



SERVICE QUALITY PERCEPTION: EMPIRICAL COMPARISON OF PUBLIC AND PRIVATE HOSPITALS

Yumlembam Menaka Devi¹, Dr. A.S. Rapheileng², Dr. Kh. Tomba Singh³

¹Research Scholar, Department of Commerce, Manipur University

²Faculty, Department of Commerce, Manipur University

³Registrar, National Institute of Technology, Manipur

Article DOI: <https://doi.org/10.36713/epra23073>

DOI No: 10.36713/epra23073

ABSTRACT

The quality of services provided in hospitals varies from one hospital to another. There is a need to assess the quality of services provided in public and private hospitals. The purpose of the study is to analyze the patients' perceptions of hospital service quality. A factor analysis was performed to examine the factor structure of the patients' perception. Cronbach's alpha test was also performed to test the reliability of a set of test items. Four factors were determined to assess the patients' perceptions of hospital service quality: Tangibility, Reliability, Responsiveness, and Empathy, based on the SERVQUAL model. T-test was conducted to examine the differences in the perception of hospital service quality in the private (Leishiphung) and public (District Hospitals). The findings indicated that there was a significant difference in the patients' perception of hospital service quality between private and public hospitals.

KEYWORDS: Service Quality, Perception, Hospital, Tangibility, Reliability, Responsiveness, Empathy

INTRODUCTION

Customers have begun to sense the need for improved medical treatment to support their changing lifestyles, which has led to significant expansion within the global healthcare services sector (Panchapakesan et al., 2010). This expansion has been aided by the world's growing population and rising standards of living. In any organization, quality plays a key role in all functions. According to Mosadeghrad (2014), quality is seen as a strategic differentiator to maintain an organization's competitive edge.

The term "quality" was first used by manufacturing companies, but service businesses also place a high value on it (Shafiq et al., 2017). The extent of the service level provided meets customer expectations is a metric of service quality. According to Lewis and Booms (1983; as cited in Parasuraman et al. 1985), providing quality service entails consistently meeting customer expectations. Additionally, customer satisfaction and service quality are strongly related. Customer satisfaction can refer to a specific, momentary experience or the entire course of receiving a service. According to Duffy and Ketchand (1998), service-encounter satisfaction measures how much a customer likes or dislikes a specific service encounter. When an organization provides high-quality service to its clients, a bond is formed (Schneider and White, 2004 as cited in Uzunboylu, 2016).

According to Aagja and Garg (2010) hospital service quality is the difference between patients' or patients' attendants' perceptions of the services and their expectations about the hospital providing those services. A hospital is a facility for healthcare that treats patients with specialized personnel and

tools. Every hospital's main duty is to care for patients who are in need. Patient satisfaction is a major deciding factor when choosing hospitals or other healthcare facilities. As a result, a hospital's ability to succeed depends on how well it treats its clients or patients. Due to competitive pressures and the growing need to provide patient satisfaction, the components of quality control, quality of services, and effectiveness of medical treatment have become vitally important.

Service Quality

Service quality in the modern economy has received a lot of research attention in marketing literature (Teas, 1993, as cited in Uzunboylu, 2016). Alternative concepts for service quality, such as the Nordic view, the American view, and a three-dimensional concept of service quality, have been developed by various researchers. The Nordic perspective breaks down service quality into two categories: functional quality and technical quality. The five characteristics of tangibility, empathy, assurance, reliability, and responsiveness are used by Americans to define service quality. The three dimensions were service product, service environment, and service delivery. Service quality has been defined as "the outcome of an evaluation process where the consumer compares his expectation with the service he has received" or the difference between expected service and perceived service. Parasuraman et al. (1985) define service quality as "the discrepancy between consumers' perceptions of services offered by a particular firm and their expectations about firms offering such services". Altuntas et al. (2012) are of the opinion that measuring service quality is quite important to improve perceived service quality, make a difference, and obtain



superiority in a competitive environment. Numerous studies have shown that offering high-quality service is directly related to increases in profits, market share, and cost savings (Devlin and Dong, 1994, as cited in Sohail, 2003).

REVIEW OF LITERATURE

Across the globe, economic conditions shape people’s expectations of service quality and their lifestyle. Customers’ perceptions play a crucial role in the failure of any product or service (Shafiq et al., 2017). A study on examining the role of service quality in overall service satisfaction was conducted by Duffy and Ketchand (1998). He compared two competing hypothetical models describing the relationship among service quality, life satisfaction and overall service satisfaction. It was found that determining overall service satisfaction, a model which concerned only service quality found incomplete and the model which include life satisfaction (well-being) is more preferable in predicting overall service satisfaction. Furthermore, well-being appears to be strongly influenced by mood. Andaleeb (2000) compared the quality of services provided by public and private hospitals in Bangladesh. Patient assessments of service quality and significant demographic variables were used to predict the preference between public and private hospitals. The study concluded that the private hospitals were evaluated better on responsiveness, communication and discipline. The study's findings suggested that by gradually exposing hospitals to market incentives, service quality in the healthcare industry could be raised. In Asian context, Shafiq et al (2017) conducted service quality assessment of hospital in Pakistan. In his study he found that private hospitals are better than public ones in terms of tangibility, reliability, responsiveness and empathy. Sohail (2003) also stated that patients in Malaysia were generally satisfied with the quality of services received from private hospitals where the mean difference between expectations and perceptions, patients' perceived value of the services exceeds expectations for all the variables measured. While Aaja and Garg (2010) concluded that administering PubHosQual helps managers in locating service quality gaps for public hospitals and provides them insights on focusing on them in service quality improvement programs.

RESEARCH AIMS AND HYPOTHESIS

The purpose of the current study was to compare patients' perceptions of the quality of healthcare services provided by public and private hospitals empirically. In light of this it is predicted that:

Ho: There is no significance difference in the patients’ perception on healthcare services between the public and private hospital.

RESEARCH METHODOLOGY

A survey was conducted to examine patients' perceptions of hospital service quality. Primary data were collected through questionnaires from inpatients at two major hospitals in Ukhrul district, i.e., private (Leishiphung) and public (District Hospitals). Prior to the commencement of the data collection, ethical approval was sought from the concerned hospital authorities. Participants in the study included 80 patients, of whom 49 from public hospital and 31 were from private. The participants were randomly approached to participate in the study. The questionnaires were collected from May 2023 to June 2023. The sample distribution of the respondents is given in Table 1. IBM SPSS (AMOS Statistics) was used to enter, process, and codify the collected data. An independent t-test was conducted to evaluate the patient’s perception of the service quality of private and public hospitals in Ukhrul District.

RESULTS AND DISCUSSION

Table 1 exhibited the sample distribution of the study based on demographic profile of the respondents. According to the educational data in Table 1, the majority of patients (92.5%) were educated, while only 7.5% were illiterate. When compared to the number of patients between genders, there is not much difference in the number of male (51.2%) and female (48.8%) population. Patients who worked for the government made up a very small percentage (5%) compared to those who did so for the private sector (37.5%). 52.5% of patients were single, while 47.5% were married.

Table 1: Sample Distribution According to Demographic Profile

| Variables | Group | Type of Hospital | | Total (n=80) |
|---------------|-----------------------|-------------------|------------------|-----------------|
| | | Private (n=31) | Public (n=49) | |
| Gender | Male | 19 (61.3) | 22 (44.9) | 41 (51.2) |
| | Female | 12 (38.7) | 27 (55.1) | 39 (48.8) |
| Qualification | Illiterate | 1 (3.2) | 5 (10.2) | 6 (7.5) |
| | Nursery-class 10 | 6 (19.4) | 11 (22.4) | 17 (21.3) |
| | Class 11 and 12 | 4 (12.9) | 5 (10.2) | 9 (11.3) |
| | Bachelors to graduate | 14 (45.2) | 22 (44.9) | 36 (45) |



| | | | | |
|-----------------------|-------------------|-----------|-----------|-----------|
| | Post grad and PhD | 6 (19.4) | 6 (12.2) | 12 (15) |
| Occupation | Govt. employment | 1 (3.2) | 3 (6.1) | 4 (5) |
| | Private employee | 12 (38.7) | 18 (36.7) | 30 (37.5) |
| | Students | 10 (32.7) | 6 (12.2) | 16 (20) |
| | Own business | 6 (19.4) | 3 (6.1) | 9 (11.3) |
| | Others | 2 (6.5) | 19 (38.8) | 21 (26.3) |
| Marital status | Single | 21 (67.7) | 21 (42.9) | 42 (52.5) |
| | Married | 10 (32.3) | 28 (57.1) | 38 (47.5) |

Source: Computed from Primary Data. Note: Figures in the brackets indicate percentages.

The principal components analysis with varimax rotation was used to examine the factor structure of patients' perception. The scree plot recommended a four-factor solution as shown in Fig. 1. The varimax extraction through PCA was shown in Table 2. All the factors of the original SERVQUAL perception were retained and no other study were added in this study. The four factors altogether accounted for 73.640 of the variances in the score. The Kaiser- Meyer-Oklin (KMO) measure of sampling adequacy was 0.921. The first factor accounted for 57.331% of the variance, and comprised of 7 items relating with Reliability factor (alpha=0.920). The second factor accounted for 6% of the

variance, and it is in relation with hospital's Responsiveness, which comprised of 5 items (alpha=0.920). The third factor accounted for 5.468% of the variance and comprised of 6 items relating to Empathy (alpha=0.926). Tangibility was in the fourth factor which contains 4 items (alpha=0.777) and accounted for 4.840% of the variance. Since, the Cronbach's alpha of the subscales of the SERVQUAL perception ranges from 0.777 to 0.920, it meant that the reliability level is excellent and acceptable (given in Table 3).

Table 2: Factor Analysis of Performance Perception

| Items/Variables | F1 | F2 | F3 | F4 |
|---|-------------|-------------|-------------|--------------|
| Proper and on time service provision | .763 | .290 | .218 | .260 |
| Insist on accurate/error free patient record | .724 | .452 | .213 | .077 |
| Hospital staff demeanor instilled confidence | .698 | .223 | .442 | .006 |
| Active and up-to-date medical equipment | .691 | .243 | -.004 | .416 |
| Personnel were never too busy to respond to requests | .668 | .325 | .411 | .139 |
| Convenient service operating hours | .664 | .418 | .390 | .038 |
| Medical staff are need in appearance | .593 | .037 | .352 | .411 |
| Communicative to patients on service provision | .189 | .804 | .256 | .221 |
| Provide prompt services to the patient's queries and grievances | .248 | .775 | .297 | .149 |
| Get things done without partiality | .380 | .729 | .195 | .151 |
| Sympathy and reassurance when I face problem | .363 | .638 | .384 | .148 |
| Personnel's continuous willingness to help patients | .411 | .592 | .448 | .203 |
| Gave individual attention to the patient | .171 | .154 | .780 | .299 |
| Maintain privacy on patient's health condition | .215 | .358 | .740 | .068 |
| Knowledge and expertise of personnel in response to patient's questions | .396 | .345 | .639 | .289 |
| Listened to opinions of patients and kept them apprised | .294 | .498 | .622 | .229 |
| Personnel had patients interests at heart | .452 | .394 | .570 | .285 |
| Polite or courteous behavior with patients-consistency | .355 | .472 | .528 | .359 |
| Have clear signboards/info-boards as deemed | -.015 | .331 | .131 | .785 |
| Have enough chairs to rest | .304 | .441 | .203 | .626 |
| Pharmacy | .199 | -.063 | .252 | .626 |
| Clean and visually appealing physical facilities | .457 | .493 | .137 | .541 |
| % of Variance Explained | 57.331 | 6.000 | 5.468 | 4.840 |
| Eigenvalues | 12.613 | 1.320 | 1.203 | 1.065 |
| Cronbach's Alpha | .920 | .920 | .926 | .777 |



KMO = 0.921, Barlett's $\chi^2 = 1481.311$

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 8 iterations.

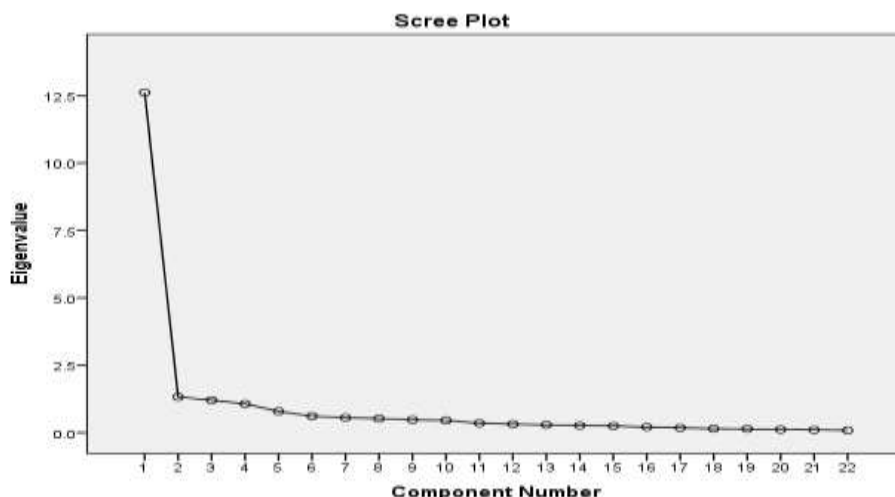


Figure 1: Scree Plot of Patients' perception

Table 3: Range of Reliability and its Coefficient of Cronbach's Alpha

| No. | Coefficient of Cronbach's Alpha | Reliability Level |
|-----|---------------------------------|-------------------|
| 1 | More than 0.90 | Excellent |
| 2 | 0.80-0.89 | Good |
| 3 | 0.70-0.79 | Acceptable |
| 4 | 0.60-0.69 | Questionable |
| 5 | 0.50-0.59 | Poor |
| 6 | Less than 0.59 | Unacceptable |

Source: Adopted from George, D., and Mallery, M. (2003).

T-tests were used to analyze the variations in patients' perception of service quality provided by private and public hospitals. Two factors of the SERVQUAL scale, that is, Responsiveness ($t = 1.738, p = 0.086$) and Tangibility ($t = 1.965, p = 0.053$) did not differ significantly. Thus, supposition of no mean differences for the SERVQUAL scale in relation to Responsiveness and

Tangibility was failed to reject at 5% significance level. Whereas, the supposition of no mean differences in relation to Reliability ($t = 2.045, p = 0.044$) and Empathy ($t = 2.731, p = 0.008$) were rejected, which revealed that parts of the hypotheses of no mean differences for the SERVQUAL scale in relation to Reliability and Empathy was rejected at 5% significance level.

Table 4: Mean, S.D and T-Test between the Patient's Perception of Service Quality of Public and Private Hospital

| Factors | Private Hospital | | Public Hospital | | t | p-value |
|----------------|------------------|---------|-----------------|---------|-------|---------|
| | Mean | SD | Mean | SD | | |
| Reliability | 27.8387 | 3.64323 | 25.5714 | 6.26498 | 2.045 | 0.044* |
| Responsiveness | 20.6129 | 2.92891 | 19.2449 | 4.10046 | 1.738 | 0.086 |
| Empathy | 26.1290 | 2.98599 | 23.6531 | 5.11758 | 2.731 | 0.008* |
| Tangibility | 15.4839 | 2.21917 | 14.2449 | 3.41889 | 1.965 | 0.053 |

Source: Primary Data

DISCUSSION AND CONCLUSION

This research was undertaken to assess the service quality of hospitals in Ukhrul district. The current study is limited in that it examines only the patients' perspective. The survey anticipated 80 patients in the study, out of whom 49 from public hospital and 31 were from private hospital. Most of the patients have bachelor degree qualification. The principal components analysis with varimax rotation was used to inspect the factor structure of patients' perception in the study. The present study studied four

factors (Tangibility, Reliability, Responsiveness, and Empathy). It was revealed through the t-test result that the patients' perception of service quality with regard to the hospitals' Responsiveness and Tangibility were equal between private and public hospital. However, the patients' perception of service quality with regard to the hospitals' Reliability and Empathy between public and private hospital differed significantly. The test of the study revealed that there is significant difference in the patients' perception between public and private hospital with regard to the factor of Reliability and Empathy. However, there is



no significant difference in the patient's perception with regard to Responsiveness and Tangibility.

BIBLIOGRAPHY

1. Aagja, J. P., & Garg, R. (2010). *Measuring perceived service quality for public hospitals (PubHosQual) in the Indian context. International Journal of Pharmaceutical and Healthcare Marketing*.4(1).60-83.
2. Ali, S.S., Basu, A., &Ware, N. (2018). *Quality Measurement of Indian Commercial hospitals - Using a SERVQUAL Framework. Benchmarking: An International Journal*.1-37.
3. Altuntas, S., Dereli, T., & Yilmaz, M. K. (2012). *Multi-criteria decision-making methods based weighted SERVQUAL scales to measure perceived service quality in hospitals: a case study from Turkey. Total Quality Management & Business Excellence*.23(12).1379-1395.
4. Amin, M., & Nasharuddin, S. Z. (2013). *Hospital service quality and its effects on patient satisfaction and behavioural intention. Clinical Governance: An International Journal*.18(3).238-254.
5. Andaleeb, S. S. (2000). *Public and private hospitals in Bangladesh: service quality and predictors of hospital choice. Health Policy and Planning*.15(1).95-102
6. Andaleeb, S.S.(2001). *Service quality perceptions and patient satisfaction: a study of hospitals in a developing country. Social Science & Medicine*.52.1359-1370.
7. Boshoff, C. & Gray, B. (2004). *The relationships between service quality, customer satisfaction and buying intentions in the private hospital industry. S. Afr. J. Bus. Manage*.35(4).27-37.
8. Cleary, P.D., & McNeil, B.J. (1988). *Patient Satisfaction as an Indicator of Quality Care. Inquiry*.25(1).25-36.
9. Duffy, J. M., & Ketchand, A. A. (1998). *Examining the Role of Service Quality in Overall Service Satisfaction. Journal of Managerial Issue*.10(2).240-255.
10. George, D., & Mallery, P. (2003). *SPSS for windows step by step: A simple guide and reference. 11.0 Update (4th ed.). Boston, MA: Allyn & Bacon.*
11. Gil, M. R., & Choi, C.G (2019). *Factors Affecting the Choice of National and Public Hospital Among Outpatient Service Users in South Korea. Inquiry*.56.1-11.
12. Lee, D.H., & Kim, K. K. (2017). *Assessing healthcare service quality: a comparative study of patient treatment types. International Journal of Quality Innovation*.
13. Lim, J. S., Heinrichs, J. H., Aali, K. A., & Aamir, A. (2018). *The role of hospital service quality in developing the satisfaction of the patients and hospital performance. Management Science Letters*.8.1353-1362.
14. Padma, P., Rajendran, C., & Lokachari, P.S. (2010). *Service quality and its impact on customer satisfaction in Indian hospitals. Benchmarking: An International Journal*.17(6).807-841.
15. Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1994). *Reassessment of Expectation as a Comparison Standard in Measuring Service Quality: Implications for Further Research. Journal of Marketing*.58(1).111-134.
16. Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). *A Conceptual Model of Service Quality and Its Implication for Future Research. Journal of Marketing*.49(4).41-50.
17. Shafiq, M., Naeem, M. A., Munawar, Z., & Fatima, I. (2017). *Service Quality Assessment of Hospitals in Asian Context. Inquiry*. 54.1-12.
18. Shemwell, D.J., & Yavas, U. (1999). *Measuring Service Quality in Hospitals: Scale development and Managerial Applications. Journal of Marketing Theory and Practice*, 7(3). 65-75.
19. Singh, A., Prasher, A., & Kaur, N. (2020). *Assessment of hospital service quality parameters from patient, doctor and employees' perspectives. Total Quality Management & Business Excellence*.31(13-14).1467-1486.
20. Sohail, M.S. (2003). *Service Quality in Hospitals: more favorable than you might think. Managing Service Quality*.13(3).197-206.