

Quality Care Quotient: A Holistic Examination of Outpatient Satisfaction Through Service Excellence at the National Brain Center Hospital

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Abstract

The objective of this research is to ascertain the impact of various service quality variables, namely Physical Evidence, Reliability, Responsiveness, Assurance, and Empathy, on the level of Outpatient Patient Satisfaction at the National Brain Center Hospital. This study utilizes a quantitative methodology with a descriptive design, and surveys were administered to a sample of 100 participants using a probability sampling technique known as simple random sampling. The data were obtained from a sample of 100 outpatient individuals at the National Brain Center Hospital using distributed questionnaires. The research employed various data analysis techniques, such as testing the research instrument, assessing data validity, conducting classical assumption tests, examining autocorrelation, performing multiple linear regression analysis, analyzing the coefficient of determination, and conducting hypothesis testing. The research findings suggest that the various dimensions of service quality have a collective positive impact, accounting for 89.5% of the overall influence. The remaining percentage is influenced by additional factors that fall outside the scope of this study.

Keywords: *Service Quality, Patient Satisfaction.*

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INTRODUCTION

The healthcare sector in Indonesia is experiencing robust growth, leading to heightened competition among medical entities. To remain competitive, healthcare companies must devise distinctive strategies centered around enhanced service quality to attract customers. In Indonesia, hospitals play a crucial role in delivering comprehensive health services, including inpatient, outpatient, and emergency care, as outlined in Law Number 44 of 2009. Given their significant responsibility to the community, hospitals must optimize service delivery to fulfill patients' goals of seeking and improving recovery.

The government, through the National Health Insurance (JKN) program, emphasizes the imperative for healthcare facilities, including hospitals, to provide high-quality services. In the era of intensifying competition, the healthcare industry must shift its focus to patient satisfaction to improve competitiveness. The quality of hospital services is a central element in this paradigm shift, particularly within the context of JKN. Service delivery should be tailored to achieve patient satisfaction,

identified as the desired outcome of health services. Patient satisfaction is a key indicator for evaluating the quality of health services. The large influx of patients to a hospital is seen as a positive sign, reflecting satisfactory service delivery. Patients returning for future care or recommending the hospital to others underscore the success of service delivery. Conversely, a low patient count may indicate the need for improvements in hospital services. The dimensions of customer satisfaction, including reliability, assurance, tangible evidence, empathy, and responsiveness, are integral to the implementation of health services.

In the 2007 Basic Health Research (Riskesdas), stroke emerged as the leading cause of death and disability in Indonesian hospitals. To address this, the government established the National Brain Center Hospital, specializing in comprehensive brain and nerve health services. Positioned as a role model for neurology cases in Indonesia, the hospital is committed to prioritizing patient safety, accessibility, customer satisfaction, and continuous innovation aligned with technological advancements.

Situated in East Jakarta, the National Brain Center Hospital provides inpatient, outpatient, and emergency services. As a vertical hospital under the Ministry of Health, it strives to elevate public service standards by understanding customer needs and incorporating technological advancements. By emphasizing patient safety and satisfaction, the National Brain Center Hospital aims to stand out in the competitive healthcare landscape, exemplifying a commitment to excellence in neurology care in Indonesia. The commitment to patient-centric care is underscored by the hospital's dedication to understanding and meeting patient needs. The dimensions of customer satisfaction, as identified by reliability, assurance, tangible evidence, empathy, and responsiveness, guide the hospital in providing optimal health services. In a landscape marked by the National Health Insurance program, hospitals are compelled to adapt to the evolving healthcare landscape and ensure that their services align with patient expectations.

The National Brain Center Hospital, as a specialized institution, addresses the prevalence of stroke, a significant health concern in Indonesia. The hospital's commitment to prioritizing patient safety and accessibility aligns with the broader healthcare objectives outlined in the National Health Insurance program. By continuously innovating in line with technological advancements, the hospital aims not only to meet but exceed patient expectations, setting itself apart in a competitive industry. The geographical location of the hospital in East Jakarta positions it strategically to serve a significant population. As a vertical hospital under the Ministry of Health, it operates within a framework that emphasizes the importance of understanding and meeting patient needs. This commitment is vital in a landscape where patient satisfaction is increasingly regarded as a key metric for assessing the quality of healthcare services.

In conclusion, the healthcare landscape in Indonesia is evolving rapidly, driven by growth and competition. The National Brain Center Hospital stands as a testament to the commitment to excellence in neurology care. Its emphasis on patient satisfaction, safety, accessibility, and innovation reflects the broader shifts in the healthcare industry, where adapting to patient expectations is paramount for success. As the healthcare sector continues to grow, the role of specialized institutions like the National Brain Center Hospital becomes pivotal in shaping the future of healthcare delivery in Indonesia.

METHODOLOGY

This study employs quantitative research methods to examine the impact of service quality on patient satisfaction at the National Brain Center Hospital in Indonesia. Quantitative methods, as defined by Sugiyono (2019), involve data presented in numerical form, which can be processed using mathematical or statistical techniques. The research focuses on variables, which are attributes or values subject to variation, categorized as independent and dependent variables. Independent variables, influencing the dependent variable, include Physical Evidence (X1), Reliability (X2), Responsiveness (X3), Assurance (X4), and Empathy (X5). The dependent variable is Patient Satisfaction (Y). The study's object is the National Brain Center Hospital, specializing in brain and nerve health. The population comprises patients and their families undergoing outpatient treatment at the hospital. The sample of 100 respondents is selected through purposive sampling.

Data collection involves surveys using questionnaires, with statements directed at variable indicators. A Likert scale is employed, and documentation from the hospital's annual report supplements the data. The research utilizes various data analysis techniques, starting with validity and reliability tests conducted through Statistical Products and Services Solutions for Windows (SPSS). The study also includes a normality test, multicollinearity test using Variance Inflation Factor (VIF), heteroscedasticity test, and autocorrelation test using Durbin-Watson test.

Multiple linear regression analysis examines the relationship between independent variables and patient satisfaction, represented by the equation $Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + e$. The coefficient of determination (R^2) gauges the model's explanatory power, and hypotheses are tested using F and T tests. The F-test assesses the joint influence of independent variables on the dependent variable, while the T-test evaluates the significance of individual influences. The study aims to provide comprehensive insights into the factors affecting patient satisfaction at the National Brain Center Hospital.

RESULTS AND DISCUSSION

The characteristics of the respondents in this study revealed a relatively equal distribution between male and female participants, with 53% being male and 47% female. Regarding age distribution, the majority of respondents were over 50 years old, constituting 36%, while those under 20 years old made up 6%, 21-30 years old were 23%, 31-40 years old were 14%, and 41-50 years old were 21%.

In terms of education level, the majority of outpatient respondents at the National Brain Center Hospital had an undergraduate/postgraduate education, comprising 42% of the total. High school graduates constituted 41%, while junior high school, D3 level, and elementary school graduates represented 7%, 6%, and 4% respectively. The data suggests a diverse educational background among the respondents.

Occupationally, the variation among outpatient respondents was notable. Approximately 2% of respondents did not work, while 33% were private employees, 6% were civil servants/TNI/police, and 11% were students. Additionally, 13% identified as self-employed/traders, and 35% fell into the category of other occupations, indicating a diverse range of professions among the respondents. The

dominant occupation among outpatients at the National Brain Center Hospital was categorized as "other occupations," representing 35% of the total respondents.

In the validity test, all five indicators in the study were deemed valid, signifying that the measurements conducted adhered to proper rules and standards. The validity test involved 100 respondents, and the results were compared with the recorded r-table value of 0.195. The validation of indicators ensures the accuracy and precision of the actions taken in the study.

Table 1. Validation Test Result Output

Variables	Code	Statemen t	R Count	R Table	Descri ption
Tangible / Physical Evidence	X1	X1.1	0,899	0,195	Valid
		X1.2	0,928	0,195	Valid
		X1.3	0,917	0,195	Valid
		X1.4	0,927	0,195	Valid
Reliability	X2	X2.1	0,877	0,195	Valid
		X2.2	0,849	0,195	Valid
		X2.3	0,846	0,195	Valid
Responsive ness	X3	X3.1	0,901	0,195	Valid
		X3.2	0,885	0,195	Valid
		X3.3	0,920	0,195	Valid
Assurance	X4	X4.1	0,861	0,195	Valid
		X4.2	0,818	0,195	Valid
		X4.3	0,857	0,195	Valid
Emphaty / Empathy	X5	X5.1	0,924	0,195	Valid
		X5.2	0,857	0,195	Valid
		X5.3	0,913	0,195	Valid

The reliability test conducted on various variables, including Physical Evidence or Tangible, Reliability or Reliability, Responsiveness or Responsiveness, Assurance or Assurance, Empathy or Empathy, and Patient Satisfaction, revealed that each variable exhibited a calculated value of Cronbach's alpha exceeding 0.7. This indicates a high level of internal consistency and reliability for all variables. In summary, the results affirm the reliability of the measurements, providing confidence in the accuracy and consistency of the data collected from the study participants.

Table 2. Output of Reliability Test Results

No.	Variables	Cronbach Alpha Count Value	Condition Value	Description
1	Physical Evidence or <i>Tangible</i>	0,978	0,7	Reliab le

2	Reliability	0,980	0,7	Reliability
3	Responsiveness	0,978	0,7	Reliability
4	Assurance	0,979	0,7	Reliability
5	Empathy	0,979	0,7	Reliability
6	Patient Satisfaction	0,979	0,7	Reliability

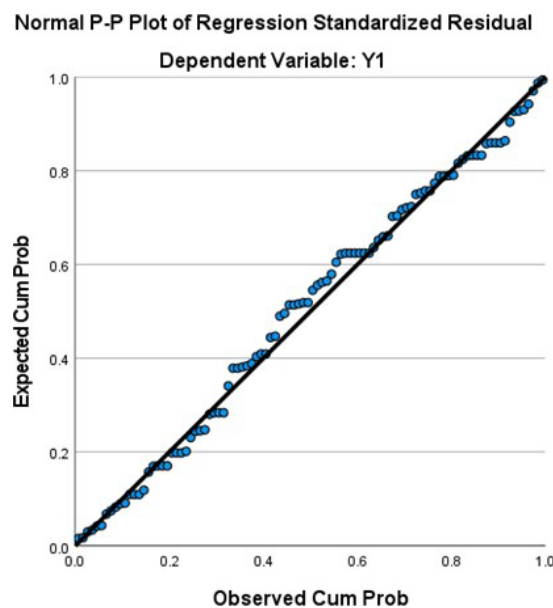


Figure 1. P-Plot Output of Normality Test

The normality test conducted in this study, as depicted in Figure 1, reveals a pattern where the data points are evenly scattered across the diagonal area and along the diagonal direction. This uniform distribution suggests that the data adheres to a normal distribution. In summary, the normality test results indicate that the data exhibits a balanced and symmetrical distribution.

The normality test, conducted using both the P-plot graph and the Kolmogorov-Smirnov test, aimed to assess the distribution of the data. According to the Kolmogorov-Smirnov test results presented in Figure 2, the Assym.Sig value (2-tailed) is 0.200. As per the established criteria, if the Asymp. Sig (2-tailed) value exceeds 0.05, it indicates that the data follows a normal distribution. In this case, with the Asymp. Sig (2-tailed) value of 0.200, it can be concluded that the data is evenly distributed and adheres to a normal distribution. Both the P-plot graph and the Kolmogorov-Smirnov test results affirm the normality of the data in this study.

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		100
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	.29201046
Most Extreme Differences	Absolute	.065
	Positive	.050
	Negative	-.065
Test Statistic		.065
Asymp. Sig. (2-tailed) ^c		.200 ^d
Monte Carlo Sig. (2-tailed) ^e	Sig.	.359
	99% Confidence Interval	Lower Bound .347
		Upper Bound .372

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

Figure 2. Output of Kolmogorov-Smirnov Test Results

The results of the multicollinearity test, as presented in Figure 3, reveal the tolerance values for each independent variable. For the Physical Evidence variable (X1), the tolerance is 0.105; for Reliability (X2), it is 0.110; for Responsiveness (X3), it is 0.108; for Guarantee (X4), it is 0.106, and for Empathy (X5), it is 0.113. Simultaneously, the variance inflation factor (VIF) values are noted, with the VIF for Physical Evidence (X1) at 9.544, Reliability (X2) at 9.071, Responsiveness (X3) at 9.266, Guarantee (X4) at 9.407, and Empathy (X5) at 8.882.

Interpreting the results, the tolerance values for all independent variables are greater than 0.1, and the VIF values are less than 10. According to these criteria, it can be concluded that there is no significant multicollinearity among the independent variables. This implies that the variables Physical Evidence, Reliability, Responsiveness, Guarantee, and Empathy are not highly correlated, and their inclusion in the analysis does not lead to issues of multicollinearity.

Coefficients ^a							
		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics
Model		B	Std. Error	Beta	t	Sig.	Tolerance VIF
1	(Constant)	-.101	.169		-.595	.553	
	X1.Tot	.456	.108	.436	4.215	<.001	.105 9.544
	X2.Tot	-.104	.117	-.090	-.894	.374	.110 9.071
	X3.Tot	.249	.108	.235	2.307	.023	.108 9.266
	X4.Tot	.197	.118	.171	1.668	.099	.106 9.407
	X5.Tot	.243	.108	.224	2.244	.027	.113 8.882

a. Dependent Variable: Y1

Figure 3. Output of Multicollinearity Test Results

In the multicollinearity test, as evident from Figure 3, the tolerance values for each independent variable are as follows: Physical Evidence (X1) at 0.105, Reliability (X2) at 0.110, Responsiveness (X3) at 0.108, Guarantee (X4) at 0.106, and Empathy

(X5) at 0.113. Additionally, the variance inflation factor (VIF) values are as follows: Physical Evidence (X1) at 9.544, Reliability (X2) at 9.071, Responsiveness (X3) at 9.266, Guarantee (X4) at 9.407, and Empathy (X5) at 8.882. It is noteworthy that all tolerance values are greater than 0.1, and all VIF values are less than 10. According to the criteria, this implies the absence of multicollinearity among the five independent variables. In summary, the results suggest that the variables in the study exhibit no significant multicollinearity.

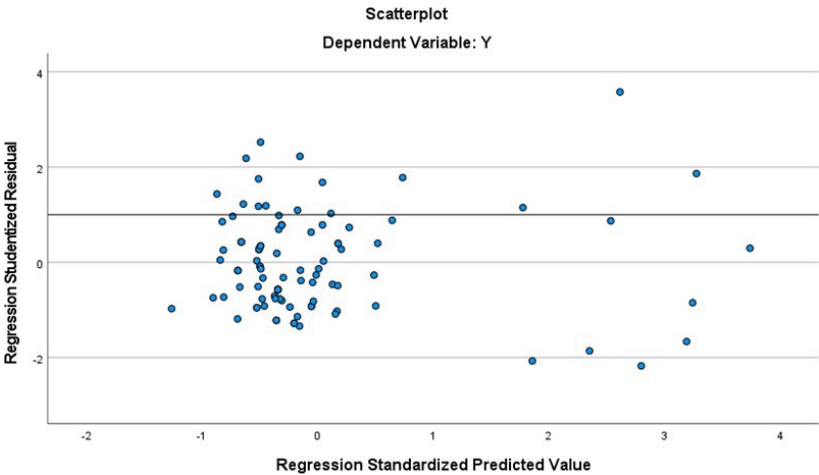


Figure 4. Scatterplot of Heteroscedasticity Test Results

The heteroscedasticity test results, as depicted in Figure 4, reveal a wide distribution of data points with no discernible pattern above or below zero on the Y-axis. This absence of a distinct pattern signifies that the regression model test output does not indicate heteroscedasticity, establishing the suitability of the data for research purposes.

Correlations						
			X1.Tot	X2.Tot	X3.Tot	X4.Tot
Spearman's rho	X1.Tot	Correlation Coefficient	.743	.662**	.726**	.714**
		Sig. (2-tailed)	.	<.001	<.001	<.001
	N	100	100	100	100	100
	X2.Tot	Correlation Coefficient	.662**	.743	.601**	.628**
		Sig. (2-tailed)	<.001	.	<.001	<.001
	N	100	100	100	100	100
	X3.Tot	Correlation Coefficient	.726**	.601**	.743	.731**
		Sig. (2-tailed)	<.001	<.001	.	<.001
	N	100	100	100	100	100
	X4.Tot	Correlation Coefficient	.714**	.628**	.731**	.743
		Sig. (2-tailed)	<.001	<.001	<.001	.
	N	100	100	100	100	100
	X5.Tot	Correlation Coefficient	.637**	.649**	.776**	.643**
		Sig. (2-tailed)	<.001	<.001	<.001	<.001
	N	100	100	100	100	100

** . Correlation is significant at the 0.01 level (2-tailed).

Figure 5. Output of Spearman's Rho Test Results

Furthermore, the table calculations confirm that none of the five variables—Physical Evidence, Reliability, Responsiveness, Assurance, and Empathy—exhibit heteroscedasticity. The sigma values for each variable, including Physical Evidence (X1) with a total sigma value of 0.743, Reliability (X2) with 0.662, Responsiveness (X3) with 0.726, Assurance (X4) with 0.714, and Empathy (X5) with 0.637, all surpass 0.05.

According to the criteria, this indicates the absence of heteroscedasticity, signifying a positive outcome. In summary, the data is deemed suitable for research as heteroscedasticity is not observed in any of the variables.

Coefficients ^a							
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.101	.169	-.595	.553		
	X1.Tot	.456	.108	.436	<.001	.105	9.544
	X2.Tot	-.104	.117	-.090	.374	.110	9.071
	X3.Tot	.249	.108	.235	.023	.108	9.266
	X4.Tot	.197	.118	.171	.099	.106	9.407
	X5.Tot	.243	.108	.224	.027	.113	8.882

a. Dependent Variable: Y1

Figure 6. Output of Multiple Linear Analysis Test Results

The regression equation is constructed from the table's calculated values, yielding a constant value (α) of -0.101 and coefficients for Physical Evidence (X1) at 0.456, Reliability (X2) at -0.104, Responsiveness (X3) at 0.249, Guarantee (X4) at 0.197, and Empathy (X5) at 0.243. The formulated equation,

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + \epsilon$$

$Y = -0.101 + 0.456 X_1 + -0.104 X_2 + 0.249 X_3 + 0.197 X_4 + 0.243 X_5 + \epsilon$, illustrates that when other variables are held constant, patient satisfaction remains constant at -0.101. Positive coefficients for Physical Evidence, Responsiveness, Guarantee, and Empathy indicate that increases in these factors positively influence patient satisfaction. Conversely, the negative coefficient for Reliability implies that as reliability increases, patient satisfaction decreases. These coefficients offer insights into the varying impacts of different service quality dimensions on patient satisfaction at the National Brain Center Hospital.

The coefficient of determination, also known as R-squared, assesses the extent to which the dependent variable can be elucidated by the independent variables. R-squared ranges from 0 to 1, with a higher value indicating a better fit. In this analysis, the results of the R-squared analysis are crucial for understanding the explanatory power of the model. Unfortunately, the specific R-squared value is not provided in the text. Nevertheless, a high R-squared value would signify that a significant proportion of the variation in patient satisfaction at the National Brain Center Hospital can be attributed to the combined influence of the independent variables, namely Physical Evidence, Reliability, Responsiveness, Guarantee, and Empathy. This information aids in evaluating the overall effectiveness of the model in capturing the dynamics of patient satisfaction based on the selected service quality dimensions.

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.946 ^a	.895	.889	.300

a. Predictors: (Constant), X5.Tot, X4.Tot, X1.Tot, X2.Tot, X3.Tot

b. Dependent Variable: Y1

Figure 7. Output of R Square Analysis Results

The total coefficient of determination (R-Square) in the output results is observed to be 0.895, with an adjusted R-Square of 0.889. This value signifies the collective impact of the Physical Evidence, Reliability, Responsiveness, Assurance, and Empathy variables on patient satisfaction (KK). The coefficient of determination (KD) is calculated using the formula $KD = r^2 \times 100\%$, $KD = 0.895 \times 100\%$, $KD = 0.895 \times 100\% = 89.5\%$. This implies that 89.5% of the variance in patient satisfaction can be explained by the combined influence of the specified variables. The remaining 10.5% suggests that other factors beyond the scope of this study contribute to patient satisfaction at the National Brain Center Hospital.

The calculated result of 89.5% indicates that the patient satisfaction variable (Y) is significantly explained by the variables of Physical Evidence, Reliability, Responsiveness, Assurance, and Empathy. In other words, these service quality dimensions contribute substantially to the understanding of patient satisfaction at the National Brain Center Hospital. The remaining 10.5% suggests that factors outside the scope of this study, not considered in the model, also play a role in influencing patient satisfaction. This insight underscores the comprehensive nature of patient satisfaction determinants and highlights the need for further exploration of external variables impacting the healthcare experience.

The F-test results, as depicted in Table 7, involve determining the critical F-table value using a significance level of 0.05. With df1 (degrees of freedom for the numerator) equal to the number of variables minus 1 ($5 - 1 = 4$) and df2 (degrees of freedom for the denominator) equal to $n - k - 1$ ($99 - 5 - 1 = 93$), the calculated F-table value is 3.10. The hypotheses tested are as follows: H0 states that there is no influence between the independent variables and the dependent variable, while H1 suggests there is an influence between them.

The decision rule for accepting or rejecting the null hypothesis (H0) is based on whether the calculated F value is greater than the F table value. Specifically, if the calculated F value exceeds the critical F table value, H0 is rejected, and H1 is accepted. Conversely, if the calculated F value is less than the critical F table value, H0 is accepted, and H1 is rejected. Moreover, a significance level (Sig.) less than 0.05 leads to rejecting H0 and accepting H1, while a significance level greater than 0.05 results in the acceptance of H0 and the rejection of H1.

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	71.718	5	14.344	159.719	<.001 ^b
	Residual	8.442	94	.090		
	Total	80.160	99			

a. Dependent Variable: Y1

b. Predictors: (Constant), X5.Tot, X4.Tot, X1.Tot, X2.Tot, X3.Tot

Figure 8. F Test Results

Based on the calculations, the F-test yields a value of 159.719 with a significance level (Sig.) of 0.001. In interpreting these results, it is evident that the calculated F value is greater than the critical F table value, and the significance level is less than 0.05. Consequently, the null hypothesis (H0) is rejected, and the alternative hypothesis (H1) is accepted. This implies that there is a simultaneous positive effect of the independent variables on the dependent variable. The F-test

results provide statistical evidence supporting the notion that the combined influence of Physical Evidence, Reliability, Responsiveness, Assurance, and Empathy significantly affects Patient Satisfaction at the National Brain Center Hospital.

Coefficients ^a					
		Unstandardized Coefficients		Standardized Coefficients	
Model		B	Std. Error	Beta	t
1	(Constant)	-.101	.169		-.595
	X1.Tot	.456	.108	.436	4.215
	X2.Tot	-.104	.117	-.090	-.894
	X3.Tot	.249	.108	.235	2.307
	X4.Tot	.197	.118	.171	2.768
	X5.Tot	.243	.108	.224	2.244

a. Dependent Variable: Y1

Figure 9. T Test Results

To determine the critical t-table value, with a significance level of 5% (0.05) and degrees of freedom (df) based on the data of 100 respondents, the value is found to be 1.983. The hypotheses tested are as follows: H0 posits no influence between the independent variable and the dependent variable, while H1 suggests an influence between them.

The decision rule for accepting or rejecting the null hypothesis (H0) is based on whether the calculated t value is greater than the critical t-table value. If the t count is greater than the t-table value, H0 is rejected, and H1 is accepted, indicating that the independent variable has an influence on the dependent variable. Additionally, a significance level (Sig.) less than 0.05 leads to rejecting H0 and accepting H1, signifying that the independent variable has a significant effect on the dependent variable.

The T-test results will provide insight into the individual impact of each independent variable—Physical Evidence, Reliability, Responsiveness, Assurance, and Empathy—on Patient Satisfaction at the National Brain Center Hospital. The study's findings reveal significant insights into the factors influencing patient satisfaction at the National Brain Center Hospital. Notably, the Physical Evidence variable demonstrates a considerable impact on patient satisfaction, as evidenced by a t value of 4.215, surpassing the critical t-table value. This outcome suggests that the implemented Physical Evidence practices at the hospital significantly contribute to outpatient satisfaction. Contrarily, the Reliability variable exhibits no substantial effect on patient satisfaction, indicated by a t value of -0.894, falling below the critical t-table value. Consequently, the study concludes that the reliability practices at the National Brain Center Hospital do not significantly influence outpatient satisfaction.

In contrast, the Responsiveness variable shows a positive effect on patient satisfaction, supported by a t value of 2.307 exceeding the critical t-table value. This implies that the hospital's responsiveness significantly contributes to outpatient satisfaction. Similarly, the Guarantee variable demonstrates a significant impact on patient satisfaction, with a t value of 2.768 surpassing the critical t-table value. This suggests that the guarantee practices at the hospital significantly influence outpatient

satisfaction. The Empathy variable also emerges as a significant factor affecting patient satisfaction, evidenced by a t value of 2.244, exceeding the critical t-table value. Therefore, the study rejects the null hypothesis and accepts the alternative hypothesis, affirming the substantial influence of empathy on outpatient satisfaction.

Moreover, the combined effect of service quality variables (Physical Evidence, Reliability, Responsiveness, Assurance, and Empathy) on patient satisfaction is supported by the F-test, with a calculated f value of 159.719 surpassing the critical f-table value of 3.10. This reinforces the hypothesis that service quality collectively plays a significant role in influencing outpatient satisfaction at the National Brain Center Hospital. The study highlights the importance of these service quality factors in shaping a positive healthcare experience for outpatients.

CONCLUSION

The descriptive analysis of service quality dimensions, including Physical Evidence, Reliability, Responsiveness, Assurance, and Empathy, collectively falls within the "good" category. Notably, patients at the National Brain Center Hospital express high satisfaction with the Physical Evidence dimension, indicating contentment with aspects such as the cleanliness and comfort of the waiting room.

However, the dimension of Responsiveness exhibits a lower average score, suggesting that some patients are dissatisfied with the speed of service during outpatient registration. Specifically, the statement item "the registration section serves quickly" highlights an area where improvements can enhance patient satisfaction.

In summary, the analysis reveals that patient satisfaction levels vary across service quality dimensions at the National Brain Center Hospital. The Physical Evidence dimension contributes positively to patient satisfaction, showcasing the hospital's success in providing a comfortable and clean environment. Conversely, the Reliability dimension does not significantly influence patient satisfaction. Despite the lower average score in Responsiveness, this dimension still exhibits a positive effect on patient satisfaction, emphasizing the importance of addressing issues related to the speed of outpatient registration. Additionally, the Guarantee and Empathy dimensions both positively impact patient satisfaction. This comprehensive understanding of patient satisfaction across different dimensions provides valuable insights for enhancing the overall outpatient experience at the National Brain Center Hospital..

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