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PARADIGM CONFLICTS IN SUSTAINING SERVICE QUALITY IN HOSPITALS

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ABSTRACT

Indian Healthcare is one of India's largest sectors, in terms of revenue and employment, and one can well witness the sector to expand rapidly. With the fast growing purchasing power, Indian patients are willing to pay more to avail health care services of international standard. In the era of globalization and heightened competition, it has been observed that delivery of quality service is imperative for Indian healthcare providers to satisfy their indoor as well as outdoor patients. Hence, it is essential to be aware of how the patients and patient parties evaluate the quality of health care service. Such an understanding facilitates hospital administration to enhance quality of service and satisfy patients to a great extent as well. SERVQUAL instrument among several tools of measuring service quality and patient satisfaction is the most widely used tool.

This paper focuses on the measurement of service quality provided by hospitals. Quality is considered as one of the important factors in differentiation and excellence of services and it is a basis of competitive advantage so that its understanding, measuring, and developing it are important challenges for all health services organizations.

The objective of this research is to examine the service quality influence in hospitals of Bangalore, service quality measures are based on some of the dimensions of the SERVQUAL, namely responsiveness, empathy, reliability and tangible are considered.

The research is purely based on primary data; the data has been collected by 50 respondents by using structured questionnaire. The data has been analysed by using one sample t-test and regression analysis. The results revealed that all the four dimensions were positively related to the satisfaction level of patients. It has been found that if the customers 'perception on service quality is high, it results in higher customer loyalty.

KEYWORDS: Patient Satisfaction, Customer Expectations, Customer Convenience, Hospitals, Service Quality, Measurement, Service Sector

INTRODUCTION

Healthcare sector in India is one of the India's largest service sectors terms of revenue and employment. On the back of continuously rising demand, the hospital services industry is expected to be worth US$ 81.2 billion by 2015. With the fast growing purchasing power, Indian patients are willing to pay more to avail health care services of international standard. In the era of globalization and heightened competition, it has been observed that delivery of quality service is imperative for Indian healthcare providers to satisfy their indoor as well as outdoor patients. Hence, it is essential to be aware of how the patients and patient parties evaluate the quality of health care service. Such an understanding facilitates hospital administration to enhance quality of service and satisfy patients to a great extent as well. SERVQUAL instrument among several tools of measuring service quality and patient satisfaction is the most widely used tool.

During the last few decades, the number of private centres providing health care services in Bangalore has been growing, and the private sector health care services market has turned out to be a competitive environment. And the vital need of increasing service organizations and advancing their services necessitates the measuring of service quality. The peer competitions have made the hospitals to provide superior services in order to retain in the competitive environment.

OBJECTIVES OF THE STUDY

- The main objective of the research is to study the Service Quality in selected hospitals in India.
- To measure the Service Quality in selected hospitals and find out the reasons for gaps.
- To analyse the perceptions of Staff and Patients.
- To suggest some measures for the policy makers in health care sector and the selected specific hospitals for reducing, eliminating the Service Quality gap and finally making the health care delivery in India effective.

METHODOLOGY

This part of the study deals with the selection of sample including the selection of respondents, the selection of sampling technique to be used and the layout of questionnaire.

DEVELOPMENT OF THE QUESTIONNAIRE

The best-known method of operationalizing service quality is the Gap Model / SERVQUAL approach suggested by Parasuraman, Zeithaml and Berry (1988)27. It is based on the "expectancy disconfirmation" paradigm and measures service quality perceptions (as opposed to so-called "objective" quality) by comparing customer expectations with the service performance (Boshoff and Gray, 2004: 36)28. It measures patient satisfaction with human aspects of service (responsiveness, reliability, empathy and assurance); only one factor of the instrument is devoted to the non-human aspect of care rendered (tangibles)

A thorough literature review on SERQUAL and particularly its application in medical situations was undertaken. Having done this the consideration of which dimensions identified by Parasuraman, *et.al.,* (1988)30 as being appropriate to these hospitals, whose services had many similar qualities to the original service categories, was considered. Then we adapted the SERVQUAL statements to reflect the service quality aspects of these hospitals in different dimensions. When developing the statement and dimension definitions, the viewpoint from these hospitals patients was taken to help stop the development of a biased survey reflecting the service provider's view.

QUESTIONNAIRE LAYOUT

In the survey, the Service Quality of each hospital is evaluated in terms of patients' perceptions, administrators', doctors', nurses', para-medical staffs', and supporting staffs' (on a rating scale of 1 for strongly disagree, to 7 for strongly agree) for 5 different dimensions as shown in appendix. The respondents (patients, administrators, doctors, nurses, para-medical staff, and supporting staff) were classified and confined to the individual hospital.

SAMPLING TECHNIQUE

The sampling procedure used was simple random sampling. Each member of the population who used the hospital had an equal chance of being selected.

COLLECTION OF DATA

Hospitals in the city of Bangalore constitute the population under study. As stated earlier, the sample is comprised of simple random selection of hospitals belonging to the broad categories under (as explained earlier) Government, Private, Public – Private Partnership (semi-government), Corporate, and Trust based were selected. The survey questionnaires were distributed to all of the five hospitals as mentioned above.

LIMITATIONS

The time frame selected to conduct the survey is limited and chosen based on convenience and not necessarily to produce the similar results and interpretations if the same survey is administered again.

Language interpretation found to be one of the limitations by some of the patients in both rural and urban areas. Researcher explained the meaning of the question wherever and whenever necessary to the patient in the local language with a greater diligence as not to provide any room for tampering of the meaning. Some other patients were unable to express their feelings exactly

CONCEPTS USED IN STUDY

Hospital

The World Health Organization defines modern hospitals as "The modern hospital is an integral part of social and medical organization, the function of which is to provide for the population complete health care both curative and preventive and who's out patient services reach out to the family in its home environment. The hospital is also a center for training of health workers and for bio-social research."

Health Care

The World Health Organization defines Health Care as "The prevention, treatment, and management of illness and the preservation of mental and physical well-being through the services offered by the medical and allied health professions."

Service Quality

"Service quality as perceived by the customer is the degree and direction of discrepancy between customer service perceptions and expectations."42 (Parasuraman, et al. 1985: page 41) This definition provided for the first time recognition that perception by the customer was as much a factor in service quality as the actual service delivered.

Service Quality Gap

Parasuraman et al (1988)43 identified the parameters of Service Quality as below.

Tangibles or the appearance of physical facilities, equipment, personnel and communication material. · Reliability or the ability to perform the desired service dependably and accurately · Responsiveness or the willingness to help customers and prompt service

Assurance as measured by the competence of the firm in delivering the promised service, courtesy extended to the customer, the firm's creditability and the extent to which customer feels secure.

Empathy or the caring, individualized attention that the firm provides to customer Customer perceived reliability,

assurance tangibility responsiveness and empathy in order to determine the service quality of the firm. When positive perceptions are not confirmed by the actual performance of the firm, a gap occurs, and this has been called the Service Quality Gap.

SERVQUAL

SERVQUAL as developed by Parasuraman, et al (1988)44 is the optimum measuring device that can be modified to accomplish predicting customer perceptions against expectations and the casting of those perceptions and expectations against the service provider perceptions of what it will require to satisfy the customers' service needs. SERVQUAL model is predominantly used to evaluate service quality.

LITERATURE REVIEW

The observations noted in the literature review leads to an understanding that a remarkable research is conducted in countries like USA including the many general areas in health care and service quality. The same intensity of work is yet to be triggered in India. Health is one of the important sectors and development of this sector directly contributes to the development of any country;

India has no exception to this. Now a days, though there are many alternatives available to the health care managers, the external people including patients are very cautious to follow them due to increase in the awareness. Slowly, the thrust is shifting towards "institution based" competition from "product based" competition. Interest of public is also shifting from "doctor" to "institution". Patient has become icon. Against the traditional "customer view", the "hospitals' view", which was not much focused earlier, started gaining strength. This made the hospitals to be more in need of calculating the service quality gap. As mentioned earlier, through the understanding from literature review, in the history of Indian health care, much work is yet to be evident in the calculation of service quality gap. This is becoming very important, as patient is now the central figure. The necessity to study the institutions is also changing from doctors' perspective to patients' perspective. All these are strong reasons for the researcher to make an attempt to study towards this gap 5. Due the constraints of time and effort, using the questionnaires for inpatients and oral interviews with critical stake holders in all the categories of administration, doctors, nurses, paramedical, supporting and patients, it is decided to study only the Gap 5. Hence a specific thrust on the remaining 4 gaps is not taken up in this study. But as identified by all most all eminent contributors in this field, it is very important to note, that gap 5 is equal tothe function of gap 1, gap 2, gap 3, and gap 4. Gap 5 = f (Gap 1, Gap 2, Gap3, Gap 4)

FINDINGS OF THE STUDY

The study was conducted by designing a cross sectional study of patients attending the OPD of the hospital, using the SERVQUAL questionnaire developed by Parasuraman as the Survey instrument. The SERVQUAL instrument has been empirically evaluated in the hospital environment and has been shown as a reliable and valid instrument in that setting.

SERVQUAL is designed to measure quality expectations and perceptions about quality of services using 22 items representing five dimensions, using a seven-point Likert scale:

- **Tangible**s**:** Physical facilities, equipment and appearance of personnel.
- **Reliability:** Ability to perform the promised service dependably and accurately.

- **Responsiveness:** Willingness to help consumers and provide prompt service.
- **Assurance:** Competence, courtesy and security.
- **Empathy:** Caring and individualised attention.

Table 1: SERVQUAL Dimension Scores for Hospital Outpatient Department Services

Dimension	Cronbach's Alpha	Expectation (E)	Perception (P)	Service Gap Score (P–E)	*P* Value*
Tangibles	0.78	6.61	6.06	0.55	< 0.001
Reliability	0.79	6.38	6.34	0.04	1.00
Responsiveness	0.78	6.53	5.88	0.65	< 0.001
Assurance	0.80	6.59	6.31	0.28	0.463
Empathy	0.82	6.39	6.28	0.11	0.155
Total unweight SERVQUAL score (–) 1.63					

**P* value < 0.05 is considered statistically significant.

DISCUSSIONS

The study population was defined as patients attending the general as well as specialist OPDs of the hospital. The sample consisted of 50 patients, a little above half of the respondents being female (53%). Respondents were mostly between the age of 21 and 45 (72%) and predominantly represented by service personnel posted to the military station and their dependents (81%). A small percentage of respondents were veterans and their dependents in the higher age group of 40–65 years. Majority of the respondents were married and 86% of the respondents had at least higher-secondary education. Civilian non-entitled patients being attended as a welfare measure were excluded from the scope of the study.

Every third patient who had utilised the OPD services of the hospital at least once before the current visit was requested to respond to the self-administered questionnaire on-site. Patients were assured full confidentiality and anonymity and requested to complete the survey while waiting for their supply of medicines at the dispensary after completing the doctor's consultations.

To confirm reliability and internal consistency of the study instrument, Cronbach's coefficient alpha was calculated for each dimension of the study instrument (Table 1).

By using the SERVQUAL instrument, expectation (E) and perception (P) of each respondent was assessed across each of the 22 items of the instrument and the service quality gap evaluated by measuring the gap score (P–E) across the same 22 items.

The score on each dimension of the scale was then calculated as the mean of the corresponding item scores and the mean expectation and perception values for each dimension was tested for difference between the mean scores of the dependent sample at 0.05 level of significance by analysing the data using SPSS, Version 2 (Table 1).

Finally, the mean expectation (E) and perception score (P) as well as the gap score across each of the 22 items of the instrument was examined and similarly analysed for testing difference between the mean values for statistical significance, so as to correctly identify the service quality gaps in respect of the OPD services being studied (Table 2).

RESULTS

The coefficient alpha values were observed to be consistently high, ranging from 0.78 to 0.82 across all five

dimensions, indicating high internal consistency among items within the SERVQUAL The E values were consistently high for all the items, the mean scores being above six for all items except the two items of 'staff always willing to help' and 'readiness for personal attention.' The highest expectation value was observed against the item 'prompt response to request' (Table 2).

Perception (P) mean scores were mixed in their scope, with several item scores being close to the expectation values while an appreciable number of item scores observed to be significantly lower than the reciprocal expectation scores (Table 2).

Service quality gaps (P–E) have been illustrated in both Tables 1 and 2. As can be seen from Table 1, quality gaps exist along all five dimensions of the survey instrument, with the gap across the dimensions of 'tangibles' and 'responsiveness' being statistically significant at < 0.001 value. The quality gap was further emphasised by the observation of an overall unweighted SERVQUAL score of (−) 1.63.

Service quality gaps across 20 of the 22 items of the survey instrument demonstrated a negative value between perceptions and expectations. Quality gap across various items, particularly those under the dimensions of 'tangibles' and 'responsiveness' were statistically significant at a value of < 0.05. However, the quality gap showed positive value across the items of 'individual attention to patients' and 'readiness for personal attention' (Table 2).

Table 2: Item Score Analysis for Expectations and Perceptions

Item	Expectations (E)	Perceptions (P)	Service Gap Score (P–E)	*P* Value*
Tangibles				
Modern equipment	6.74	5.24	–1.50	< 0.001
Physical facilities	6.50	6.04	–0.46	0.009
Clean and hygienic appearance	6.68	6.38	–0.30	0.041
Clean smart staff	6.66	6.30	–0.36	0.003
Reasonable waiting time	6.50	6.34	–0.16	
Reliability				
Sympathetic attendance to patients	6.52	6.62	–0.10	
Dependable OPD services	6.24	6.24 0		
Punctual OPD staff	6.76	6.52	–0.24	
Accurate OPD records	6.00	6.00 0		
Responsiveness				
Easy appointment/attendance	6.64	6.34	–0.30	
Prompt service	6.64	5.50	–1.14	< 0.001
Staff always willing to help	5.80	5.68	–0.12	
Prompt response to any request	6.96	6.02	–0.94	< 0.001
Assurance				
Can trust OPD staff	6.46	6.20	–0.26	
Feel safe	6.58	6.28	–0.30	
In-Care of OPD Staff				
Polite OPD staff	6.74	6.52	–0.22	

Table 2 – Cond.,

Adequate	6.58	6.24	–0.34	0.045
Support by the Hospital to the OPD				
Empathy				
Individual attention to patients	6.56	6.84	0.28	
Readiness for personal attention	5.76	5.96	0.20	
OPD staff aware of the needs of the patients	6.18	5.88	–0.30	
Staff have best interests of the patients in their heart	6.72	6.52	–0.20	
Convenient working hours	6.72	6.62	–0.10	

*P value < 0.05 is considered statistically significant.
OPD: outpatient department.

DISCUSSIONS

Understanding quality from the perspective of the consumer, particularly functional quality is emerging as a critical issue in health service delivery with recent research showing that physicians do not have good understanding of consumer expectations. Studies show that perceived service quality is directly linked to compliance with medical advice and treatment regimes to achieving best health outcomes.12 Quality has been defined as “The totality of features and attributes of a service that bear on its ability to satisfy a given need”.13

However, service quality is being increasingly expressed as a function of consumer expectations of service to be provided compared with their perceptions of the actual service experience.14 Consumers are becoming increasingly knowledgeable, discriminating and demanding of healthcare service, with their access to the internet opening up the realm of consumer medical knowledge. The high expectations scores, where the mean scores across majority of the items of the survey instrument are above six in a seven-point scale possibly reflect the new paradigm of increasing consumer expectations and demand for high quality care by the consumers of service hospitals. The quality image of a healthcare organisation is made of a set of expectations that will serve as a standard for comparing the perceived performance of the service provider, once the need for a service encounter arises. The result of a service encounter is a satisfaction or dissatisfaction judgment, the judgment being the outcome of the patient’s comparison of perceived service performance with the expectations brought by the consumer to the hospital. Mean perception scores observed during the study gives conflicting results, with scores along majority of the survey items being less than the expectation scores while exceeding such scores against two items listed under the dimension of ‘empathy.’ Service quality gaps existed across all five dimensions of the survey instrument with the total unweighted SERVQUAL score standing at (–) 1.63. These findings demonstrate that the patients’ perceptions of offered service were falling short of their expectations in respect of all dimensions of hospital OPD services. The study findings are similar to the findings of a study conducted by Lam,16 where gap scores were observed in the dimensions of reliability, responsiveness, assurance and empathy. Service quality gap across the dimension of ‘tangibles’ was observed to be statistically significant at < 0.001. This dimension consisted of five items representing the physical infrastructure and turn-out of OPD staff along with waiting time. The gap score across all items except waiting time were also observed to be statistically significant, pointing towards an appreciable deficiency across these items. Probably the peripheral location of the hospital, being located in a field station can partially explain the

gap. However, the gap was also a wake-up call for the hospital management to drastically improve the structure of the OPD services of the hospital.

Consumer ratings for paired expectation and perception scores were observed to demonstrate appreciable convergence across the dimensions of 'reliability' and 'assurance', signifying high confidence among the consumers in respect of dependability and competence of the services being provided. However, statistically significant quality gap existed across the item 'adequate support by the hospital to the OPD'. This particular perception needs further analysis as to the reason behind such perception.

Statistically significant quality gap was also observed across the dimension of 'responsiveness', with wide gaps between expectation and perception observed against the necessity of prompt service and prompt response by OPD staff. This deficiency possibly referred to requirement for additional inputs in behavioural training of OPD staff. However, it may also be interpreted as inadequate staffing of the OPD, as dependable and helpful OPD staff is not being able to deliver prompt service, though willing to do so.

It was comforting to observe reasonable convergence in E/P scores across the dimension of 'empathy', indicating careful, compassionate attendance by OPD staff. Positive gap score was also observed across the items of 'individual attention to patient' and 'readiness for personal attention', which point towards consumer delight across these dimensions.

The study had significant implications for the hospital management, as service quality gaps along with their specific dimensions were correctly identified, thus directing focused improvement efforts for addressing such gaps in the hospital OPD services.

It will be appropriate to acknowledge the exploratory nature of the study, as the study did not control for important confounders such as educational and hierarchical status of the respondents, illness severity and physician characteristics which may impact quality perception due to possible attribution effects. There is a need for further research with a bigger sample size on this issue for gaining stronger insights.

CONCLUSIONS

Service quality has become an increasingly important focus among health organisations, and has been linked to patient recovery and wellbeing. As health services place greater focus on patient satisfaction, hospital managers have to direct resources to quality management and the implementation of techniques to improve service delivery

Service quality gaps were identified to exist across all the five dimensions of the survey instrument, with statistically significant gaps across the dimensions of 'tangibles' and 'responsiveness.' The quality gaps were further validated by a total unweighted SERVQUAL score of (–) 1.63.

The study concludes that significant service quality gaps existed in the delivery of the hospital OPD services, which need to be addressed by focused improvement efforts by the hospital management

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