

# INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY: APPLIED BUSINESS AND EDUCATION RESEARCH

2024, Vol. 5, No. 4, 1331 – 1345

<http://dx.doi.org/10.11594/ijmaber.05.04.18>

---

## Research Article

### Service Quality, Patient Satisfaction, and Improvement Indicators

Silvestre P. Mabini Jr., Lalaine O. Narsico, Peter G. Narsico\*

College of Management, Business, and Accountancy, Cebu Institute of Technology-University, Cebu City, 6000, Philippines

---

#### Article history:

Submission April 2024

Revised April 2024

Accepted April 2024

#### \*Corresponding author:

E-mail:

[petergnarsico@gmail.com](mailto:petergnarsico@gmail.com)

#### ABSTRACT

The study delves into the intricate symbiotic relationship between service providers and customers, which becomes increasingly complex amid competitive landscapes. It counts on the service provider's capability to deliver exceptional service that fosters a unique customer satisfaction that not only encourages repeat patronage but also prompts referrals to others. The study sought to determine the presence of a correlation between the quality of service delivered by medical staff and patients' satisfaction levels by using the SERVQUAL model with 22 slightly modified indicators spread across five service quality dimensions that include reliability, assurance, tangibles, empathy, and responsiveness. The research was conducted within the confines of a hospital in Cebu. 314 patients consented to participate in the data collection process. A survey was conducted to gather data on service delivery and another was conducted for patient satisfaction. Multiple regression analysis and Dublin-Watson test were used to compute correlations and Analysis of Variance (ANOVA) was used to compute the significance of difference. The following items are the findings. The five dimensions of service quality are above average and the service quality rating in its entirety was 3.756. Patient satisfaction was above average with a rating of 3.131. All the service quality dimensions were statistically correlated with patient satisfaction. Service quality in its entirety was statically correlated with patient satisfaction. There was a significant difference between service quality in its entirety and patient satisfaction. Finally, the ratings suggest that improvements were needed in all service dimensions, and because of high patient expectations improvements are both necessary and urgent.

**Keywords:** *Service Quality, Patient Satisfaction, Customer Loyalty, SERVQUAL model, Medical Service Provider*

---

#### How to cite:

Mabini Jr., S. P., Narsico, L. O., & Narsico, P. G. (2024). Service Quality, Patient Satisfaction, and Improvement Indicators. *International Journal of Multidisciplinary: Applied Business and Education Research*. 5(4), 1331 – 1345. doi: 10.11594/ijmaber.05.04.18

## Introduction

The study delves into the intricate symbiotic relationship between service providers and customers, which becomes increasingly complex amid competitive landscapes. With a plethora of alternative options available to customers, service providers face the arduous task of distinguishing themselves to attract and retain clientele. A favorable scenario arises when service providers deliver exceptional service, fostering a unique customer satisfaction that not only encourages repeat patronage but also prompts referrals to others. Research in various industries underscores the correlation between service quality and customer satisfaction, highlighting its pivotal role in fostering customer loyalty. Studies in the cellular phone industry (Thapa & Yogi, 2024), community pharmacies (Carter et al., 2023), travel sector (Octavia et al., 2024), and logistics services (Prastyorini et al., 2023) consistently demonstrate the strong linkage between service quality and customer satisfaction. Moreover, research in different sectors, including cutting tool manufacturing (Supriyanto & Dahlan, 2024), electrical engineering (Ihdina Gustina et al., 2023), community pharmacies (Gül et al., 2023), the restaurant industry (Cankül et al., 2024); (Merdekawati, 2023), and green practices (González-Viralta et al., 2023), affirm the positive impact of customer satisfaction on loyalty, delineating a clear cause-effect relationship. Recognizing the interplay of various variables, the study focuses on elucidating the relationships among service quality, customer satisfaction, and loyalty, with a specific emphasis on medical staff's service quality and patient satisfaction.

In line with medical staff service quality, there exists a unique and personal kind of challenge. A study by Schattner (2023) revealed that in some contexts the experience of care may be highly consequential in improving health outcomes. With medical care, some unintentional barriers could add pressure on healthcare providers. A study on quality integrated care for adolescent depression revealed that barriers include limited access to expertise for assessment and diagnosis, long wait times for treatment, and shortages of clinicians (Sarakbi et al., 2024). Additionally, medical

care has to continuously transform with knowledge development. A study by Horachuk et al. (2023) asserts that recent scientific and educational activities had to be added to traditional medical practices. Moreover, in medical care, nursing plays a central role in ensuring overall patient satisfaction throughout their hospital stay, from admission to discharge (Christi et al., 2024). A study by Singh & Kaur (2023) asserts that nursing care should be delivered to patients within a framework characterized by respect, kindness, and courtesy, with a particular emphasis on the significance of effective communication. In the medical service provider where this framework was seen in action highly satisfied customers would recommend the hospital to their families and friends.

Drawing from an established model such as SERVQUAL (Parasuraman et al., 1988), the study assesses service quality across dimensions like reliability, assurance, tangibles, empathy, and responsiveness. Studies conducted in healthcare settings by Arif et al. (2023), Damayanthie et al. (2024), and Guspianto et al. (2023) corroborate the significance of service quality in enhancing patient satisfaction. Furthermore, the study sought to determine the presence of a correlation between the quality of service delivered by medical staff and patients' satisfaction levels. The insights gleaned from this research will serve as a foundation for enhancing service quality to elevate patient satisfaction levels and ultimately cultivate greater customer loyalty.

## Research Questions

The study aimed to determine areas for improvement in the service quality of a hospital in Cebu using the SERVQUAL model and patients' satisfaction with the services received. Specifically, the study sought to answer the following questions:

1. What were the ratings of the five dimensions of service quality based on the SERVQUAL model and the rating for service quality as a whole?
2. What was the rating for the patient's satisfaction with the services received from the hospital?

3. Were there correlations between each service quality dimension based on the SERVQUAL model and the patient's satisfaction with the services received from the hospital?
4. Was there a correlation between service quality as a whole and the patient's satisfaction with the services received from the hospital?
5. Was there a significant difference between service quality as a whole and the patient's satisfaction with the services received from the hospital?
6. Drawing from the study's findings, what are the implications for the improvement of the service quality of the hospital focused on the study?

## Methods

The research was conducted within the confines of a hospital in Cebu, which graciously provided data and statistical analyses under conditions of anonymity. Employing random sampling techniques, we mitigated selection bias, thereby bolstering the generalizability of our findings. Through concerted efforts, 314 patients consented to participate in the data collection process. Emphasizing the importance of patient consent, we ensured their active involvement in the survey. Our methodology involved administering two sets of surveys to gather insights: one focused on patients' perceptions of the hospital's service quality, utilizing the SERVQUAL model encompassing twenty-two indicators distributed across five service quality dimensions. This survey employed a five-point scale, ranging from strongly agree to strongly disagree. The second set of data gauged patient satisfaction levels, utilizing a similar five-point scale ranging from extremely satisfied to very dissatisfied.

The means of each service quality indicator were computed, followed by the calculation of the means for each service quality dimension. Additionally, the mean for the entire service quality, encompassing its indicators and dimensions, was calculated. Patients' satisfaction responses underwent computation to determine the mean for the entire dataset. Utilizing a linear regression model, we assessed

the correlation between each service dimension and patient satisfaction. Employing the Dublin-Watson test, we further examined the correlation of service quality as a whole with patient satisfaction. Lastly, to evaluate the significance of the difference between service quality in its entirety and patient satisfaction, we conducted an Analysis of Variance (ANOVA).

## Results and Discussions

### *SERVQUAL model and Components*

Researchers A. Parasuraman, Valarie Zeithaml, and Leonard L. Berry introduced the SERVQUAL model to evaluate service quality. This model delineates five fundamental service quality dimensions—reliability, assurance, tangibles, empathy, and responsiveness—identified to encapsulate various facets of service quality (Parasuraman et al., 1988). Reliability underscores the ability to consistently and accurately fulfill promised services. Assurance pertains to the knowledge, courtesy, and competence of employees in fostering trust and confidence. Tangibles encompass the physical facilities, equipment, and appearance of service personnel. Empathy involves the provision of personalized and attentive care to customers. Responsiveness denotes the eagerness to assist customers promptly. Through a rigorous development process, the authors refined a scale comprising 22 items distributed across these five dimensions (Parasuraman et al., 1988).

This research embraced the SERVQUAL model due to its adaptability across various service-providing organizations. Advocates of this model assert its versatility, underlining its robust reliability, validity, and broad applicability (Parasuraman et al., 1991). To tailor the model to the context of a hospital setting, minor adjustments were made to the twenty-two scales distributed across five dimensions. This aligns with the proponents' stance that slight modifications in wording to accommodate specific contexts are permissible (Parasuraman et al., 1991). However, caution is advised against eliminating items, as this could compromise the scale's integrity and raise concerns regarding its effectiveness in capturing service quality (Parasuraman et al., 1991). The sample surveys conducted by the model's proponents utilized a

seven-point scale, where seven indicated strong agreement and one indicated strong disagreement. Research on data characteristics demonstrated that once rescaled, both five-point and seven-point scales yielded identical mean scores (Dawes, 2008). Accordingly, for the study conducted in a hospital in Cebu City,

Philippines, the SERVQUAL model was slightly modified. All service quality dimensions retained their twenty-two items, employing a five-point scale where five represented strong agreement and one represented strong disagreement.

**Medical Staff Service Quality Dimensions Score as Rated by Patients**

Table 1. Overall Medical Staff Service Quality Dimensions Score

<i>n</i> = 314	
Service Dimensions	Means
<b>Reliability</b>	
Medical staff can make an accurate diagnosis promptly.	3.62
The patient’s condition is improved following treatment.	3.85
Medical staff visit time (patient’s examination) is carried out exactly according to the time stated ±15 minutes from the specified schedule.	2.76
Dimension Mean for Reliability	<b>3.41</b>
<b>Assurance</b>	
The patient’s examination is carried out by medical staff (according to the schedule on board).	4.00
Patients’ examination was done carefully.	3.77
Medical staff checked the patient thoroughly.	3.70
Medical staff do not discriminate between patients.	3.86
Dimension Mean for Assurance	<b>3.82</b>
<b>Tangibles</b>	
The appearance of the medical staff seems convincing.	4.09
The tool used to do the inspection looks good.	4.07
Medical staff use specific attributes that are easily known and read by patients	4.33
Dimension Mean for Tangible	<b>4.16</b>
<b>Empathy</b>	
The medical staff gives attention to all patients.	3.81
Medical staff asks for patients’ complaints.	3.93
Medical staff are being patient in dealing with both patient’s and family’s complaints.	3.82
Dimension Mean for Empathy	<b>3.85</b>
<b>Responsiveness</b>	
Medical staff responds quickly and effectively to patient’s complaints.	3.55
Medical staff responds to each patient’s complaints.	3.64
The medical staff explains the results of the examination and patients understand the explanation.	3.44
Medical staff provides effective communication, information, and education to patients.	3.39
Dimension Mean for Responsiveness	<b>3.54</b>
<b>Grand Mean</b>	<b>3.756</b>

\*A five-point scale was used with five meaning strongly agree and one meaning strongly disagree.

The grand mean of 3.756 surpasses the midpoint of 3.00, indicating that patients' responses across all service quality dimensions collectively exceeded the average. Specifically, reliability, assurance, tangibles, empathy, and responsiveness obtained mean scores of 3.41, 3.82, 4.16, 3.85, and 3.54 respectively, demonstrating that each service quality dimension received above-average ratings. Notably, within the hospital under study, tangibles received the highest rating of 4.16, whereas reliability garnered the lowest rating of 3.41. A closer examination of the tangibles dimension reveals that all three specific items received ratings above 4.00. Conversely, within the reliability dimension, one specific item about the accuracy of medical staff visiting times received a rating of 2.76, marking the sole instance where any of the twenty-two items across the five service quality dimensions fell below the 3.00 midpoint. While acknowledging room for improvement across all dimensions, with a perfect score of 5.0 as the ultimate goal, addressing the issue of medical staff visiting time accuracy stands out as particularly pressing due to its low rating.

The proponents of the SERVQUAL model advocated for using patients' expected service quality as the benchmark for assessing actual perceived service quality, emphasizing that the latter should meet or exceed the former (Parasuraman et al., 1990). However, beyond customer expectations, quality standards, often aligned with national guidelines, serve as fundamental benchmarks for evaluating service quality (Swan & Connolly, 2023). For instance, Balasundaram et al. (2023) utilized defined medication safety standards to enhance medication practices for a specific medical condition. Similarly, a study on food nutritional quality and compliance underscored the importance of policies in limiting added sugars, artificial sweeteners, and synthetic dyes (Cohen et al., 2024). The International Organization for Standardization (ISO) outlines seven essential international quality standards for medical and healthcare providers (ISO

Certifications in the Medical Field – the Must-have Standards - ISO Update, 2021). Given the presence of these considerations in the study, the reference point for evaluating service quality extends beyond customer expectations to encompass the highest possible rating of 5.0 and beyond.

Adhering to standards presents its own set of challenges. Research on service standards and workforce calculations has highlighted the importance of having an adequate workforce to deliver quality service (Lee et al., 2024). Similarly, a study by Niere et al. (2024), revealed the relationship between workload and job performance. Moreover, a study on the performance of air transport inspectors revealed that an insufficient number of personnel led to a lack of direct supervision of airline staff, thereby affecting the quality of supervision (Handayani & Setiadi, 2024b). In the realm of inpatient services, the inability of medical facilities to meet minimum service quality standards has been attributed to a shortage of human resources (Winda & Habibie, 2023). In line with human resources, a study on community pharmacy services revealed that a supportive pharmacy environment enabled pharmacists to perform better (Yong et al., 2023). Additionally, budget allocation plays a significant role. In some contexts, there's not only a shortage of personnel but also a lack of comprehensive and updated standards, as evidenced by research on transport service standards (Skvorcova, 2023). Understanding and adhering to standards is crucial for output quality, as demonstrated in a study on information technology and government accounting standards (Putri et al., 2021). Transitioning from one set of standards to another can pose challenges, requiring new competencies, as highlighted in research by Shpyrnya (2023). Given the diverse challenges across various areas, there is a constant need to adapt and enhance service quality to meet customer demands, as supported by research on customer feedback and service quality (Praise et al., 2024).

**Patients' Satisfaction**

Table 2. Level of Patients' Satisfaction in the Hospital

*n* = 314

Level of Patient Satisfaction	Frequency	Equivalent	Summation	Percentage
Extremely Satisfied	1	5	5	0.32 %
Very Satisfied	84	4	336	26.75 %
Satisfied	187	3	561	59.55 %
Dissatisfied	39	2	78	12.42 %
Very Dissatisfied	3	1	3	0.96 %
Total	314		983	100 %
Grand Mean = 3.131				

Legend: 5 – Extremely Satisfied; 4 – Very Satisfied; 3 – Satisfied; 2 – Dissatisfied; and 1 – Very Dissatisfied

The majority of respondents, comprising 314 patients, rated their hospital experience with a score of 3.00, indicating satisfaction with the service quality provided during their stay. This accounts for almost 60 percent of the total respondents. Additionally, 85 respondents rated their experience higher than 3.00, indicating a high level of satisfaction or greater with the service quality received. This represents roughly 27 percent of the total respondents. Conversely, 42 respondents rated their experience lower than 3.00, indicating dissatisfaction or lower with the service quality experienced. This constitutes approximately 13 percent of the total respondents. The mean of all patient responses collected during the survey was 3.131, indicating an overall satisfaction level above the midpoint of 3.00.

The survey findings indicate a strong correlation between service quality and customer satisfaction. Supriyanto & Dahlan (2024) emphasized the substantial impact of service quality on customer satisfaction in their research on brand image and service quality. Likewise, Dewi & Praswati (2024) uncovered a significant positive relationship between service quality and customer satisfaction in their study. Supporting this idea, Octavia et al. (2024) asserted that enhancing service quality leads to improved customer satisfaction. Furthermore, Joshi's study (2023) on service quality, customer satisfaction, and customer loyalty underscored the significant relationship between service quality and customer satisfaction. Another factor that positively affects customer satisfaction is the perceived product or service value.

Umboh et al. (2024) found that perceived value positively correlates with customer satisfaction, a conclusion also supported by Octavia et al. (2024). Additionally, the atmosphere of an establishment plays a crucial role in enhancing customer satisfaction, as indicated in a study on customer loyalty by Alfiansyah et al. (2024). This study further suggests that the demeanor of establishment attendants also contributes positively to customer satisfaction. In line with a positive establishment atmosphere, a study on customer retail app experience revealed that affective dimensions and sensory experience carry more weight in satisfaction and loyalty (Molinillo et al., 2022). Moreover, research on social media marketing and corporate image by Ningrum et al. (2024) highlights the influence of both social media marketing and corporate image on customer satisfaction. Similarly, Cheng & Lee (2023) observed that the superior performance of product quality components enhances customer satisfaction, ultimately leading to improved customer loyalty. Additionally, customer trust, as identified by Susanto & Pandjaitan (2024), is another factor significantly affecting customer satisfaction. From a broader perspective, effective customer relationship management, enabling organizations to understand their customers better, results in enhanced customer satisfaction (Dwivedi et al., 2024). Furthermore, Anam & Mujib (2023) assert that customer satisfaction fosters customer loyalty, which in turn leads to brand loyalty, as demonstrated in the study by Jessica Atieno Ooko et al. (2023).

**Correlations between Medical Staff Service Quality Dimensions Score and Patients' Level of Satisfaction**

Table 3. Test for Correlations between Each Medical Staff Service Quality Dimensions Score and Patients' Level of Satisfaction using the Linear Regression Model

*n* = 314

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	0.026	0.064		0.409	0.683	-0.099	0.152
Reliability	0.226	0.011	0.307	19.758	0.000	0.204	0.249
Assurance	0.332	0.016	0.423	20.190	0.000	0.300	0.365
Tangibles	0.100	0.015	0.109	6.804	0.000	0.071	0.129
Empathy	0.075	0.014	0.098	5.246	0.000	0.047	0.102
Responsiveness	0.235	0.013	0.348	18.440	0.000	0.210	0.260

The p-values for the independent variables—reliability, assurance, tangibles, empathy, and responsiveness—are all 0.000, which is lower than the significance level of 0.05. Consequently, correlations exist between each of

these dimensions and the dependent variable of patient service quality satisfaction. Hence, all five service quality dimensions exhibit a significant correlation with patients' satisfaction.

Table 4. Test for Correlations between Medical Staff Service Quality Dimensions and Patients' Level of Satisfaction using the Dublin-Watson Test

*n* = 314

R	R Square	Adjusted R Square	Std. Error of the Estimate	Dublin-Watson
0.969	0.939	0.938	0.14414	1.820

The Dublin-Watson value of 1.820 indicates a positive correlation between service quality and patient satisfaction. This is because Dublin-Watson values lower than 2.0 signify a positive correlation between variables, while values higher than 2.0 indicate a negative correlation. Therefore, the observed Dublin-Watson value confirms a positive association between service quality and patient satisfaction in this study.

The study on the mediating effect of patient trust in the relationship between service quality and patient satisfaction, conducted by Alhilou and Suifan (2023), highlights a positive correlation between service quality and patient satisfaction. This finding is reinforced by similar research from Jaber-Chehayeb (2023), Andreano and Pardede (2023), Arif et al. (2023), Damayanthie et al. (2024), Aladwan et al. (2023), and Sri Zumriyah et al. (2024), all underscoring the crucial role of service quality in

business success. Furthermore, customer trust emerges as another pivotal factor influencing patient satisfaction. Research by Andreano and Pardede (2023), Alhilou and Suifan (2023), Sasarari et al. (2023), and Aladwan et al. (2023) consistently demonstrate a positive and significant association between customer trust and satisfaction. Additionally, the hospital's reputation, as highlighted in studies by Aladwan et al. (2023) and Sasarari et al. (2023), contributes to patient satisfaction by fostering trust in the institution. Moreover, customer value emerges as yet another critical determinant of patient satisfaction, as affirmed by Guspianto et al. (2023). Opposite to customer value, a study on discrimination in health services revealed that patient bias also plays a role in how patients perceive service delivery (Fagundes et al., 2022). These findings collectively emphasize the multifaceted nature of patient satisfaction, underscoring the intertwined relationships

between service quality, trust, reputation, and perceived value in healthcare settings.

A study examining patient satisfaction with pharmaceutical services highlighted a notable disconnect between patient expectations across five service quality dimensions and the actual service provided by pharmacy staff (Pratama et al., 2023). This underscores the imperative for the institution under study to enhance its services. Similarly, research focusing on inpatient healthcare services revealed that the responsiveness of medical staff—defined as their prompt and attentive response to patient concerns—is a significant determinant of patient satisfaction (Hendrik et al., 2023). Likewise, in the outpatient setting, factors such as waiting times for test results and appointments emerged as crucial determinants of patient satisfaction (Azam et al., 2023). Addressing these

areas of concern is vital to ensuring patient satisfaction and fostering patient loyalty.

Indeed, satisfied patients are more likely to become loyal patrons, a relationship corroborated by studies conducted by Andreano & Pardede (2023) and Guspianto et al. (2023). These findings underscore the interconnected nature of variables influencing patient loyalty, as highlighted in research on enhancing hospital patient loyalty through service quality, patient value, and satisfaction (Guspianto et al., 2023). This study posited that service quality fosters patients' perception of service value, which in turn drives satisfaction, ultimately cultivating patient loyalty. Such insights are pivotal for healthcare institutions striving to optimize patient experiences and cultivate enduring patient relationships.

**Test for Significant Difference between Medical Staff Service Quality Dimensions and Patients' Level of Satisfaction**

Table 5. Test for Significant Difference between Medical Staff Service Quality Dimensions and Patients' Level of Satisfaction using the Analysis of Variance (ANOVA)

<i>n</i> = 314					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	98.016	5	19.603	943.482	0.000
Residual	6.400	308	0.021		
Total	104.416	313			

Since the p-value of 0.000 is less than the selected significance level of 0.05, a statistically significant difference exists between the means of the dimensions of service quality provided by medical staff and patients' levels of satisfaction. The grand mean of the service quality provided by medical staff, as per the adopted SERVQUAL model comprising 22 indicators across 5 dimensions, was calculated to be 3.756, whereas the grand mean of patients' satisfaction with the service rendered during their stay was 3.131. This substantial disparity of 0.625 between the two means is noteworthy. It suggests that although the service quality is rated at 3.756, the satisfaction rate from patients is notably lower at 3.131. This indicates that patients may have relatively high expectations, making them harder to please. Consequently, it implies that medical staff need to exert additional effort to improve service

quality to effectively satisfy patients' needs and expectations.

High customer expectations are not exclusive to the healthcare service sector; indeed, studies demonstrate that across various industries, customers hold elevated expectations. For instance, an examination of customer expectations and service quality perceptions at a post office highlighted a negative gap between customer expectations and perceived quality, indicating a failure to meet customer expectations (Eposi, 2023). Similarly, research on customer expectations and actual experiences with self-service kiosks revealed significant disparities between what customers anticipate and what they encounter (Zahari et al., 2023). In the hospitality sector, a study on customer complaints in hotels identified hotel personnel and food-related issues as primary sources of customer dissatisfaction (MUTLUBAŞ, 2023).



Likewise, a study investigating customer satisfaction with the service quality of a theme park unveiled significant discrepancies between customer expectations and perceived service quality across all dimensions, underscoring widespread dissatisfaction due to unmet expectations (HERNANDEZ et al., 2023). While it is important to note that not all instances involve failing to meet customer expectations, these studies collectively emphasize the challenge inherent in meeting and exceeding customer expectations across diverse industries.

### **Improvement Perspectives**

Improving service quality can be approached through various initiatives aimed at addressing customer needs, enhancing processes, leveraging technology, adopting green practices, investing in human resources, and ensuring adequate budget allocation. Firstly, understanding and aligning organizational strategies with customer needs is paramount. Winarto & Wurjaningrum (2023) emphasize prioritizing service process improvements based on customer interests, while Trisolini et al. (2023) highlight the importance of identifying specific client concerns to develop effective quality improvement strategies in family planning services. Efficient processes play a crucial role in enhancing service quality. Research on lean and agile operations by Alshurideh et al. (2023) underscores the effectiveness of lean operations' efficiency and agile operations' flexibility. Kuska et al. (2024) stress the importance of continuous measurement and improvement in website consistency, response speed, and information availability to enhance service quality through effective processes. Similarly, a study on the digitization of micro-finance operations revealed that the use of technology has enhanced service delivery (Andres et al., 2024). Moreover, the integration of appropriate technology likewise significantly enhances service quality, as affirmed by studies conducted by Hertati (2023), Ivan & Kravchuk (2023), and Subagja et al. (2023). Embracing green practices also contributes to service quality improvement, as evidenced by research by Winarto & Wurjaningrum (2023) and Ni Kadek Helen Kusuma Dewi et al. (2023). Investing in a capable human resource is essential,

with Abbas & Rahmadanita (2023) stressing that personnel possessing necessary skills such as technology proficiency, data processing expertise, societal understanding, and effective communication enhance service quality. Building rapport with customers, as advocated by Mesra & Hariadi (2023), and ensuring sufficient budget allocation, as supported by Taqwa et al. (2024) and Rusta (2023), are additional factors crucial for improving service quality across various industries. These initiatives collectively contribute to fostering superior service experiences and enhancing organizational performance.

### **Conclusions**

Based on the findings of the study, the following conclusions were deduced.

1. The ratings of the five dimensions of service quality and service quality as a whole are both above average. Specifically, the service quality rating in its entirety was 3.756.
2. The rating of patient satisfaction with the service rendered was also above average. Specifically, the rating is 3.131.
3. All the service quality dimensions were statistically correlated with patient satisfaction.
4. The service quality in its entirety was statistically correlated with patient satisfaction.
5. There was a significant difference between service quality in its entirety and patient satisfaction.
6. The ratings suggest that the services of healthcare staff can still improve in all dimensions. Given the high expectations of patients in service delivery evidenced by the disparity between service quality and satisfaction rating, improvement is necessary and urgent.

### **Recommendations**

After considering the conclusions, recommendations were directed to the management of the medical service provider focused on the study and to the management of other medical service providers;

- a. to initiate improvements in all the service quality dimensions;

- b. to initiate a comprehensive framework for service quality implementation given the latter's necessity and urgency; and
- c. to incorporate, where feasible, all ISO standards that are essential for medical service providers.

### Acknowledgment

Special thanks to the hospital focused on the study for allowing this research to be conducted and for providing relevant data. Special thanks also go to the patients who went out of their way to answer the survey.

### References

- Abbas, M. N., & Rahmadanita, A. (2023, December 27). Work Performance in Improving the Public Service Quality. *Jurnal MSDA (Manajemen Sumber Daya Aparatur)*, 11(2), 1–13. <https://doi.org/10.33701/jmsda.v11i2.3173>
- Aladwan, M. A., Anuar, M. M., Aladwan, R. M., & Salleh, H. S. (2023, December 29). The Effect of Service Quality, Patient Trust and Hospital Reputation on Patient Satisfaction in Jordanian Public Hospital. *WSEAS TRANSACTIONS ON BUSINESS AND ECONOMICS*, 21, 410–426. <https://doi.org/10.37394/23207.2024.2136>
- Alfiansyah, R., Pamungkas, R. A., & Bakhri, S. (2024, January 18). Enhancing Customer Loyalty: Optimizing Barista and Store Atmosphere for Increased Customer Satisfaction. *International Journal of Social Service and Research*, 4(01), 1–14. <https://doi.org/10.46799/ijssr.v4i01.657>
- Al-hilou, M., & Suifan, T. (2023, November 9). The mediating effect of patient trust on the relationship between service quality and patient satisfaction. *International Journal of Health Care Quality Assurance*, 36(1/2), 1–16. <https://doi.org/10.1108/ijhcqa-05-2023-0028>
- Alshurideh, M., Hamadneh, S., Al Kurdi, B., Shammout, E., & Wasfi, A. Alrawabdeh. (2023, July 30). Capitalizing Lean and Agile Operations: An emphasis on improving Service Quality. *International Journal of Theory of Organization and Practice (IJTOP)*, 3(1), 1–13. <https://doi.org/10.54489/ijtop.v3i1.238>
- Anam, C., & Mujib, A. (2023, November 30). Relationships Between Service Quality, Store Image, Customer Satisfaction, And Customer Loyalty. *IJEED (International Journal of Entrepreneurship and Business Development)*, 6(6), 1157–1165. <https://doi.org/10.29138/ijeed.v6i6.2585>
- Andreano, P. R., & Pardede, R. (2023, September 30). Service Quality and Patient Trust on Patient Loyalty Mediated by Patient Satisfaction on Inpatients. *Interdisciplinary Social Studies*, 2(12), 2684–2692. <https://doi.org/10.55324/iss.v2i12.595>
- Andres, J. L., Narsico, L. O., & Narsico, P. G. (2024). Digitization of microfinancing operational procedures. *International Journal of Multidisciplinary*, 5(2), 563–574. <https://doi.org/10.11594/ijma-ber.05.02.17>
- Arif, A. Z., Wahyudi, A., & Harista, D. R. (2023, April 26). QUALITY OF HEALTH SERVICES CAN INCREASE IN PATIENT SATISFACTION. *Proceeding of International Conference of Kerta Cendekia*, 2(1), 209–213. <https://doi.org/10.36720/ickc.v2i1.523>
- Azam, P., Akhlaq, A., Niazi, M. M., & Nawaz, S. (2023, December 28). Impact of Outpatient Quality Services on Patient Satisfaction. *National Journal of Health Sciences*, 8(4), 162–167. <https://doi.org/10.21089/njhs.84.0162>
- Balasundaram, B., Loh, S. Y., Rosario, B. H., Tun, M. H., Ooi, C. H., Li, F., & Bishara, D. (2023). Embedding a Quality Framework for medication safety standards in delirium and dementia: A Singapore Study in a geriatric psychiatry liaison service. *Delirium Communications*. <https://doi.org/10.56392/001c.87943>
- Cankül, D., Kaya, S., & Kızıldaş, M. Ç. (2024). The effect of gastronomic experience on restaurant image, customer perceived value, customer satisfaction and customer loyalty. *International Journal of Gastronomy*

- and Food Science (Print), 100908. <https://doi.org/10.1016/j.ijgfs.2024.100908>
- Carter, S., Ahmed, A. M., & Schneider, C. R. (2023). The role of perceived service quality and price competitiveness on consumer patronage of and intentions towards community pharmacies. *Research in Social and Administrative Pharmacy*, 19(5), 717–727. <https://doi.org/10.1016/j.sapharm.2023.02.002>
- Cheng, S., & Lee, C. W. (2023, December 31). The Effect of Electric Vehicle Product Quality on Customer Satisfaction and Customer Loyalty: Focusing on the Chinese Market. *The Academic Society of Global Business Administration*, 20(6), 82–103. <https://doi.org/10.38115/asgba.2023.20.6.82>
- Christi, V., Macwan, A., Valand, S., & Gohil, D. (2024). Patient Satisfaction Regarding Quality Nursing Care. *RGUHS Journal of Nursing Sciences*, 14(1). [https://doi.org/10.26463/rjns.14\\_1\\_6](https://doi.org/10.26463/rjns.14_1_6)
- Cohen, J. F., Kesack, A., Daly, T. P., Elnakib, S., Hager, E. R., Hahn, S., Hamlin, D., Hill, A., Lehmann, A., Lurie, P., Maroney, M., Means, J. H., Mueller, M. P., Olarte, D. A., Polacsek, M., Schwartz, M. B., Sonnevile, K. R., Spruance, L. A., Woodward, A., & Chapman, L. E. (2024). Competitive Foods' Nutritional Quality and Compliance with Smart Snacks Standards: An Analysis of a National Sample of U.S. Middle and High Schools. *Nutrients*, 16(2), 275. <https://doi.org/10.3390/nu16020275>
- Damayanthie, N., Ayubi, D., & Sulistiadi, W. (2024, January 9). The Relationship between Service Quality, Satisfaction and Image on Revisit Intentions in Standard Inpatient Class Patients at Rumah Sakit Umum Pusat Surakarta. *International Journal of Research and Review*, 11(1), 85–98. <https://doi.org/10.52403/ijrr.20240110>
- Dawes, J. (2008). Do data characteristics change according to the number of scale points used? An experiment using 5-Point, 7-Point and 10-Point scales. *International Journal of Market Research*, 50(1), 61–104. <https://doi.org/10.1177/147078530805000106>
- Dewi, M., & Praswati, A. N. (2024). The mediating role of customer trust in the effect of service quality and customer perceived value on customer satisfaction. *Jurnal Ilmiah Manajemen Kesatuan*, 12(1), 129–140. <https://doi.org/10.37641/jimkes.v12i1.2396>
- Dwivedi, R. K., Choudhary, S. L., Dixit, R. S., Sahiba, Z., & Naik, S. V. (2024). The Customer Loyalty vs. Customer Retention: The Impact of Customer Relationship Management on Customer Satisfaction. *Web Intelligence*, 1–18. <https://doi.org/10.3233/web-230098>
- Eposi, E. M. (2023, November 10). Evaluation of Customers' Expectations and Perceptions of Service Quality Dimensions: A Study of South African Post Office in the North-West Province. *International Review of Management and Marketing*, 13(6), 29–42. <https://doi.org/10.32479/irmm.14876>
- Fagundes, M. L. B., Júnior, O. L. D. A., Menegazzo, G. R., & Giordani, J. M. D. A. (2022). Association between perceived discrimination in health services and oral health-related quality of life in older adults. *Journal of Dentistry*, 125, 104249. <https://doi.org/10.1016/j.jdent.2022.104249>
- González-Viralta, D., Veas-González, I., Egaña-Bruna, F., Vidal-Silva, C., Delgado-Bello, C. A., & Pezoa-Fuentes, C. (2023). Positive effects of green practices on the consumers' satisfaction, loyalty, word-of-mouth, and willingness to pay. *Heliyon (London)*, 9(10), e20353. <https://doi.org/10.1016/j.heliyon.2023.e20353>
- Gül, İ., Helvacioğlu, E. T., & Saraçlı, S. (2023). Service quality, outpatient satisfaction and loyalty in community pharmacies in Turkey: A structural equation modeling approach (research article). *Exploratory Research in Clinical and Social Pharmacy*, 12, 100361. <https://doi.org/10.1016/j.rcsop.2023.100361>

- Guspianto, G., Mutmainnah, M., & Aurora, W. I. D. (2023, September 1). How can service quality, patient value, and patient satisfaction increase hospital patient loyalty? JPPI (Jurnal Penelitian Pendidikan Indonesia), 9(3), 1726. <https://doi.org/10.29210/020232917>
- Handayani, G. A., & Setiadi, P. B. (2024b). Analysis of the performance of Regional III Airport Authority Air Transport Inspector personnel on optimizing PT Minimum Service Standard supervision. Wings Airlines. AURELIA Jurnal Penelitian Dan Pengabdian Masyarakat Indonesia, 3(1), 41–51. <https://doi.org/10.57235/aurelia.v3i1.1326>
- Hendrik, Simorangkir, G. F., Girsang, E., & Ginting, J. B. (2023, July 29). Analysis of the quality of health services in inpatient installations on patient satisfaction. International Journal of Research in Medical Sciences, 11(8), 2780–2784. <https://doi.org/10.18203/2320-6012.ijrms20232404>
- HERNANDEZ, G. J., BUNGCASAN, J. J., SARDIDO, N. A., & GUECO, I. (2023, August 28). CUSTOMER SATISFACTION ON SERVICE QUALITY OF THEME PARK X: AN EXPERIMENTAL STUDY. Quantum Journal of Social Sciences and Humanities, 4(4), 204–216. <https://doi.org/10.55197/qjssh.v4i4.269>
- Hertati, D. (2023, October 17). Improving the Quality of Public Services through Innovation of Online Complaints Based on the Wargaku Application. Journal La Sociale, 4(3), 97–102. <https://doi.org/10.37899/journal-la-sociale.v4i3.831>
- Horachuk, V. V., Kondratiuk, N. Y., Yashchenko, Y. B., & Dyachuk, M. D. (2023, December 24). DEVELOPMENT AND IMPROVEMENT OF QUALITY CHARACTERISTICS OF MEDICAL CARE. Clinical and Preventive Medicine, 7, 87–93. <https://doi.org/10.31612/2616-4868.7.2023.12>
- Ihdina Gustina, Dedy Lazuardi, & Zulkarnain Siregar. (2023, June 20). Analysis of Service Quality and Customer Satisfaction on Customer Loyalty. Outline Journal of Management and Accounting, 2(1), 8–15. <https://doi.org/10.61730/ojma.v2i1.129>
- ISOUpdate.com. (2021, January 12). ISO certifications in the medical field – The must-have standards - ISO Update. ISO Update. <https://isoupdate.com/general/iso-certifications-in-the-medical-field-the-must-have-standards/>
- Ivan, V., & Kravchuk, S. (2023, December 21). POSSIBILITIES OF IMPROVING THE VOICE SERVICES QUALITY IN 5G NETWORKS. Information and Telecommunication Sciences, 2, 9–16. <https://doi.org/10.20535/2411-2976.22023.9-16>
- Jaber-Chehayeb, R. (2023, November 27). Analyzing the Mediating Role of Service Quality in the Relationship between Service Quality and Patient Satisfaction at Rafic Hariri University Hospital. International Journal of Professional Business Review, 8(11), e03827. <https://doi.org/10.26668/businessreview/2023.v8i11.3827>
- Jessica Atieno Ooko, Dr. Fredrick Onyango Aila, & Dr. Alphonse Juma Odondo. (2023, October 25). Relationship between Customer Satisfaction and Brand Loyalty. The International Journal of Business & Management. <https://doi.org/10.24940/theijbm/2023/v11/i9/bm2309-005>
- Joshi, C. (2023, December 5). Measuring the Relationship between Service Quality, Customer Satisfaction and Customer Loyalty in the Banking Sector of Nepal. Contemporary Research: An Interdisciplinary Academic Journal, 6(2), 52–71. <https://doi.org/10.3126/craiaj.v6i2.60248>
- Kuska, D. A. R., Wijayanto, H., & Santoso, A. (2024, January 31). Improving The E-Satisfaction and E-Loyalty Based on E-Trust and E-Service Quality on Shopee Customer. Journal of Consumer Sciences, 9(1), 22–39. <https://doi.org/10.29244/jcs.9.1.22-39>
- Lee, M., Kim, S., Jeong, J. W., Park, Y., & Han, H. (2024). Development of service standards and manpower calculation criteria for

- hospital clinical pharmacies in South Korea: a survey-based study. *BMC Health Services Research*, 24(1). <https://doi.org/10.1186/s12913-023-10530-7>
- Merdekawati, I. (2023, November 1). The Influence of Service Quality and Customer Satisfaction on Customer Loyalty Pos KUPI Langsa. *Journal of Social Science Utilizing Technology*, 1(1), 1–10. <https://doi.org/10.55849/jssut.v1i1.585>
- Mesra, M., & Hariadi, B. (2023, December 30). Improving Service Quality Through the Performance of State Civil Apparatus in Sangir Batanghari District. *Adabi : Journal of Public Administration and Business*, 10(2), 1–12. <https://doi.org/10.62066/jpab.v10i2.1>
- Molinillo, S., Aguilar-Illescas, R., Anaya-Sánchez, R., & Carvajal-Trujillo, E. (2022). The customer retail app experience: Implications for customer loyalty. *Journal of Retailing and Consumer Services*, 65, 102842. <https://doi.org/10.1016/j.jretconser.2021.102842>
- MUTLUBAŞ, I. (2023, June 30). Evaluation of Online Customer Complaints for Hotel Businesses in Terms of Expectation Management and Behavioral Intention. *Journal of Tourism and Gastronomy Studies*. <https://doi.org/10.21325/jotags.2023.1250>
- Ni Kadek Helen Kusuma Dewi, Nyoman Mastiani Nadra, I Ketut Suarja, Ni Nyoman Triyuni, & I Ketut Astawa. (2023, June 7). Implementation of Green Practice In Improving Service Quality At The Front Office Department At Mercure Bali Legian. *International Journal of Travel, Hospitality and Events*, 2(2), 116–129. <https://doi.org/10.56743/ijothe.v2i2.260>
- Niere, M. I. E., Narsico, L. O., & Narsico, P. G. (2024). Work training, workplace relationships, workload and job performance. *International Journal of Multidisciplinary*, 5(2), 664–680. <https://doi.org/10.11594/ijma-ber.05.02.26>
- Ningrum, A. M., Rofiaty, R., & Moko, W. (2024, January 11). The Influence of Social Media Marketing and Corporate Image on Customer Loyalty is Mediated by Customer Satisfaction (Study of 5 Star Hotel Customers in Malang City). *JOURNAL OF ECONOMICS, FINANCE AND MANAGEMENT STUDIES*, 07(01). <https://doi.org/10.47191/jefms/v7-i1-16>
- Octavia, Y. F., Luh Komang Candra Dewi, Donny Dharmawan, Silvia Ekasari, & Hery Erdi. (2024, February 1). The Influence Of Customer Value, Customer Trust And Electronic Service Quality On Customer Satisfaction Of Traveloka. *JEMSI (Jurnal Ekonomi, Manajemen, Dan Akuntansi)*, 10(1), 283–288. <https://doi.org/10.35870/jemsi.v10i1.1908>
- Parasuraman A., Berry L., & Zeithaml V. (1990). Guidelines for conducting service quality research. *Marketing Research*, 2, 33–44. [https://www.researchgate.net/publication/313163392\\_Guidelines\\_for\\_conducting\\_service\\_quality\\_research](https://www.researchgate.net/publication/313163392_Guidelines_for_conducting_service_quality_research)
- Parasuraman A., Berry L., & Zeithaml V. (1991). Refinement and Reassessment of SERVQUAL Scale. *Journal of Retailing*, 67(4), 420–450. [https://www.researchgate.net/publication/247373898\\_Refinement\\_and\\_reassessment\\_of\\_the\\_SERVQUAL\\_instrument](https://www.researchgate.net/publication/247373898_Refinement_and_reassessment_of_the_SERVQUAL_instrument)
- Parasuraman A., Zeithaml V., & Berry L. (1988). SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality. *Journal of Retailing*, 64(1), 12–40. [https://www.researchgate.net/publication/225083802\\_SERVQUAL\\_A\\_multiple-Item\\_Scale\\_for\\_measuring\\_consumer\\_perceptions\\_of\\_service\\_quality](https://www.researchgate.net/publication/225083802_SERVQUAL_A_multiple-Item_Scale_for_measuring_consumer_perceptions_of_service_quality)
- Praise, O. I., Baba, M., Nehemiah, E., Suleiman, F. Y., & Daniel, C. (2024). Customer feedback and service quality in the Akwa Ibom State hospitality sector. *European Journal of Business and Innovation Research*, 12(1), 42–52. <https://doi.org/10.37745/ejbir.2013/vol12n14252>

- Prastyorini, J., Mudayat, M., & Ramadhan, C. A. (2023, July 5). Enhancing Customer Satisfaction in Logistics Services: The Impact of Service Quality and Trust. *Indonesian Journal of Law and Economics Review*, 18(3). <https://doi.org/10.21070/ijler.v18i3.930>
- Pratama, K. J., Khasanah, I. N., Sari, D. W., & Sabri, N. H. M. (2023, May 13). Analysis of Patient Satisfaction on the Quality of Pharmaceutical Service at the Pharmaceutical Installation. *Proceedings of the International Conference on Nursing and Health Sciences*, 4(1), 61–70. <https://doi.org/10.37287/pic-nhs.v4i1.1683>
- Putri, T. S., Yulianti, O., & Herlin, H. (2021). The effect of information technology and understanding of government accounting standards on the quality of financial reports at the Marine and Fishery Services Bengkulu Province. *Journal of Indonesian Management (JIM)*, 1(4). <https://doi.org/10.53697/jim.v1i4.315>
- Rusta, A. (2023, August 23). Analysis of Bureaucratic Performance in Improving the Quality of Services in the Education and Health Sector in Pasaman District. *JOELS: Journal of Election and Leadership*, 4(2), 80–88. <https://doi.org/10.31849/joels.v4i2.15550>
- Sarakbi, D., Groll, D., Tranmer, J., Kessler, R., & Sears, K. (2024, February 1). Supporting Quality Integrated Care for Adolescent Depression in Primary Care: A Learning System Approach. *International Journal of Integrated Care*, 24, 6. <https://doi.org/10.5334/ijic.7685>
- Sasarari, Z. A., Achmad, V. S., Naka, A. S. B., & Andani, N. (2023, August 3). The Effect of Home Care Service Quality on Patient Satisfaction. *Jurnal Edukasi Ilmiah Kesehatan*, 1(2), 79–84. <https://doi.org/10.61099/junedik.v1i2.19>
- Schattner, A. (2023, November 22). Patients' experience of care as key to improving quality of care. *Postgraduate Medical Journal*. <https://doi.org/10.1093/postmj/qgad112>
- Shpyrnya, O. V. (2023). On the issue of the transition to new educational standards within the enlarged group of specialties and areas of «Hospitality, service and provision of services». *Vestnik Majkopskogo Gosudarstvennogo Tehnologičeskogo Universiteta*, 2, 115–121. <https://doi.org/10.47370/2078-1024-2023-15-2-115-121>
- SINGH, T., & KAUR, A. (2023, December 7). A STUDY TO ASSESS PATIENT'S SATISFACTION WITH QUALITY OF NURSING CARE. *Asian Journal of Pharmaceutical and Clinical Research*, 156–175. <https://doi.org/10.22159/aj-pcr.2023.v16i12.49932>
- Skvorcova, G. (2023, December 30). Transport service standard as the basis for improving the quality of passenger transportation by public transport. *Russian Journal of Management*, 11(4), 58–68. <https://doi.org/10.29039/2409-6024-2023-11-4-58-68>
- Sri Zumriyah, Irwan, & Sri Manovita Pateda. (2024, January 30). The effect of the performance and quality of nursing services on the satisfaction of patients in the inpatient room at Mokoyurli Hospital Buol, Indonesia. *World Journal of Advanced Research and Reviews*, 21(1), 2566–2575. <https://doi.org/10.30574/wjarr.2024.21.1.2651>
- Subagja, A. D., Almaududi Ausat, A. M., Sari, A. R., Wanof, M. I., & Suherlan, S. (2023, May 1). Improving Customer Service Quality in MSMEs through the Use of ChatGPT. *Jurnal Minfo Polgan*, 12(1), 380–386. <https://doi.org/10.33395/jmp.v12i1.12407>
- Supriyanto, B., & Dahlan, K. S. S. (2024, January 25). The Impact of Brand Image and Service Quality on Customer Loyalty, with Customer Satisfaction as A Mediator. *International Journal of Social Service and Research*, 4(01), 290–297. <https://doi.org/10.46799/ijssr.v4i01.709>
- Susanto, E. F., & Pandjaitan, D. R. H. (2024). The Effect of Trust on Customer Loyalty through Customer Satisfaction. *Jurnal Ilmiah Manajemen Kesatuan*, 12(1), 203–

210. <https://doi.org/10.37641/jim-kes.v12i1.2404>
- Swan, D., & Connolly, D. (2023). Driving improvements in the quality, safety, consistency and coordination of care and support for children using health and social care services, through the collaborative development of national standards.&nbsp; International Journal of Integrated Care, 23(S1), 561. <https://doi.org/10.5334/ijic.icic23208>
- Taqwa, T., Rifai, A., Nashriana, N., & RS, I. R. (2024, January 12). Indonesian Ombudsman: Strengthening Role in Improving the Quality of Public Services. Pena Justisia: Media Komunikasi Dan Kajian Hukum, 22(3), 513. <https://doi.org/10.31941/pj.v22i3.3605>
- Thapa, M., & Yogi, P. N. (2024, January 29). Service Quality and Customer Satisfaction With Reference to Cellular Phone Industry of Nepal. The Batuk, 10(1), 39–54. <https://doi.org/10.3126/batuk.v10i1.62297>
- Trisolini, M., Javier, M. E., Jabar, M., Rodriguez, C., Varquez, J., Danganan, O. D., Benabaye, R. M., Reynaldo, C., Conti-Lopez, M. A., Dela Rosa, J. J., Mendoza, O., Dasmarinas, E., Stan, L., Bisson, C., & Oliveros, Y. (2023, July 24). Improving the quality of family planning services in the Philippines: Barriers and opportunities. The International Journal of Health Planning and Management, 38(6), 1629–1643. <https://doi.org/10.1002/hpm.3683>
- Umboh, S. F. B. W., Tulung, J. E., & Wangke, S. J. C. (2024, January 23). The influence of perceived value to customer loyalty with customer satisfaction as an intervening variable on ESSE Brand Users in Manado. Riset Akuntansi Dan Manajemen Pragmatis, 2(1), 1–19. <https://doi.org/10.58784/ramp.89>
- Winarto, M. B., & Wurjaningrum, F. (2023, November 28). Improving the Service Quality In A Board Game Café with Quality Function Deployment Method. Southeast Asian Business Review, 1(2), 146–155. <https://doi.org/10.20473/sabr.v1i2.49698>
- Winda, N., & Habibie, D. K. (2023). Analysis of minimum service standards for inpatient services at the Teluk Kuantan General Hospital. QISTINA Jurnal Multidisiplin Indonesia, 2(2), 1228–1234. <https://doi.org/10.57235/qistina.v2i2.984>
- Yong, F. R., Hor, S., & Bajorek, B. (2023). Australian community pharmacy service provision factors, stresses and strains: A qualitative study. Exploratory Research in Clinical and Social Pharmacy, 9, 100247. <https://doi.org/10.1016/j.rcsop.2023.100247>
- Zahari, A. R., Esa, E., Asshidin, N. H. N., Surbaini, K. N., Abdullah, A. E., & Majid, N. A. (2023, August 8). The Study of Customers' Expectations and Real Experiences Using the Self-Service Kiosk. International Journal of Professional Business Review, 8(8), e02295. <https://doi.org/10.26668/businessreview/2023.v8i8.2295>