

Association Between Service Quality, Patient Satisfaction And Patient Loyalty In Health Care Service Centers

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How to cite this article: S.Jebastine Suthan Raja, R.Jimmy Carter, K. Karthik Subramanian (2024) Association Between Service Quality, Patient Satisfaction And Patient Loyalty In Health Care Service Centers. *Library Progress International*, 44(3), 21598-21607

Abstract:

In response to the harsh conditions brought about by the industry's maturing, decreased financing, and more rivalry, the health-care sector has reorganized its service delivery system in the last several years. Finding efficient solutions to meet the demands and wishes of the patients has been the primary emphasis of the reorganization. Quality management strategies are being used more and more often by businesses and organizations. For a service organization to thrive, the quality of its technical and functional support must be top-notch. Today, no healthcare provider can afford to skimp on service quality or patient happiness. Rising service standards and consumer awareness have both contributed to higher expectations among today's consumers. Their expectations for the service they get are likewise rising. When patients are pleasantly surprised by the high level of treatment they get at hospitals, it often leads to a positive opinion of such institutions. Identifying patient profiles and personality attributes and assessing hospital service quality are the primary aims of the research. Data processing was carried out using suitable statistical methods on the gathered data. Up to this point, you have seen the findings, as well as their analysis and interpretation. What follows is a synopsis of the study's results, along with its conclusions and policy recommendations. Hospital service quality may be defined by three factors: fundamental, value-added, and crucial service characteristics.

Keywords: Service Quality, Patient Satisfaction, Patient Loyalty, Health Care Services

Introduction

Actions, procedures, and results constitute services. The term "service" is used to describe a wide range of economic activities that do not directly involve the production of a tangible good for consumer use but rather generate value via the provision of intangibles such as entertainment, health, punctuality, comfort, and convenience. Growing excellent items prompts quantifiable additions in benefit, cost reserve funds, and pieces of the pie, as per research in the administrations business. The quality of medical treatment has been a growing issue in recent years in India. The Indian healthcare system has undergone dramatic transformation as a result of liberalization and globalization policies. Patients are becoming more knowledgeable customers who want high-quality health care services. When choosing a hospital, quality has become a major factor for consumers.

The current research focuses in on health-care services, which include hospital services, diagnostics, physician consultations, and a few other developing areas, as one facet of the service industry. There are two main categories that researchers use to classify service quality: technical and functional. As opposed to practical quality,

which connects with how the help is given to the client, technical quality denotes the correctness and production of technical aspects. Patients in the health care business often depend on practical attitudes, such as the facilities, cleanliness, quality of the facility, cuisine, and attitude of the staff.

Statement of the Problem

A service's end result is not a tangible item that people buy and use in their homes. The production of services results in the addition of value, which may be described as intangible, in the forms of ease, entertainment, punctuality, comfort, or health. Improvements in profit, cost, savings, and market share may be achieved via the development of high-quality products, according to research in the service industry. The quality of services has been an increasingly pressing issue in recent years in India.

Review of Literature

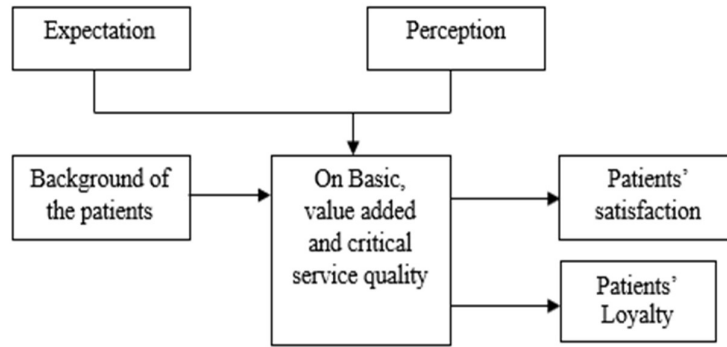
- **Febri Endra Budi Setyawan et.al (2022)** their research titled "Understanding Patient Satisfaction and Loyalty in Public and Private Primary Health Care" looked at. Health care providers may enhance their services and cost-effectiveness by focusing on three critical areas: the quality of health facilities, patient happiness, and loyalty. As a result, the goal of this study is to contrast public and private primary care clinics in terms of patient happiness and loyalty. As a conclusion, primary care clinics may enhance the quality of their services by identifying the requirements that impact patient happiness and loyalty.
- **Geoffrey Bentum-Micah et.al (2020)** "Perceived Service Quality, a Key to Improved Patient Satisfaction and Loyalty in Healthcare Delivery: The Servqual Dimension Approach" was described in their paper.
- This research aimed to find out how patients' perception of quality of services in the hospitals varied with their happiness and loyalty towards these services as reflected by the five SERVQUAL dimensions; the research employed SmartPLS V3.2.8, a second-generation multivariate data analysis method (PLS-SEM), a regression and path analysis approach. The data was collected by using the census method and patients from private hospitals. Specifically, 562 patients with the most common visceral disease were selected because they attended the study. The consequences of the review showed that assistance quality aspects (RATER) connected with patients fulfillment and devotion to the medical care administrations at the same time representing the major determinants for their relationships. The fact is if they do not cover all four dimensions, they would get totally different results. In a study, these five components are based on credibility and trust, humanity, empathy, and attentiveness, which aim to attract patients in the hospital settings.

Research Gap

Quality of hospital services and its influence on patient satisfaction are manifested by the preceding literature study. No one research has looked specifically at the demographics, expectations, and experiences of patients in public and private hospitals in the Kanyakumari area to determine the quality of care they get. Because of this, the current work has attempted to close the knowledge gap by presenting a research model.

Proposed Research Model

It is a visual depiction of the order and reasoning behind the current study's research procedures.

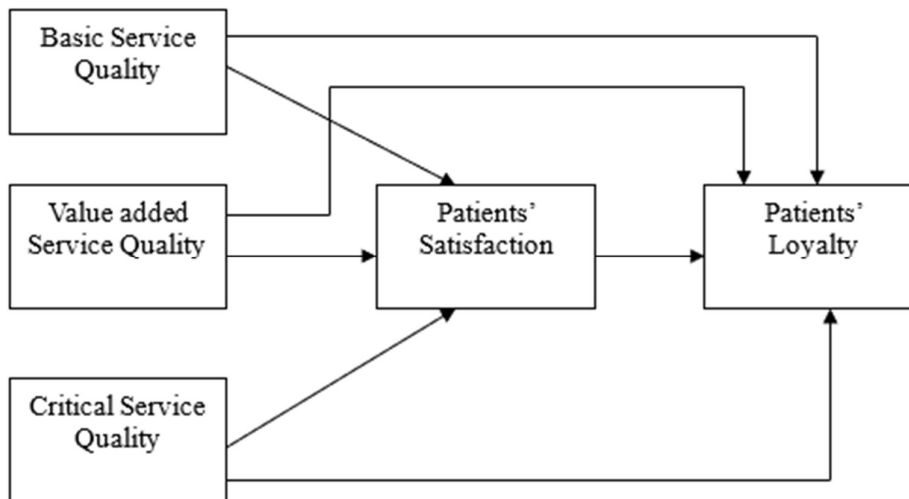


Objectives of the Study

The current study aims to accomplish the following using the suggested research model:

1. Therefore, to reveal the personal traits of each patient's,
2. Achieving this would be through a customer survey has to be conducted to understand where there is a quality deficiency of service across all dimensions.
3. To display the extent to which patients are pleased and devoted to the hospitals and
4. To examine how customers' happiness and loyalty are affected by different aspects of service excellence.

Linkage between service qualities, patients' satisfaction and Loyalty



Hypothesis of the Study

The following assumptions are made in light of the suggested research model:

1. There is no discrepancy or apparent difference among patients in both public and private hospitals in relation to particular aspects of service quality like delivery, accessibility, and communication..
2. The patient profile is not significantly related to their expectation and perception levels on different service quality aspects.

3. The happiness and loyalty of patients towards hospitals are unaffected by service quality.

Research Design of the Study

The program or blueprint for a study is called a research design. Data collection, measurement, and analysis may be seen as following this broad outline. From formulating hypotheses and thinking through their practical consequences to doing final data analysis, it lays out the whole process. Given that this descriptive research sought to address the "what" and "why" of patients' attitudes regarding hospital service quality, it is useful for understanding the existing situation. It likewise analyzes the impact of medical clinic administration quality on tolerant joy and reliability, as well as the correlation between patient profile and opinion on hospital service quality expectations and perceptions. Its primary function is to diagnose any problems. Accordingly, the study's applied research approach is both descriptive and diagnostic.

Association between the Profile of Patients and their Personality Traits

Using One-Way Analysis of Variance, we looked at how patients' profiles relate to their personalities.

Association between Profile of Patients and their Personality Score

SL.No.	Profile variables	'F' statistics	Table value of 'F' at five per cent	Result
1.	Nativity	4.7882	3.84	Significant
2.	Age	3.6441	2.37	Significant
3.	Gender	2.6514	3.84	Insignificant
4.	Level of education	2.9683	2.37	Significant
5.	Occupation	2.4673	2.21	Insignificant
6.	Marital status	2.1782	2.60	Insignificant
7.	Level of education of spouse	2.9697	2.60	Significant
8.	Personal income per month	2.7944	2.60	Significant
9.	Nature of family	3.2542	3.84	Insignificant
10.	Family size	2.1143	2.37	Insignificant
11.	Number of educated family members	2.9694	2.60	Significant
12.	Number of earning members per family	3.8673	3.00	Significant
13.	Family income	2.9611	2.37	Significant

Since their 'F' insights are critical at the five percent level, the accompanying profile factors are altogether associated with patients' personalities: natality, age, level of education, college/university education, income per month per person, family size, number of family members with college/university level education, number of employed family members, and family income per month.

Reliability and Validity variables in Critical Service Quality Factors

Five components make up CRSQ, or critical service quality. There are several variables used to quantify each of these six aspects. It is critical to use Confirmatory component Analysis (CFA) to check the reliability and validity of each CRSQ component before combining the scores of its variables. The CRSQ factor has been evaluated for its overall dependability using Cronbach's alpha.

Reliability and Validity of Variables in CRSQ factors:

Sl.No.	CRSQ factors	Range of standardized factor loading	Range of 't' statistics	Cronbach alpha	Composite reliability	Average variance extracted
1	Personnel factor	0.9249-0.6848	3.9166*-2.8183*	0.8043	0.7848	54.04
2	Operation facilities factor	0.8647-0.6549	3.6504*-2.4849*	0.7842	0.7606	52.49
3	Adequate material resources	0.8667-0.6549	3.8507*-2.5142	0.7903	0.7763	53.08
4	Treatment factor	0.8544-0.6508	3.6567*-2.4599*	0.7914	0.7633	52.08
5	Communication factor	0.8044-0.6024	3.3997*-2.1173*	0.7408	0.7117	50.08
6	Acute Care factor	0.8557-0.6447	3.6997*-2.6884	0.7893	0.7611	52.33

*Significant at five percent level.

Cronbach's Alpha and Composite Reliability are the two components of CRSQ, both of which have factor loadings higher than 0.60, indicating content validity. The concurrent legitimacy is exemplified by the centrality of the 't' insights of the normalized factor loadings of the factors as a component of each CRSQ. The fact that the average values of AVE (50%) and CR (0.50) in both items are higher than their standard thresholds provides more details. Each component of the CRSQ has an internal consistency level of 0.60 or above according to the Cronbach alpha.

Population of the Study

All public and private hospitals in the Kanyakumari District make up the study's population. Information was gathered from the district collectorate on the number of hospitals that provide medical services to both inpatients and outpatients at the same time. In this context, "hospital" might mean either "private" or "government" run. Government hospitals in the district total 39, while private hospitals number 295.

The researchers in this study used a purposive sampling technique. Each of the 39 public hospitals and 39 private hospitals in the district is included for this research to ensure that public and private healthcare providers are considered equally. Ten individuals were chosen at random from each institution to participate in the research. This meant that a total of 780 patients (390 males and 390 females) were considered for the sample. Patients at public hospitals responded to the interview schedule at a rate of 61.79 percent, whereas those at private hospitals responded at 70.35 percent. Results showed that 529 people were considered for the study, with 241 representing public hospitals and 288 representing private ones.

Collection of Data

Primarily, primary data is the foundation of this survey. The main data was gathered using a pre-arranged interview plan. An essential element of the interview schedule is separated into three sections. Here we learn about the patients' histories and characteristics in the first section. Hospitals' foundational and cutting-edge service quality are covered in the second hour of the program. Variables pertaining to patients' happiness, loyalty, and unsatisfactory service quality in hospitals make up the third section of the scheduling. With the assistance of the medical officials, a pilot study was carried out with 100 patients from both public and private hospitals in the area. Improvements, alterations, removals, and simplifications were made according to the pre-test feedback. The main data was gathered using the final draft.

Discriminant Validity of BSQ factors

Sl.No.	Mean of AVE Square of correlation coefficients	1	2	3	4	5
1.	Tangibility		0.5286	0.5206	0.5372	0.5449
2.	Reliability	0.3886		0.5089	0.5254	0.5331
3.	Responsiveness	0.3041	0.2886		0.5174	0.5251
4.	Assurance	0.2997	0.3011	0.3676		0.5416
5.	Empathy	0.2842	0.3446	0.2969	0.3082	

In all sets of BSQ factors, the mean of AVE is more noteworthy than the square of the connection coefficient between the two sets of components. It shows that the BSQ is discriminantly valid. The correlation coefficient squared of the pair of BSQ components is smaller than the mean of AVEs of tangibility and reliability (0.5286). As an example, the square of the correlation coefficient for certainty and empathy is 0.3082, but the mean of the two is 0.5416, which is higher. All of these findings point to the BSQ components' discriminant validity.

Influence of VASQ variables on Patients' Loyalty

Sl.No.	VASQ factors	Regression coefficient among patients in		
		PRH	GOH	Pooled data
1.	Infrastructure	0.0844	0.0447	0.0661
2.	Personnel quality	0.1496*	0.0887	0.1092
3.	Process of clinical care	0.0334	0.0446	0.0227
4.	Administrative procedure	-0.0227	0.0889	0.0441
5.	Safety indicators	0.1102	-0.0045	0.0676
6.	Social responsibility	0.0717	0.1227*	0.1334*
7.	Administrative process	0.0886	-0.0144	0.0454
	Constant	0.1492	0.0811	0.1392
	R ²	0.7981	0.7633	0.8144
	F Statistics	8.4508*	8.0144*	9.2667*

*Significant at fiveper cent level.

The nature of the PRH's staff is the main VASQ component in deciding the devotion of the patients to the office. Increases of 0.1496 units in patient loyalty are associated with increases of one unit in the aforementioned VASQ component. The R² value of 0.7981 indicates that variations in patients' perceptions of the VASQ components account for 79.81% of the variation in their loyalty. There is a 0.1227 unit increase in patient loyalty for every unit rise in the sense of social responsibility among GOH patients. A whopping 76.33% of the variation in patient loyalty may be accounted for by changes in how they perceive the VASQ components.

Basic Classification of Patients**Distribution of respondents on the basis of Hospital**

Sl.No.	Nature of hospital	Number of patients	Percentage to the Total
1.	Private hospitals (PRH)	288	54.44
2.	Government hospitals (GOH)	241	45.56
	Total	529	100.00

There are three steps to complete this study. Patients' histories and character quirks were covered in the first phase. Stage two included surveying hospital staff to gauge their expectations and perceptions of fundamental value contributed and crucial service quality. Finally, we looked at how happy and loyal our patients were, as well as how service quality affected those metrics. In a nutshell, this study aims to do the following: (1) reveal patient profiles and personality traits; (2) analyze hospital service qualities; (3) analyze service quality gaps in each hospital dimension; (4) investigate service quality discriminators between using the said dimensions of patients experience in both the private and public hospital; (5) present patients' satisfaction and loyalty to the effectiveness of administration quality; what's more (6) break down the effect of various help quality elements on these levels.

Primary sources formed the backbone of the current investigation. Information was gathered by means of a prearranged interview plan. To accomplish the objectives of the examination, the interview schedule was carefully designed. Previous research was used to compile variables pertaining to patient happiness, loyalty, and fundamental, value-added, and crucial service quality aspects. One hundred patients from both public and private institutions participated in the pilot trial, which was facilitated by medical authorities. The final data collection plan was established after several adjustments and simplifications were made based on the pilot study's comments.

The Kanyakumari district is home to 295 private hospitals in addition to 39 public ones. The research intentionally included all 39 public hospitals and all 39 private hospitals to ensure that all types of institutions were fairly represented. Ten patients were chosen from each hospital with the assistance of the medical officers of those facilities. A total of 780 participants were the study's sample that was covered in this research. Noteworthy is that the response rate for the public hospital patients was estimated to be 61.79%, whereas it was 73.85% for the private hospital patients. Thus, the analysis focused on a total of 529 patients (241 patients were from the public hospitals and 288 were from the private hospitals).

Appropriate statistical methods were used to analyze the data that was obtained. Prior chapters included the findings, analysis, and interpretation. The results, conclusions, and policy implications are summarized in this chapter.

The current research found that critical service qualities, value added service qualities, and basic service qualities were the three most essential aspects of hospital service quality. The service provider has not yet met the level of expectation from patients on all three service attributes. Compared to PRH patients, GOH patients had a wider service quality gap. Patients at PRH report greater levels of responsiveness and empathy, two discriminating fundamental service quality indicators, compared to those at GOH. When it comes to vital and value-added service quality indicators, the most discriminating ones are indications of staff quality and safety. There is a small but favorable correlation between the three measures of service quality (basic, value-added, and crucial), and the happiness and loyalty of patients. As a result, hospital administration should prioritize patient loyalty in addition to patient happiness. Patients will only remain loyal if they are consistently satisfied with the care they get. Therefore, it is imperative that the hospital administration always enhance the quality of their services.

Suggestions

Here are some recommendations derived from the study's findings:

1. Establishment of Customer Cell

It would be wise for the hospital administration to set up a customer cell that regularly surveys patients to find out how they feel about the service they received. Then and only then will they be able to upgrade their infrastructure and facilities to suit their customers' demands. Based on customer cell data, hospital administration may use differentiated pricing strategy to cater to all customer categories as needed.

2. Concentrate on Latest Service Quality

Customers' levels of knowledge are increasing at a quicker pace, so hospitals shouldn't only concentrate on fundamental service quality; they need also make sure it's current and vital. The level of service that patients are expecting is comparable to what is expected on a global scale.

3. Discriminating Pricing Strategy

Public hospitals might use a discriminating pricing approach to narrow the gap with private hospitals. Despite the abundance of equipment and facilities available to public hospitals, the quality of their upkeep is severely lacking. It might be because the government isn't providing enough funds. As a result, the administration of the hospital may be given permission to cater only to the wealthy. The cost of services offered to the impoverished may be covered by that fund.

4. Price fairness in Hospitals

Due to the mentality of poly clinics, confidential medical clinics in India are growing at a faster speed. Patients are receiving improved care that is on line with global standards. The issue of pricing equity, however, is of paramount importance to these organizations. This is something that the hospital administration should keep in mind. The hospital's service costs and the minimal annual profit target may be reconciled by creating a dedicated department. Based on it, they could set the cost for their services. Only when patients are completely satisfied will they be able to maximize their profit.

5. Focus on Patients Loyalty

The managements of private hospitals would do well to prioritize the development of patient loyalty. Patients' loyalty is almost nonexistent these days due to the painful experiences they've had in hospitals. Private hospital administrations should give this issue significant thought and implement suitable measures to foster patient loyalty as the expense of acquiring new patients is far higher than the expense of maintaining the current patients.

Scope for future Research

A great deal of potential future research may be built upon the current findings. In the future, this study could be expanded to include other districts in Tamil Nadu. Soon, researchers in Tamil Nadu may compare the quality of healthcare services provided by hospitals in different districts. Future research can look at the service quality disparity from every angle as its own study. The current research might be broadened to include an examination of hospital service quality from the perspective of physicians, nurses, and paramedical officers. In the future, researchers may look at how service quality affects patient loyalty both directly and indirectly. In future studies, structural equation modeling could assist researchers examine the mediating factors' roles in the relationship between service quality and patient loyalty. Potentially also covered is the topic of comprehensive quality management in healthcare facilities. Research in the future could provide insight on the demographic bias in hospital service quality.

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