

ASSESSING PATIENT SATISFACTION USING SERVQUAL MODEL- A CASE STUDY OF PUBLIC AND PRIVATE HOSPITALS

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ABSTRACT

Aim

The purpose of the present study is to assess and evaluate the patient's needs and degree of satisfaction in public and private hospitals using a SERVQUAL model.

Methodology

This study has been conducted on 200 patients in both public and private hospitals of Jaipur with the study period between August to November 2022 with a structured questionnaire to all the participants, who were chosen using a simple random sampling method. For analysing data, both descriptive and inferential statistics have been used.

Results

By using Structural Equation Modelling, the study has found Assurance, Empathy, Reliability, Responsiveness, and Tangibility as influential factors; and is significantly related to overall patient satisfaction in public and private hospitals

Conclusion

This study suggests that for ensuring better patient satisfaction, variables like emergency patients, report accuracy, timely and appointment-based patient observation, hygienic environment, and timely report delivery, etc. should be provided.

Keywords Patients, Satisfaction; SERVQUAL; Service Quality.

INTRODUCTION

In providing responsive, quality healthcare delivery, the importance of understanding patients' satisfaction is widely acknowledged. According to Woodside et al cited, consumer satisfaction is a fundamental requirement for healthcare providers.¹ Satisfaction become very imperative as patients themselves and institutional healthcare service buyers make selection decisions. Many studies add that in addition to its positive implications on patient retention and loyalty, patient satisfaction influences the rate of patient compliance with physician advice and the healing process of patients.² Peprah et al, argues that for the limited healthcare resources to be allocated and managed effectively, it is therefore prudent for healthcare providers to access and identify patients' priorities among various service quality dimensions and to improve these dimensions for patient satisfaction.³ According to Jackson and Kroenke, healthcare service quality is an indicator aiding the discovering of the aspects of service quality that require changes to improve patient satisfaction.⁴ The importance of patients' views as an essential tool for monitoring and managing as well as improving service quality has been stressed by many studies. Many hospitals are shifting from the culture of the

healthcare system from one formed by the preferences and decisions of medical professionals to one shaped by the views and needs of its users thus adopting a patient-centred attitude.⁵ As a result, a number of studies investigating patient satisfaction employ a wide range of measurements depending on their patient satisfaction definition.⁶ The SERVQUAL model is a tool used for measuring service quality and consequently the satisfaction of clients. It begins with the assumption that service quality is a function of customer's expectation of a service and their perceptions of the service actually rendered. To ascertain satisfaction, the difference between these variables (customers' expectations and perceived service actually delivered) is determined. Zeithaml et al. asserts that SERVQUAL is a reliable instrument for determining service quality and satisfaction of customers and have been applied in different studies in different service industries.⁷ There are a number of critical issues relating to healthcare services that highlight the need to assess and measure patients' satisfactions and improve them. Sewell puts forward that health which is particularly the relief or cure of ill health, is universally necessary and creates the needed attention to provide high quality services in response to development in medicine. As a result, assessing and measuring patient's satisfaction and perceived service quality is an important issue for a healthcare provider to understand what is cherished by patients, and to know where, when and how service can be altered or possible improvement can be made as well as how the scarce resources of the healthcare service would be distributed.⁸ Like the other service organizations, healthcare organization has become a highly competitive and very rapidly growing service industry in Bangladesh. In healthcare, patient perceptions are considered to be the major determinant to assess the service quality of a healthcare organization.⁹ This interprets that customer satisfaction is the prime indicator for critical decision making in selecting a healthcare service.

AIM OF THE PRESENT STUDY

The purpose of the present study was to assess and evaluate the patient's needs and degree of satisfaction in public and private hospitals using a SERVQUAL model.

METHODOLOGY

As a core objective of this study, it sought to assess patient's satisfaction using SERVQUAL model. (Figure 1) The study population was made up of 200 patients who had visited both public and private hospitals at the time of the research between August 2022 to November 2022. Respondents for the study were selected by using simple random sampling technique. The SERVQUAL instrument by Parasuraman et al., was adapted and modified to capture the relevant data.¹⁰ The questionnaire was pre- tested, refined and finally administered to the target sample through personal contact by the researcher using 12 questions. (Table 1) Informed Consent information was attached to each questionnaire. This produced a total response and active response rates as 86.4% and 62.0% respectively. The data were analysed using SPSS (version 25.0) for descriptive statistics. The gap score which indicates patients' satisfaction was determined by the service quality gap model. According to this model, the service quality is a function of perception and expectations and can be modelled as:

$$SQ = \sum_{i=1}^k (P_{ij} - E_{ij})$$

Where:

SQ = overall service quality; k number of attributes.

P_{ij} = Performance perception of stimulus i with respect to attribute j.

E_{ij} = Service quality expectation for attribute j that is the relevant norm for stimulus i.

Service quality manifest when expectations are met (or exceeded) resulting in satisfaction, and a service gap occurs if expectations are not met also producing dissatisfaction

(Parasuraman et al., 1985). The gap score for each statement is calculated by deducting the expectation score from perception score. The manifestation of a positive gap score suggest that expectations have been met or exceeded and a negative score also means that expectations are not being met. Gap scores can be analyzed for individual statements and can be aggregated to give an overall gap score for each dimension.

RESULTS

The respondents' age as depicted in table 1 indicated that the age range varied 18-30 (30.4 per cent), 31-40 (33.2 per cent), 41-50 (22.9 per cent), and > 50 years (13.5 per cent). 55.1 per cent of the respondents were females whilst the remaining 44.9 per cent were males. As a public hospital, it serves both males and females. In total, 74.3 per cent of the respondents had some form of formal education. According to this SERVQUAL model, service quality is a function of perception and expectations. The results indicated that overall satisfaction of patients concerning the service quality of the hospital was good. A total of one hundred and fifty-seven (73.4%) patients responded to this question with all rating the hospital's service as good. Thirty-eight (17.8 %) of the patients also rated the service of the hospital as very good. On the other hand, a few thus, nineteen (8.8%) were not happy about of the general service quality of the hospital and therefore rated it as poor. The service quality dimension gap score which is the discrepancy between patient's expectation and perception about the dimensions of service quality revealed that negative gaps occurred in four of the dimensions out of six dimensions employed in the study. This suggest that, even though patients' overall satisfaction was good or high, there is more room for the hospital to improve service quality in relation to the dimension with the negative gaps. Path diagram revealed that assurance (= 0.158; t = 3.795, empathy (= 0.128, t = 3.368), tangibility (= 0.089, t = 2.239), reliability (= 0.135; t = 3.032), and responsiveness (= 0.474; t = 8.829) were found to be related to patient satisfaction, with the evidence that the five formulated hypotheses exceeded the recommended value, 1.96 (< 0.05), hence, Assurance, Empathy, Reliability, Responsiveness, and Tangibility have relationship with patient satisfaction. (Table 1)

DISCUSSION

Demographic characteristics such as age, gender, and educational level are very vital in determining and assessing patients' satisfaction and perceived service quality in healthcare delivery. These are important to be able to determine how they influence satisfaction of patients.¹¹⁻¹³ Whichever the hospital is, the prime task of the hospital will be to ensure satisfaction of the patient or the patient's family by providing enough quality services. This is the prime concern of assurance. The factors that are covered under this part are: doctor's ability and efficiency, regular examination of patient, accuracy of the report, taking advice from expert doctors, special caring for emergency patients, etc.¹⁴⁻¹⁶ According to our study, patients are satisfied with the services provided by private hospitals as compared to public hospitals. The study found that assurance to patient satisfaction is highly significant at the 1 % level of significance. As a diagnostic instrument, SERVQUAL has identified where the largest service quality gaps, as perceived by patients, occur across six service quality dimensions used in the study. The instrument also allows management to identify in further detail where such gaps are occurring by analysing the individual statements that make up each dimension.¹⁷ A Correlation and Regression Analysis technique using the model suggested by Parasuraman et al.¹⁰ was used to identify the significant relationship between patient satisfaction and the factors identified through service quality factors (Assurance, Empathy, Reliability, Responsiveness, and Tangibility).¹⁸⁻²⁰ This study finds that the patients are concerned about getting special attention to emergency cases, doctors, staffs and nurses care the patient as special treatment is very crucial to emergency cases. The study tried to

compose a conceptual model that would better predict and explain service quality dimensions to patient satisfaction in the health care context.

CONCLUSION

We deduced subjectively that the staff appreciated the concept of patients' rights and autonomy while inside the facility. Besides the workshops designed by the study team, the efforts put in by the facility staff were commendable. This was eventually reflected in their dealings with the patients and the results showed great improvement in the satisfaction level of the patients coming to the hospital. This study suggests that for ensuring better patient satisfaction, factors like: special attention to emergency patients, accuracy in lab reports, doctors/Staff observe patients timely, appointment-based observation, hygienic environment, and on time delivery of reports should be provided in both public and private hospitals. To fully assess the quality of healthcare delivery and patients satisfaction, it is expected that both technical and functional aspects of the service be considered. As another limitation to this study, it considered only the functional aspects of the service delivery thus only patients' view were used for the research.

TABLES

Figure 1- Servqual model utilized for the study (Source- Parasuraman et al., (1985))

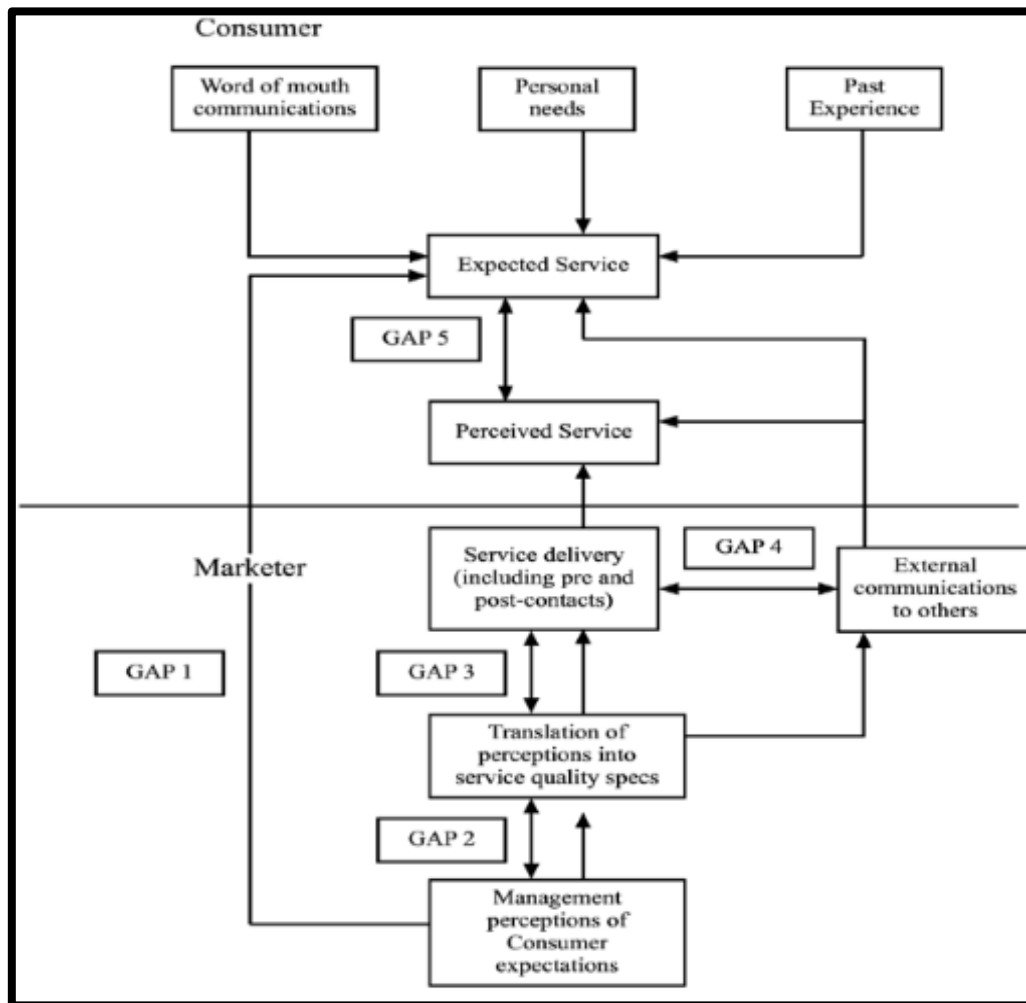


Table 1- Questionnaire provided to the patients based on servqual model

S. No.	Questions
1	Does the hospital have good facilities to treat patients?
2	Do they provide information brochure/ leaflet?
3	Do they have good medical equipment's?
4	Did the doctor explain to you about your condition properly?
5	Did they guide you regarding diagnosis and treatment options?
6	Had the doctor given ample time to examine you?
7	Did you have to wait longer for the treatment to be given?
8	Did nurses answered your queries?
9	Did nurses give enough time and attention to take care of your ailment?
10	Does the hospital provide good treatments and is available 24 hours a day?

11	Does the hospital have a good reputation?
12	Did the doctor's consultation room had all the details you needed to understand about your treatment needs?

Table 2- Individual statements that contribute to the gap score of service quality dimensions.

Attributes	Gap score
Reliability	
1. Prompt service delivery without waiting time	-0.85
2. The doctor has ample time to examine patients	-0.82
Responsiveness	
1. The hospital delivers 24 hours service quality all the time	-0.82
2. Nurses were willing to answer questions of patients	-0.39
3. Nurse made patients felt that patients were worth their time	-0.46
Assurance	
1. The hospital has a good reputation	-0.25
2. The doctor's office (consulting room) had everything needed to provide detail medical care	-0.31
Communication / interpersonal relationship/ Empathy	
1. The doctor explained what was wrong with patients before giving treatment	-0.29
2. The doctor told patients their diagnosis	-0.33
Tangibility	
1. The hospital has medical equipment's	-0.87
2. Hospital has good facilities	-0.78
3. Hospital gives information leaflet/ brochure	-0.73

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