatients was 90,128, while inpatients totaled 15,673, bringing the overall patient count to 105,801. In 2024, the number of outpatients increased further to 94,394, accompanied by a rise in inpatient numbers. It can therefore be concluded that the number of both inpatients and outpatients has fluctuated over the years.

Hospitals, as complex organizations, are responsible for a significant portion of overall healthcare expenditures. They play a crucial role in delivering care to patients with high-level medical needs. Rate (tariff) of hospital services is a critical factor influencing patient choice. A rate that is too high may act as a barrier for the public in accessing adequate healthcare, whereas a rate that is too low may affect the hospital's ability to maintain service quality.

Rate refers to the monetary value that customers must pay to service providers after receiving specific services (Asawawibul et al., 2025). It can also be defined as the value exchanged for a limited quantity or as a measure of worth for a particular good or service (Indajang et al., 2023). Therefore, it can be concluded that the rate of healthcare services represents the cost charged to patients for the medical services they receive.

Indicators of rate include affordability, alignment of price with service quality, competitiveness of pricing, and its proportionality to perceived benefits (Arianto, Limakrisna & Purba, 2022). Rate has been found to have a direct, positive, and significant influence on consumer satisfaction (Asawawibul et al., 2025; Indajang et al., 2023).

Table 2. Inpatient Service Rates at RSUP Dr. Sitanala Tangerang

Description		Class of Care				
	$\mathbf{Class}\;\mathbf{I}$	Class II	Class III	Class VIP		
Accommodation	360,000	120,000	90,000	540,000		
Visit						
General	120,000	40,000	31,500	160,000		
Practitioner						
Specialist Doctor	180,000	60,000	45,000	240,000		
Obstetrics						
Cesarean Section	12,000,000	8,000,000	6,400,000	20,000,000		
(C-Section) due to						
medical						
indications						
General Surgery						
Appendectomy	7,500,000	5,000,000	4,000,000	12,500,000		
(appendix						
surgery)						

Resource: RSUP Dr. Sitanala (2025)

Based on Table 2, the highest rates are charged for healthcare services provided in the VIP class, followed by Class I. The remaining classes—Class II and III—show relatively minor differences in pricing. These disparities among classes are primarily due to physical facilities such as accommodation, doctor fees, and other factors influencing personal healthcare services and treatment.

To thoroughly investigate the complex relationship between various service attributes and patient satisfaction in healthcare, this study draws upon the expectancy-disconfirmation theory (EDT) and the SERVQUAL model (Schiebler et al., 2025). EDT provides a foundational understanding by positing that patient satisfaction is a cognitive outcome stemming from the comparison between pre-service expectations and post-service perceptions (Zhang et al., 2022). This theoretical lens is crucial for examining how factors such as service quality, core service benefits, location utility, and even tariffs, contribute to either positive or negative disconfirmation of patients' initial expectations. The SERVQUAL model offers a pragmatic and widely accepted framework for dissecting and measuring the multidimensional nature of service quality (AlOmari, 2021).

Patient satisfaction in the service industry depends on service quality and overall experience, with organizations that successfully meet customer needs gaining a competitive advantage over others (Mensah, Achio & Asare, 2021). Hospital policies, particularly those aimed at ensuring patients receive high-quality care, reflect efforts by policymakers who influence hospital quality through various approaches.

Sukesi & Yunaidah (2019) emphasize that service quality serves as a primary benchmark for assessing a hospital's success. As public service providers, hospitals require strategies to improve service quality, which is a critical factor in enhancing patient satisfaction. A similar assertion highlights that service quality is considered vital as one of the key factors contributing to organizational success due to its strong correlation with customer satisfaction, influencing customers' decisions regarding specific products or services (Mensah, Achio & Asare, 2021).

Service quality begins with the appropriate design and implementation of service systems (Akhil & Suresh, 2021). It can be defined as the level of excellence delivered by

a company to its customers. High service quality is evident when an organization meets or even exceeds customer expectations (Prum, Long & Long, 2024).

Healthcare quality, broadly defined, refers to achieving the best possible health outcomes while maximizing satisfaction with procedures, results, and human interactions within the healthcare system (Lescher & Sirven, 2019). Jun & Palacios (2016) highlight nine dimensions of service quality characteristic of public services, including: reliability, responsiveness, competence, courtesy, credibility, access, communication, and understanding.

Dimensions of service quality such as tangibles, reliability, responsiveness, assurance, empathy, accessibility, and patient-centered care are crucial aspects in building patient satisfaction (Prum, Long & Long, 2024). Emon, Khan & Alam (2023) identify five dimensions of service quality: responsiveness, assurance, communication, discipline, and tips. Chayomchai (2021), in his study, states that service quality has a significant impact on customer satisfaction in the service sector (Chayomchai, 2021; Indajang et al., 2023; Sann, Pimpohnsakun & Booncharoen, 2024).

Healthcare services play a vital role in ensuring the overall well-being of individuals and society. One of the fundamental aspects of healthcare delivery is the core service benefit, which constitutes the primary element in meeting patients' medical needs. This core service encompasses basic components of healthcare provision, such as adequate diagnostic facilities, competent medical personnel, ease of access to healthcare services, treatment, rehabilitation, and patient health monitoring—each contributing significant added value. These core service benefits not only fulfil medical requirements but also generate positive emotional impacts by enhancing trust, comfort, and overall patient satisfaction with the healthcare system.

Dimensions of core service benefit include a feeling of comfort, relaxation and being welcomed, room quietness and safety, clear communication, and use of technology (Groen & Sprang, 2021; William et al., 2018; Swathi, Barkur & Somu, 2023). Therefore, there is a positive and significant relationship between core service benefit and patient satisfaction (Groen & Sprang, 2021; William et al., 2018). Technical and interpersonal practices, such as clear communication and use of technology, are integral parts of this. Technical services focus on procedural, clinical, and technical aspects of healthcare, including medical expertise and infrastructure that support service delivery. Interpersonal practices emphasize the relationship between healthcare providers (such as doctors, nurses, and other staff) and patients. These practices include communication, empathy, and attitude toward patients, serving as key predictors of patient satisfaction (Swathi, Barkur & Somu, 2023).

Among the factors contributing to increased patient satisfaction is the physical environment, which represents the external perception of the service setting. This surrounding physical environment refers to environmental elements that patients can directly sense. Place utility, or part of the physical environment utility, is a concept that focuses on the added value derived from the spatial or environmental context of service delivery. There are ten dimensions of place utility or physical environment utility in healthcare services, including: location, parking, cleanliness, private patient rooms, waiting rooms, music, privacy, quietness, temperature, and wayfinding (Alkazemi et al., 2019). Sweeney et al. (2023) argue that servicescape has an impact on wellbeing and patient satisfaction. Furthermore, it is noted that color and full-spectrum lighting have been shown to reduce stress levels and enhance patient satisfaction. Fatima, Malik & Sabir (2018) state that place utility has a positive and significant influence on patient satisfaction.

Based on the above discussion, therefore the current study posits that:

- H1. Rate negatively influences patient satisfaction
- H2. Service quality positively influences patient satisfaction
- H3. Core service benefit positively influences patient satisfaction
- H4. Place utility -> Patient satisfaction positively influences patient satisfaction

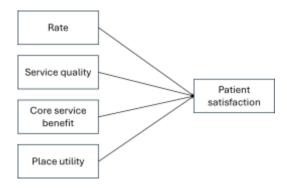


Figure 1. Conceptual framework

This study seeks to conduct a deeper analysis of variables formulated by the researcher, given the lack of holistic research integrating these key variables. Previous studies have largely examined the individual effects of rate or service quality on patient satisfaction. However, the integration of variables such as core hospital benefits or the perceived service benefits experienced by patients from hospital services and place utility or hospital physical facilities remains relatively rare. Thus, this research aims to analyze the influence of rate, service quality, core hospital benefit, and place utility on patient satisfaction.

Research Methods

The type of data used in this study is based on a quantitative research method. The research was conducted at RSUP Dr. Sitanala in Tangerang. Data collection took place from December 2024 to January 2025. The research sample consisted of patients receiving general inpatient care, with sample selection carried out using the purposive sampling technique. This sampling method was chosen because the selected respondents met the specific criteria set by the researcher, allowing for more efficient and effective use of time. To determine the appropriate sample size, the researcher employed Slovin's formula. Based on this calculation and the inclusion criteria established by the researcher, a total of 110 patients were selected as the final sample for the study.

Two types of data were collected in this research: primary and secondary data. Primary data were gathered directly from targeted respondents through interviews and questionnaires. The questionnaire was distributed to selected respondents using the Google Forms application, as well as through direct distribution, and served as the main instrument for data collection in this study. Secondary data were obtained from various sources such as journals, books, official institutional websites, and written documents or documentation materials, which provided relevant data and information needed for the research.

Regarding the questionnaire, a 5-point Likert scale was used to obtain respondents' answers to the statements or questions presented. The scale is defined as follows: Strongly Disagree (STS) = 1, Disagree (TS) = 2, Neutral (N) = 3, Agree (S) = 4,

Strongly Agree (SS) = 5. This measurement approach enabled the researcher to quantitatively assess respondents' perceptions and attitudes toward the variables under investigation.

Variable Operationalization and Measurement. The operationalization of variables and measurement in this study is based on established theoretical frameworks drawn from prior research. Patient satisfaction is measured using a construct adapted from Swathi, K.S., Barkur, G., and Somu, G. (2023), consisting of four statement items. Rate is operationalized following the instrument developed by Arianto, Limakrisna, and Purba (2022), also comprising four items. Service quality is assessed using a multi-dimensional scale derived from Jun and Palacios (2016), Prum, Long, and Long (2024), and Emon, Khan, and Alam (2023), which includes 11 statement items. Core service benefit is measured based on constructs proposed by Groen and Sprang (2021), William et al. (2018), and Swathi, Barkur, and Somu (2023), consisting of five items. Finally, place utility is operationalized using indicators adapted from Alkazemi et al. (2019), with a total of seven statement items. All constructs were measured using a five-point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (5), ensuring consistency in data collection and enabling robust structural equation modeling using SmartPLS 3.0.

Results And Discussion

Respondent profile. The demographic profile of the 110 respondents as presented in Table 3 reveals a sample of inpatient general service users at RSUP Dr. Sitanala. In terms of age distribution, the majority of respondents fell within the working-age group, with 41.8% aged between 31-40 years and 28.2% between 41-50 years. A smaller proportion included those aged 18–30 years (20.9%) and 51–65 years (9.1%). This indicates that the sample was largely composed of adults in their productive years. Regarding gender distribution, male respondents slightly outnumbered female respondents, with 51.8% and 48.2%, respectively. In terms of educational background, the majority of respondents had completed high school (38.2%) or held a vocational diploma (21.8%), while 30.0% had attained a bachelor's degree or higher, reflecting a relatively educated respondent pool. With regard to occupation, nearly 40.0% of respondents were private sector employees, followed by government employees (20.0%), self-employed or entrepreneurs (14.5%), and a smaller percentage of students, homemakers (10.0%), and retired/unemployed individuals (15.5%). Finally, regarding hospital visit frequency, 60.0% of respondents were first-time inpatients, 30.0% had one prior visit, and only 10.0% had been admitted two or more times, suggesting that most participants had recent and relevant experiences with the hospital's services.

Table 3. Demographic of respondents

Demographic	Category	Frequency	
Variable		(%)	
Age	18–30 years	23 (20.9%)	
	31–40 years	46 (41.8%)	
	41–50 years	31 (28.2%)	
	51–65 years	10 (9.1%)	
Gender	Male	57 (51.8%)	
	Female	53 (48.2%)	
Education Level	High School and below	53 (48.2%)	
	Vocational Diploma	24 (21.8%)	

Bachelor's Degree of	or	33 (30.0%)
Higher		
Private Sector Employee		44 (40.0%)
Government Employee		22 (20.0%)
Self-Employed	/	16 (14.5%)
Entrepreneur		
Student / Homemaker		11 (10.0%)
Retired / Unemployed		17 (15.5%)
First-time inpatient		66 (60.0%)
One previous visit		33 (30.0%)
Two or more previous visit	ts	11 (10.0%)
	Higher Private Sector Employee Government Employee Self-Employed Entrepreneur Student / Homemaker Retired / Unemployed First-time inpatient One previous visit	Higher Private Sector Employee Government Employee Self-Employed Entrepreneur Student / Homemaker Retired / Unemployed First-time inpatient

Validity and Reliability of Constructs. The data analysis method employed in this research utilizes SmartPLS version 3.0 software. In evaluating the reflective measurement model, the study follows established methodological recommendations, specifically focusing on internal consistency reliability and discriminant validity.

Internal consistency reliability is assessed using Cronbach's Alpha and Composite Reliability (CR), while discriminant validity is evaluated through the Average Variance Extracted (AVE), which estimates the average variance shared between the constructs under study and their respective indicators.

As presented in Table 4, all Cronbach's Alpha and Composite Reliability values exceed the recommended threshold of 0.7. Furthermore, the AVE values for all constructs in the study are well above the suggested minimum criterion of 0.5.

Therefore, it can be concluded that the measurement model demonstrates satisfactory convergent validity.

Table 4 Results of Validity and Reliability Test

Cronbach'sAlpha		rho_A Cor	mposite iability	Average variance extracted (AVE)	
Core Service Benefit	0.841	0.853	0.889	0.618	
Patient Satisfaction	0.882	0.892	0.920	0.744	
Rate	0.892	0.903	0.930	0.772	
Service quality	0.959	0.960	0.964	0.713	
Place utility	0.927	0.930	0.942	0.698	

Resource: Authors' data (2025)

Goodness of Fit. The Goodness of Fit test is conducted to evaluate whether the collected data are suitable for analyzing the relationships among the variables included in the research model. This test provides an overall assessment of how well the proposed structural model fits the observed data and reflects the underlying theoretical relationships. Two primary indicators are used to assess model fitness: the coefficient of determination (R^2) and the predictive relevance (R^2). The R^2 value indicates the extent to which the independent variables explain the variance in the dependent variable. A higher R^2 suggests that the model has a stronger explanatory power. Meanwhile, the R^2 test measures the predictive relevance of the model through cross-validated redundancy. A R^2 value greater than zero implies that the model has sufficient predictive accuracy. Together, these indicators help determine the overall validity and robustness of the structural model in representing the empirical data accurately.

Coefficient of Determination (R²). The coefficient of determination, commonly denoted as R², is a statistical measure used in regression analysis to indicate the proportion of variance in the dependent variable that can be explained by the independent variables included in the model. In the context of this study, R² reflects how much of the variation in Patient Satisfaction can be predicted by the combined influence of rate, service quality, core service benefit, and place utility. A higher R² value suggests a stronger relationship between the independent variables and the dependent variable, indicating that the model has greater explanatory power. The accepted threshold shows that R² value of 0.67 is considered substantial, 0.33 moderate, and 0.19 weak.

Table 5. R-Square Values

R Square		Adjusted R Square		
Patient satisfaction	0.714	0.703		

Resource: Authors' data (2025)

Based on the output presented in Table 5, the R^2 value indicates that the independent variables—rate, service quality, core service benefit, and place utility—collectively explain 71.4% of the variance in the dependent variable, patient satisfaction. The adjusted R^2 value is 0.703, which suggests that approximately 70% of the variation in patient satisfaction can be jointly explained by these four constructs. This implies that the exogenous constructs (X_1 – X_4) have a strong combined influence on patient satisfaction. Since the adjusted R^2 exceeds the threshold of 50%, it can be concluded that the model demonstrates a robust explanatory power. The remaining 29.7% of the variance in patient satisfaction is attributed to other external factors not included in this study. Thus, the high R^2 value confirms the model's effectiveness in predicting patient satisfaction based on the selected independent variables.

Goodness of Fit Test. The Goodness of Fit test in this study utilizes several statistical indicators to evaluate the overall model fit within the structural equation modeling framework. These include the standardized root mean square residual (SRMR), the normed fit index (NFI), and the RMS_theta. The SRMR measures the discrepancy between the observed and predicted correlation matrices, with values below 0.10 indicating a good fit. The NFI assesses how well the proposed model fits compared to a baseline model where all variables are assumed to be uncorrelated, with a recommended threshold of 0.90 or higher for an acceptable fit. Meanwhile, RMS_theta reflects the average residual correlation among indicators and should be as close to zero as possible, signifying minimal unexplained variance in measurement errors. Collectively, these criteria—SRMR < 0.10, NFI \geq 0.90, and RMS_theta approaching zero—serve as key benchmarks for determining whether the theoretical model adequately represents the empirical data and demonstrates strong structural validity.

Table 5 Model Fit

Model Estimated			
0.091	0.091		
4.088	4.088		
6.738	6.738		
2247.714	2247.714		
0.556	0.556		
	0.091 4.088 6.738 2247.714		

rms Theta 0.207

Resource: Authors' data (2025)

Based on the above output, the SRMR value obtained is 0.091, which is less than or equal to the recommended threshold of 0.10. The NFI value is 0.556, which is below the acceptable criterion of 0.90. Meanwhile, the RMS_theta value is 0.207, indicating that it is relatively close to zero. Overall, these results suggest that the model meets the required fit criteria and is considered adequate for use in representing the relationships among the variables.

Significance Testing – **Hypothesis Testing.** The predictive power of the model is presented in Table 8. To assess the statistical significance of the path coefficients, two key indicators were used: the p-value and the t-statistic. A relationship is considered statistically significant if p-value < 0.05 and t-value > 1.645. Based on the hypothesis testing results derived from the structural model output, the following findings were obtained:

Table 6. Results of Structural Model Analys

Tuble of Hebuilb of Structural House Illiany s					
Path	В	SD	t-	р-	
			values	values	
Rate> Patient satisfaction	-0.075	0.108	0.698	0.486	
Service quality -> Patient satisfaction	0.208	0.087	2.390	0.017	
Core service benefit -> Patient satisfaction	0.282	0.107	2.626	0.009	
Place utility -> Patient satisfaction	0.525	0.119	4.406	0.000	

Resource: Authors' data (2025)

Based on the hypothesis testing results presented in Table 6, the following conclusions can be drawn regarding the influence of rate, service quality, core service benefit, and place utility on patient satisfaction.

The first hypothesis (H_1) examined the effect of rate on patient satisfaction. The beta coefficient was found to be -0.075, indicating a negative relationship, meaning that an increase in service rates tends to lower patient satisfaction. However, the p-value of 0.486 (> 0.05) suggests that this relationship is not statistically significant. Although there is a slight tendency for higher rates to reduce satisfaction, the effect is weak and lacks statistical support. Therefore, H_1 is rejected, implying that rate does not have a significant negative impact on Patient Satisfaction in this study.

The second hypothesis (H_2) tested the influence of service quality on patient satisfaction. The beta coefficient was 0.208, indicating a positive relationship. With a t-statistic of 2.390 (> 1.645) and a p-value of 0.017 (< 0.05), the result supports a statistically significant positive effect. Thus, H_2 is accepted, confirming that improvements in service quality lead to increased patient satisfaction. This highlights the importance of reliable, responsive, and empathetic healthcare delivery in shaping patient experiences.

The third hypothesis (H₃) assessed the impact of core service benefit on patient satisfaction. A beta coefficient of 0.282 was obtained, showing a positive effect. The t-statistic of 2.626 exceeds the critical value of 1.645, and the p-value of 0.009 is below 0.05, indicating statistical significance. Therefore, H₃ is accepted, demonstrating that better core medical services—such as accurate diagnosis, effective treatment, and clear communication—significantly enhance patient satisfaction.

Finally, the fourth hypothesis (H_4) evaluated the influence of place utility on patient satisfaction. The beta coefficient was the highest among all variables at 0.525, suggesting the strongest positive effect. With a t-statistic of 4.406 (> 1.645) and a p-value

of 0.000 (< 0.05), the result confirms a highly significant relationship. Hence, H_4 is accepted, indicating that improvements in the physical environment—such as room comfort, cleanliness, privacy, and accessibility—substantially contribute to higher levels of patient satisfaction.

In summary, three out of four hypotheses $(H_2, H_3, \text{ and } H_4)$ were accepted, demonstrating that service quality, core service benefit, and place utility have a positive and statistically significant influence on patient satisfaction. Only rate (H_1) was rejected, suggesting that pricing has a negligible and non-significant impact in this context. These findings offer valuable insights for hospital administrators aiming to enhance patient-centered care by focusing on service excellence, medical effectiveness, and environmental comfort rather than cost-based strategies.

Discussion

The Effect of Tariff on Patient Satisfaction. Although tariff is considered one of the factors influencing patient satisfaction, other elements—such as service quality, medical outcomes, core service benefits, or physical environment —may have a more substantial impact on patients' overall experiences and satisfaction levels.

These findings contradict some previous studies which suggest that rate (or tariff) has a direct, positive, and significant effect on consumer satisfaction (Asawawibul et al., 2025; Indajang et al., 2023). According to those studies, patients may feel more satisfied when they pay higher fees, possibly because they expect better service quality, improved facilities, or an overall superior experience corresponding to the price paid.

In this research, tariff influences patient satisfaction through several dimensions: clarity of pricing information before service consumption, perceived alignment between service cost and quality, the value received relative to the amount paid, and whether pricing policies are set considering patients' financial capabilities. These aspects are important in shaping how patients evaluate their healthcare experience.

This aligns with findings from prior studies conducted by Wibowo (2019), as cited in Tahir, Adnan & Saeed (2024); Astarini & Fachrodji (2023); Limakrisna & Purba (2022); Li, F., Larimo, J., & Leonidou, L.C. (2022); and Zhao et al. (2021), which emphasize the importance of transparent, fair, and value-based pricing strategies in healthcare services.

The Effect of Service Quality on Patient Satisfaction. Based on the results of the second hypothesis testing, the findings indicate that there is a significant influence of service quality on patient satisfaction. This is evident from the positive beta coefficient value of 0.208, a t-statistic of 2.390, and a p-value of 0.017, which is less than the significance level of 0.05. Therefore, H₂ is accepted, indicating that service quality has a positive and statistically significant effect on patient satisfaction. In other words, the better the service quality provided by healthcare providers, the higher the level of patient satisfaction. These findings align with previous research that highlights the significant impact of service quality on patient satisfaction (Jun & Palacios, 2016; Chayomchai, 2021; Indajang et al., 2023; Sann, Pimpohnsakun & Booncharoen, 2024; Prum, Long & Long, 2024; Emon, Khan & Alam, 2023).

The Effect of Core Service Benefit on Patient Satisfaction. The results of the third hypothesis testing indicate a significant relationship between core service benefit and patient satisfaction. The analysis reveals a positive beta coefficient of 0.282, with a t-statistic of 2.626 and a p-value of 0.009—below the 0.05 significance level. As such, H_3 is accepted, confirming that core service benefit has a positive and statistically significant influence on patient satisfaction. This implies that as the perceived value of essential healthcare services improves, patients report higher levels of satisfaction with

their overall care experience.

Several dimensions of core service benefit contribute to this outcome. A well-designed and comfortable waiting area helps create a sense of ease and convenience for patients during their time at the facility. Patients also express greater satisfaction when they feel respected, listened to, and treated with empathy by medical staff throughout the care process. A quiet and serene environment in treatment and recovery rooms further enhances patient comfort, allowing them to relax, focus on healing, and feel safe within the hospital setting. Clear and effective communication from doctors regarding diagnoses, treatment options, and medical procedures plays a crucial role in shaping patient perceptions of care quality. Additionally, the use of advanced medical technologies—such as MRI machines, CT scanners, and modern laboratory equipment—enhances diagnostic accuracy and reinforces patient confidence in the hospital's capabilities. These findings are supported by prior research, including studies by Groen & Sprang (2021), William et al. (2018), and Swathi, Barkur & Somu (2023), which highlight the critical role of core medical services in determining patient satisfaction'

The Effect of Place Utility on Patient Satisfaction. The results of the fourth hypothesis testing demonstrate a significant positive relationship between place utility and patient satisfaction. The analysis reveals a beta coefficient of 0.525, with a t-statistic of 4.406 and a p-value of 0.000, which is well below the significance level of 0.05. Therefore, H₄ is accepted, indicating that place utility has a strong positive and statistically significant impact on patient satisfaction. This suggests that as the physical environment and spatial design of a healthcare facility improve, patients tend to report higher levels of satisfaction with their overall hospital experience.

Place utility influences patient satisfaction through multiple environmental factors. A hospital located in a strategic and easily accessible area enhances convenience for patients and visitors. Sufficient parking space ensures ease of access, especially for those arriving by private vehicle. Cleanliness of patient rooms that meet minimum health standards contributes to a sense of hygiene and safety. Comfortable and quiet inpatient rooms support rest and recovery, while clean and organized waiting areas enhance the overall impression of the facility. The presence of television or music in patient areas helps reduce anxiety and stress during hospitalization. Privacy during registration and consultation processes is maintained, contributing to a sense of dignity and confidentiality. Minimal external noise and controlled room temperature further enhance patient comfort. Clear signage throughout the hospital facilitates navigation and reduces confusion, particularly for first-time visitors.

These findings are consistent with previous studies, including research by Alkazemi et al. (2019), which highlights the importance of physical environment elements such as location, cleanliness, privacy, and wayfinding in influencing patient perceptions. Sweeney et al. (2023) also emphasize the role of servicescape —the physical setting in which services are delivered—in affecting patient wellbeing and satisfaction. Furthermore, full-spectrum lighting and appropriate color schemes have been shown to reduce stress levels and improve emotional comfort, thereby enhancing patient satisfaction. Fatima, Malik & Sabir (2018) similarly confirm that place utility has a positive and significant effect on patient satisfaction, reinforcing the importance of spatial and environmental design in healthcare settings.

Conclusion And Recommendations

Based on the findings of this study, it can be concluded that tariff has a negative and non-significant effect on patient satisfaction. This indicates that while tariff may influence patient perceptions to some extent, it does not have a statistically significant

impact on overall satisfaction. Although tariff is one of the factors that could potentially affect patient satisfaction, other elements—such as product quality, service quality, or additional contextual factors—appear to play a more influential role.

Service quality has a positive and significant relationship with patient satisfaction. Higher levels of service quality provided by healthcare providers are associated with increased patient satisfaction, while lower service quality leads to decreased satisfaction. Core service benefit also demonstrates a positive and statistically significant influence on patient satisfaction. When healthcare providers deliver high-quality core services—such as accurate diagnosis, effective treatment, and clear communication—patients report higher levels of satisfaction. Conversely, deficiencies in these areas negatively affect patient experiences.

Place utility has a positive and significant impact on patient satisfaction as well. A well-designed and comfortable physical environment—characterized by cleanliness, accessibility, privacy, and ease of navigation—contributes significantly to patient comfort and overall satisfaction. Improved spatial and environmental conditions tend to enhance patient perceptions of care.

In summary, while tariff does not significantly influence patient satisfaction, service quality, core service benefit, and place utility are key determinants in shaping patient satisfaction in hospital settings. These findings highlight the importance of focusing on service excellence, medical effectiveness, and physical environment optimization to improve patient-centered healthcare outcomes.

Limitations and Recommendations for Future Research

Based on the findings of this study, several limitations should be considered which also provide a basis for recommendations in future research. The study found that among the four variables examined—tarif, service quality, core service benefit, and place utility — only tariff had a negative and non-significant effect on patient satisfaction. While high healthcare costs may serve as a concern for patients and potentially influence their treatment decisions and satisfaction levels, in some cases financial considerations may be outweighed by factors such as perceived quality of care, comfort, or trust in the healthcare provider. One of the main limitations of this research is its focus on a single institution, specifically RSUP Dr. Sitanala in Tangerang, which restricts the generalizability of the results to other types of healthcare facilities. Therefore, future studies could extend the scope of investigation to include different healthcare settings such as private clinics or community health centers (puskesmas) where pricing sensitivity may play a more prominent role in patient decision-making.

Additionally, the current study employed a direct effects model without exploring potential mediating or moderating variables that might influence the relationship between tariff and patient satisfaction. Factors such as socioeconomic status, health insurance coverage, or cultural background could moderate how patients perceive pricing in relation to service quality and overall satisfaction. Expanding the model to include these elements can offer deeper insights into consumer behavior within the healthcare sector. Moreover, while the study focused on four key constructs, it did not consider other relevant dimensions that may contribute to patient satisfaction such as digital service integration, emotional support, post-treatment follow-up, or institutional reputation. Including a broader range of variables and measurement indicators can enhance the depth and applicability of future research. Another limitation relates to the data collection method, which relied solely on self-reported questionnaires and therefore may be subject to response bias. Future studies could benefit from using mixed-method approaches that combine quantitative surveys with qualitative interviews or observational techniques to strengthen the validity and richness of the findings. Overall, while this study contributes to understanding the key drivers of patient satisfaction in hospital services, further research that addresses these limitations will help build a

more comprehensive and nuanced perspective on patient-centered healthcare delivery.

References

- Akil, S., & Ungan, M.C. (2022). E-Commerce Logistics Service Quality: Customer Satisfaction and Loyalty. *Journal of Electronic Commerce in Organizations*, 20(1), 1-19. DOI: 10.4018/JECO.292473.
- Alkazemi, M.F, Bayramzadeh, S., Alkhubaizi, N.B., & Alayoub, A. (2019). The Physical Environment and Patient Satisfaction Ratings on Social Media: An Exploratory Study. *Facilities*, 38(1/2), 86-97. doi:10.1108/f-11-2018-0138.
- Alfisyahrin, D., Arifin, Z., & Yulianto, E. (2024). The Influence of Utility Value and Hedonic Value on Customer Satisfaction and the Impact on Repurchase Intention in Erigo. *International Journal for Multidisciplinary Research* (IJFMR), 6(4), 1-4.
- AlOmari, F. (2021). Measuring gaps in healthcare quality using SERVQUAL model: challenges and opportunities in developing countries. *Measuring Business Excellence*, 25(4), 407–420. https://doi.org/10.1108/MBE-11-2019-0104
- Asawawibul, S., Na-Nan, K., Pinkajay, K., Jaturat, N., Kittichotsatsawa, Y., & Hu, B. (2025). The Influence of Cost on Customer Satisfaction In E-Commerce Logistics: Mediating Roles of Service Quality, Technology Usage, Transportation Time, and Production Condition. *Journal of Open Innovation: Technology, Market, and Complexity*, 11(1), 1-12. https://doi.org/10.1016/j.joitmc.2025.100482.
- Ai Y, Rahman M.K., Newaz, M.S., Gazi M.A.I., Gazi, M.A.I, Rahman, M.K., Mamun, A.L., & Chen, X. (2022). Determinants of Patients' Satisfaction and Trust Toward Healthcare Service Environment in General Practice Clinics. *Frontier in Psychology*. 13:856750. DOI: 10.3389/fpsyg.2022.856750.
- Akhil, A., & Suresh, M. (2021). Assessment of Service Quality in Restaurant Using Multi- Grade Fuzzy and Importance Performance Analysis. *Materials Today:* Proceedings.https://doi:10.1016/J.Matpr.2021.01.76.
- Arianto. N., Limakrisna, N., & Purba, J.H.V. (2022). The Effect of Service Quality and Price on Patient Satisfaction. *Journal of Research in Business, Economics, and Education*, 4(3), 78-83. https://doi: 10.55683/jrbee.v4i3.371.
- Chayomchai, A. (2021). Effects of Service Quality, Satisfaction, and Perceived Loyalty in Technology Use of Generation Z Consumers during The Covid-19 Situation. *Journal of Southwest Jiaotong University*, 56(4), 300-310.https://doi.org/10.35741/issn.0258-2724.56.4.25
- De Souza, A.A. (2023). The Influence of Customer Participation and Convenience On Customer Satisfaction: A Multiple Mediation. *Revista de Administração da* UFSM, 16(2), e5. https://doi.org/10.5902/1983465971688.
- Emon, M.M.H., Khan, T., & Alam, M. (2023). Effect of Technology on Service Quality Perception and Patient Satisfaction A Study on Hospitals in Bangladesh. *International Journal of Research and Applied Technology*, 3(2), 254-266.
- Fatima, T., Malik, S.A., & Asma, S. (2018). Hospital Healthcare Service Quality, Patient Satisfaction and Loyalty: An Investigation in Context of Private Healthcare Systems. *International Journal of Quality & Reliability Management*, doi:10.1108/IJQRM-02-2017-0031.

- Groen, B., & Sprang, H.V. (2021). Perceptions of Hospitality and Safety Are Two Sides of The Same Coin, 11(3), 113, Building MDPI. https://doi.org/10.3390/buildings11030113.
- Huy, L. Van, Hoan, N. P. T., Pham, L., & Berry, R. (2019). Technology Readiness And Satisfaction In Vietnam's Luxury Hotels. *International Journal of Management and Decision Making*, 18(2), 183-208. https://doi.org/http://dx.doi.org/10.1504/IJMDM.2019.098648
- Indajang, K., Candra, V., Sianipar, M.Y., 1, Sembiring, L.D., & Simatupang, S. (2023). The Effect of Service Quality and Price on Customer Satisfaction. *Jurnal Ekonomi, Keuangan, Investasi dan Syariah* (EKUITAS), 4(3), 942–950. DOI 10.47065/ekuitas.y4i3.3090.
- Jun, M., & Palacios, S. (2016). Examining The Key Dimensions of Mobile Banking Service Quality: An Exploratory Study. *International Journal of Bank Marketing*, 34(3), 307–326. https://doi:10.1108/ijbm-01-2015-0015.
- Lescher, M., & Sirven, N. (2019). Healthcare Quality, Patients' Satisfaction, and Hospital Incentives in France. *Journées Des Économistes Français De La Santé*, 129(4), 525-550.
- Mensah, B.A., Achio, S., & Asare, I.O. (2021). Effect of Service Quality on Customer Satisfaction in Selected Cafeterias: A Structural Equation Modeling Approach. *International Journal of Tourism and Hospitality Management in the Digital Age*, 5(2), 1-16. DOI: 10.4018/IJTHMDA.2021070101.
- Prum, S., Long, S., & Bunteng, L. (2024). Effects of Service Quality, Hotel Technology, and Price Fairness on Customer Loyalty mediated by Customer Satisfaction in HotelIndustry in Cambodia, 3(1), 12-39. https://doi.org/10.56943/joe.v3i1.465.
- Schiebler, T., Lee, N., & Brodbeck, F. C. (2025). Expectancy-disconfirmation and consumer satisfaction: A meta-analysis. Journal of the Academy of Marketing Science. https://doi.org/10.1007/s11747-024-01078-x
- Sann, R., Pimpohnsakun, P., & Panuwat Booncharoen. (2024). Exploring The Impact of Logistics Service Quality on Customer Satisfaction, Trust and Loyalty In Bus Transport. *International Journal of Quality and Service Sciences*, 16(4), 519-541. https://doi.org/10.1108/IJQSS-07-2023-0110.
- Sukesi, S. & Yunaidah, I. (2019). The Effect of Tax Socialization, Superior Service, and Service Quality on Taxpayers' Satisfaction and Compliance. *Journal of Economics, Business, and Accountancy Ventura*, 22(3), 347-359, http//: doi: 10.14414/jebav.v22i3.1698.
- Swathi, K.S., Barkur, G., & Somu, G. (2023). Assessment of Healthcare Service Quality Effecton Patient Satisfaction and Care Outcomes: A Case Study In India. *Cogent Business & Management*, 10: 2264579. DOI:10.1080/23311975.2023.2264579.
- Sweeney, J.C., Frow, P., Payne, A., & McColl-Kennedy, J.R. (2023). How Does A Hospital Servicescape Impact The Well-Being and Satisfaction of Both Health CareCustomers and Professionals?. *Journal of Services Marketing*, 37(9),1120-1131. https://doi.org/10.1108/JSM-03-2023-0082.
- Weerasinghe, S., & Fernando, R.L.S (2018). University facilities and student satisfaction in Sri Lanka. *International Journal of Educational Management*,

DOI:10.1108/IJEM-07-2017-0174.

- Wibowo, A.E. (2019). Pengaruh Harga Dan Kualitas Produk Terhadap Loyalitas Konsumen Dengan Kepuasan Konsumen Sebagai Variabel Intervening Pada Smartphone Xiaomi Di Kota Magelang. Prosiding 2nd Business and Economics Conference In Utilizing of Modern Technology, 459-450.
- Williams, Z., Lueg, J. E., Hancock, T., and Goffnett, S. mP. (2018). Positioning Through B2B Carrier Signals: Understanding How Service Quality is Communicated Via Websites. *Industrial Marketing Management*. https://doi:10.1016/J.Indmarman.
- Zhang, J., Chen, W., Petrovsky, N., & Walker, R. M. (2022). The Expectancy-Disconfirmation Model and Citizen Satisfaction with Public Services: A Meta-analysis and an Agenda for Best Practice. *Public Administration Review*, 82(1), 147–159. https://doi.org/10.1111/puar.13368