



THE EFFECT OF TANGIBLE ON HEMODIALYSIS PATIENT SATISFACTION

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ABSTRACT

The incidence of kidney failure disease is increasing in Indonesia, leading to a growing number of patients undergoing hemodialysis therapy. Improving healthcare quality is essential to minimize the impact of physical and psychosocial changes in hemodialysis patients. This study aims to investigate the effect of tangible on hemodialysis patient satisfaction. The location and year of the study is at Rumah Sakit Haji Jakarta in 2022. The writer believes that there is a positive effect of tangible towards hemodialysis patient satisfaction at Rumah Sakit Haji Jakarta. Method: This study is a quantitative study with a cross-sectional design. Patients receiving hemodialysis at Rumah Sakit Haji Jakarta made up the study's population. The sample of this research was obtained by using a consecutive sampling technique with a sample of 118 hemodialysis patients in Rumah Sakit Haji Jakarta. Data collection was done using a questionnaire with one month as the time for data collection. The data analysis performed is a simple linear regression analysis using SPSS 26. On a scale of 4, the description analysis shows that the tangible score is an average of 3,37; meanwhile, the dimension of patient satisfaction has the highest score of interpersonal behavior with an average of 3,33, and the lowest score is the financial aspect with an average of 3,09. The study found that tangible gives positive and significant effect on

hemodialysis patient satisfaction at Rumah Sakit Haji Jakarta. It is expected that the outcome of this study will become a reference and guide for healthcare providers in increasing patient satisfaction.

Keywords: Tangible, Patient Satisfaction, Haemodialysis, Hospital Management

ABSTRAK

Kejadian penyakit gagal ginjal semakin meningkat di Indonesia, yang mengakibatkan peningkatan jumlah pasien yang menjalani terapi hemodialisis. Peningkatan kualitas pelayanan kesehatan sangat penting untuk meminimalkan dampak perubahan fisik dan psikososial pada pasien hemodialisis. Penelitian ini memiliki tujuan untuk mengetahui pengaruh tangible terhadap kepuasan pasien yang menjalani terapi hemodialisis. Lokasi dan tahun penelitian adalah di Rumah Sakit Haji Jakarta pada tahun 2022. Penulis meyakini bahwa terdapat pengaruh positif dari tangible terhadap kepuasan pasien hemodialisis di Rumah Sakit Haji Jakarta. Metode: Studi ini adalah penelitian kuantitatif dengan desain cross-sectional. Populasi yang diteliti adalah pasien hemodialisis di Rumah Sakit Haji Jakarta. Sampel studi ini diambil secara consecutive sampling, terdiri dari 118 pasien hemodialisis di Rumah Sakit Haji Jakarta. Pengumpulan data dilakukan dengan menggunakan kuesioner dengan waktu satu bulan sebagai waktu pengumpulan data. Pengolahan data dilakukan dengan menggunakan analisis regresi linier sederhana menggunakan perangkat lunak SPSS versi 26. Pada skala 4, analisis deskripsi menunjukkan bahwa skor tangible adalah rata-rata 3,37; sementara itu, dimensi kepuasan pasien yang memiliki skor tertinggi adalah perilaku interpersonal dengan rata-rata 3,33, dan skor terendah adalah aspek keuangan dengan rata-rata 3,09. Penelitian ini menemukan bahwa tangible berpengaruh positif dan signifikan terhadap kepuasan pasien hemodialisis di Rumah Sakit Haji Jakarta. Diharapkan hasil penelitian ini dapat menjadi panduan dan acuan bagi penyedia layanan kesehatan dalam meningkatkan kepuasan pasien.

Kata kunci: Bukti Fisik, Kepuasan Pasien, Hemodialisis, Manajemen Rumah Sakit

INTRODUCTION

Enhancing the level of hospital service quality is a major global priority for the healthcare industry, aiming to provide streamlined, high-quality care that meets patient needs efficiently, quickly, and accurately at an affordable cost (Sugiharto et al., 2019). The Law of the Republic of Indonesia No. 44 of 2009 outlines the objectives of hospitals, including facilitating public access to health services, ensuring patients and community safety, maintaining hospital service standards, and providing legal certainty to all stakeholders (Kementerian Kesehatan Republik Indonesia, 2020). Patient satisfaction, which directly mirrors the quality of healthcare services received, is affected by various factors such as interpersonal behavior, technical quality, accessibility, financial aspects, and the physical environment of care (Imaninda & Azwar, 2016).

Service quality is a crucial determinant of a hospital's success, where the level of service received is assessed against expected standards (Hoffman & Bateson, 2006). High service quality increases patient satisfaction, encouraging loyalty and repeat visits (Kotler et al., 2019). Service quality is a fluid state concerning products, services, individuals, procedures, and surroundings that can either meet or surpass patient expectations (Goetsch & Davis, 2019). The service quality model by Parasuraman et al. (1988) includes tangible, assurance, responsiveness, empathy, and reliability, which individually and collectively impact patient perceptions and satisfaction levels (Setyawan et al., 2019). Indonesia faces challenges and opportunities in healthcare enhancement due to limited resources, decentralization policies, and a growing emphasis on quality (Hasan & Putra, 2018).

The increasing incidence of kidney failure disease has led to more patients undergoing hemodialysis treatment. The 2020 Indonesian Renal Registry (IRR) data stated that 130,931 individuals in Indonesia received hemodialysis treatment (IRR, 2020). The recommendation for hemodialysis is 10-12 hours per week, is a medical procedure that uses a device to regulate and monitor blood flow, blood pressure, and vital signs and provides information on the amount of fluid removed. A patient's lifelong dependence on a hemodialysis machine with regular and scheduled therapy leads to changes

in roles, work, finances, and social life. These changes can be stressful and may cause anxiety (Huriani et al., 2019). It is essential to improve access to high-quality health services for hemodialysis patients to minimize the impact of physical and psychosocial changes experienced by hemodialysis patients.

Tangible, the ability and appearance of infrastructure and the environment around it is one aspect assessed in health service quality (Yucesan & Gul, 2020). The physical facilities provided by the hospital include the appearance of the hospital building, the condition of the toilets, parking lots, treatment rooms, waiting rooms, payment counters, and emergency aids. Patients also feel the physical facilities of the hospital building and the politeness and good appearance of the medical staff and employees on duty while undergoing treatment. Silitonga et al. (2022) found that tangible influenced hemodialysis patient satisfaction positively at the Hospital of Datu Beru Takengon in 2020. Research conducted by Mahmud (2022) also reported similar results, showing the positive and significant effect of tangible on patient satisfaction at Lamaddukelleng Hospital. However, Rustanto (2019) concluded that tangible factors do not affect patient satisfaction in the installation of Hemodialysis significantly. The results of previous studies differed because service quality in hospitals is a unique phenomenon, where a person can perceive a service quality differently based on their experiences with the service (Aladwan, 2021; Krismanto & Irianto, 2019; Pangerapan et al., 2018; Sumadi, 2021).

Rumah Sakit Haji Jakarta aims to become an internationally recognized Islamic Teaching Hospital by 2026. Its mission includes providing Islamic-based high-quality healthcare services, education, and research. The hospital provides hemodialysis services, including regular and emergency hemodialysis, treatment for HBsAg-positive patients, peritoneal dialysis, doctor consultations, temporary CDL installation and removal, and hemodialysis for COVID patients. The author emphasizes that there has been no research on the impact of tangible at Rumah Sakit Haji Jakarta on hemodialysis patient satisfaction. As a result, the author was interested in investigating "The Effect of Tangible on Hemodialysis Patient Satisfaction at Rumah Sakit Haji Jakarta." The author used a questionnaire as the research instrument and conducted multiple linear regression analysis using SPSS 26 to examine whether tangible impacts hemodialysis patient satisfaction at Rumah Sakit Haji Jakarta. The author hypothesized that tangible have a positive and significant effect on hemodialysis patient satisfaction at Rumah Sakit Haji Jakarta.

METHODS

1. Participant characteristics and research design

This cross-sectional study utilized a comparative analytic technique with a quantitative approach. In this research, the population were all Rumah Sakit Haji Jakarta hemodialysis patients, totaling 145 patients. The selection process for the sample was based on research criteria and sampling techniques. Inclusion criteria involved patients who had undergone hemodialysis therapy at Rumah Sakit Haji Jakarta and were willing to participate in the research. The ethical approval for this investigation was granted by the Research Ethics Committee of the Faculty of Medicine, UIN Syarif Hidayatullah Jakarta (B-073/F12/KEPK/TL.00/11/2022). All participants in this study agreed to take part using informed consent. Participants were briefed on the study's objectives, the procedures involved, and their right to discontinue participation in the study at any moment without facing any consequences. Confidentiality and anonymity of study participants were preserved at all times.

2. Sampling procedures

In this study, consecutive sampling was used, which involved including all subjects who met the selection criteria until the required number of subjects was reached. The study's sample size for respondents was calculated using the Slovin formula., which indicated a minimum sample of 106 respondents. After screening patients at the hemodialysis facility of Rumah Sakit Jakarta, the research obtained 118 respondents.

3. Measures and covariates

The study used primary data. The author adopted a measurement tool in the form of a close-ended and open-ended questionnaire from KKP-2017 (Imaninda & Azwar, 2016) to measure patient satisfaction and ServQual (Parasuraman et al., 1988) to measure service quality. In this study, patient satisfaction was the dependent variable, consisting of ten items and five dimensions (interpersonal behavior, technical quality, access, finance, and physical environment). On the other hand, tangible was the independent variable, consisting of seven items.

4. Data analysis

Before data collection, the participants were informed about the study's purpose and were requested to complete a consent form to confirm their willingness to participate. Then, the participants filled out a paper-based questionnaire, with or without assistance from the data collector. The questionnaire of this study consists of three sections. The first section gathered demographic data such as age, gender, education level, occupation, duration of hemodialysis treatment, frequency of hemodialysis therapy per week, and payment scheme. The second section measured the level of patient satisfaction regarding the quality of service at Rumah Sakit Haji Jakarta. Participants selected options based on the statements provided. They answered each item on a 4-point Likert scale, representing a score of 1) strongly disagree, 2) disagree, 3) agree, and 4) strongly agree to avoid neutral responses or central tendency.

In the third section of the questionnaire, respondents were asked to provide suggestions for improving the quality of service for hemodialysis patients at Rumah Sakit Haji Jakarta. They were given a blank space to share their opinions freely. Beforehand, the validity and reliability of the instrument were tested. Content validity was established through examination by hospital management experts, and construct validity was assessed, confirming the validity of all questionnaire items. The instrument's reliability was confirmed with a Cronbach's Alpha test score of 0.91, demonstrating its validity and reliability as a measuring tool for this study.

The data collected went through several stages of processing, including cleaning (selecting necessary and unnecessary components), editing (checking data completeness), coding (processing data into codes in Excel for easier entry), and entry (analyzing the processed data using a software application). The data in this study was analyzed using SPSS 26 the effect of service quality on hemodialysis patient satisfaction at Rumah Sakit Haji Jakarta was assessed through multiple linear regression analysis.

RESULTS AND DISCUSSION

Rumah Sakit Haji Jakarta is one of the Hajj Hospitals in Indonesia besides Rumah Sakit Haji Surabaya, Rumah Sakit Haji Medan, dan Rumah Sakit Haji Ujung Pandang. Rumah Sakit Haji Jakarta was built as a form of the idea of the hujjaj or Hajj brotherhood to commemorate the Al-Muaisim Mina tunnel tragedy, which claimed the lives of more than 600 Indonesian pilgrims that occurred in 1990. Rumah Sakit Haji Jakarta was inaugurated on November 12, 1994 by Mr. Suharto, who at that time was President of the Republic of Indonesia.

Rumah Sakit Haji Jakarta has a vision, namely "Making an Islamic Teaching Hospital and the best in service with international standards in 2026." The missions of the Jakarta Hajj Hospital are: 1) Organizing good hospital governance; 2) Improving the health status and quality of life of the community in an accountable manner; 3) Carry out Islamic health services, education and research, plenary, and quality; 4) Prepare and improve human resources and other resources to achieve world-class hospitals; 5) Develop a reliable hospital management information system.

1. Descriptive Analysis

Table 1
Descriptive Analysis of Tangible Variable

	Average	Total	Median	Mode	Max	Min	Standard Deviation	Variance
Tangible	3,37	2818	3	4	4	1	0,64	0,41

Tangible received an average rating of 3.37, achieving a total score of 2818, with a standard deviation of 0.64 and a variance of 0.41.

Table 2
Descriptive Analysis of Patient Satisfaction Variable

	Average	Total	Median	Mode	Max	Min	Standard Deviation	Variance
Interpersonal Behaviour	3,33	785	3	3	4	1	0,66	0,44
Technical Quality	3,29	776	3	3	4	1	0,68	0,46
Access	3,32	783	3	3	4	1	0,72	0,52
Finance	3,09	729	3	3	4	1	0,76	0,58
Physical Environment	3,17	749	3	3	4	1	0,81	0,66

Table 2 shows that the interpersonal behaviour aspect obtained the highest total score of 785 with 3.33 as the average value and 0.66 as the standard deviation value. The technical quality aspect obtained a total score of 776 with a mean value of 3.29 and a standard deviation value of 3.29. The third aspect, namely the aspect of access, obtained a total score of 783, with a mean value and standard deviation reaching 3.32 and 0.72 respectively. The financial aspect has a total score of 729 with a mean value of 3.09 and a standard deviation value of 0.76. The last aspect, namely the aspect of the physical environment, obtained a total score of 749 with an average score of 3.17. This aspect has the highest standard deviation value, namely 0.81. Furthermore, when viewed from the maximum score and minimum score obtained for each aspect, it is known that the five aspects studied obtained 4 as the maximum score and 1 as the minimum score. Similarly, the maximum score and minimum score, median and mode obtained by the five aspects studied also showed the same value, namely 3.

Classic Assumption Test

Table 3
Normality Test Result

	N	Kolmogorov-Smirnov Z	Asymp. Sig. (2-tailed)
X	118	1,122	0,261

Table 3 shows that the p-value of the tangible variable is 0.261 which indicates that the distribution is normal because it has a p-value > (0.05).

Table 4

Linearity Test Result

Y*X	Linearity deviation	Sig.
		0,421

Based on the results of the linearity test shown in table 4, it is known that variable X has a linear relationship with variable Y because it obtains a significance value greater than 0.05, which is 0.4

Table 5
Heteroscedasticity Test Result

X	Sig.
	0,134

Based on the results of the analysis performed, it is known that the X variable studied has a significance value greater than 0.05, namely 0.134. This shows that there are no symptoms of heteroscedasticity.

2. Hypothesis Testing

Table 6
Simple Linear Regression Test Result

Hypothesis Testing	Result				Information
	t-statistics	Significance	Correlation	Determination	Hypothesis
The effect of tangible (X) on patient satisfaction (Y)	10,089	0,000	0,684	46,7%	Ha accepted

According to Table 6, it is evident that the tangible factor has a notable positive impact on patient satisfaction., where the correlation test results between the two are 0.684, which means the relationship between the two is strong. The results of the determination test between tangible and patient satisfaction were 46.7%, which means that 46.7% of patient satisfaction variables can be explained by tangible variable. A significance value of 0.000 was observed, which is less than the conventional threshold of 0.05. Therefore, it can be inferred that the tangible variable (X) influences the patient satisfaction variable (Y). The t value of 10.089 exceeds the critical t-value of 1.980 from the table. Thus, it can be concluded that the tangible variable (X) significantly influences the patient satisfaction variable (Y).

The results of the regression analysis performed showed that there was a significant positive effect between tangible variable on patient satisfaction variable. This means that the better the value of the independent variable in the form of tangible studied, the better the level of satisfaction felt by hemodialysis patients at Rumah Sakit Haji Jakarta. This is in line with the results of the study by Silitonga et al (2022) which showed that tangible has an effect on the satisfaction of hemodialysis patients at RSUD Datu Beru Takengon in 2020. Research conducted by Mahmud (2022) showed that there was an effect of tangible on patient satisfaction at Lamaddukelleng Hospital in 2017. In addition, research by Umoke et al. (2020) showed results, namely that tangible has an effect on outpatient satisfaction at public hospitals in the Ebony region, Nigeria.

LIMITATION OF THE STUDY

The author believes that there are still limitations in this study. These limitations may come from external factors or internal factors. The limitations in this study are the limited research locations which only include one hospital in Jakarta and the limited variables studied in relation to the level of patient satisfaction. The results of this study are expected to be a reference and guideline for health service providers in their efforts to increase patient satisfaction.

CONCLUSIONS AND SUGGESTIONS

Based on the results of data analysis and discussion that has been presented, it can be concluded that there is a positive and significant effect between tangible (X) on patient satisfaction (Y). Based on the conclusions obtained from the results of this study, there are implications that the hospital's ability to provide physical facilities is something that the hospital needs to pay attention to in its efforts to increase patient satisfaction. By optimizing the performance of health service providers in this regard, patient satisfaction will also be optimized. The results of this study can be used as reference material for hospitals to carry out evaluations or continuous improvement programs to improve patient satisfaction levels by identifying the level of hospital performance, especially those related to the aspects discussed.

Based on the results of the research, there are several suggestions such as follows. Further research is expected to be able to cover more factors and aspects involved in providing better health services. These other aspects include service performance, communication skills, additional features, and so on. This study focuses on hemodialysis patients. Future research is expected to involve more samples, in order to be able to provide a more realistic picture of the state of a health care institution in terms of the level of patient satisfaction. Researchers can then add samples of patients who require extra services and facilities such as cancer patients, heart patients, patients who require surgery, and pediatric patients. The results of this study are expected to be a reference and guideline for health service providers in their efforts to increase patient satisfaction. This study recommends that health care providers pay attention to tangible as an important factor in increasing patient satisfaction.

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