

Assessment of Service Quality of Select Hospitals in Bengaluru- with Reference to Outpatient Services

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Abstract

The service industry plays an increasingly important role in the economy of many countries. In today's global competitive environment delivering quality service is considered as an essential strategy for success and survival (Parasuraman et al., 1985; Reichheld and Sasser, 1990; Zeithaml et al., 1990).

Health care managers are increasingly under pressure to have 'customer centric' practices that are directed towards providing best medical services to their clients for the hospital to be successful.

The purpose of this paper is to measure service quality of select private hospitals with reference to outpatient services.

This paper assesses patient's expectation and satisfaction pertaining to hospital service quality with special reference to OPD. Data collected from 192 patients of 10 hospitals are analyzed using SERVQUAL model. The model compares patients perception and expectation of services received across five dimensions of service quality like tangibility, responsiveness, assurance, reliability and empathy.

The result of this study reveals that overall service quality score is positive; however there were service quality gaps in all the dimensions of the scale.

The service quality level of the out patients in the hospitals is moderate, in addition the largest positive gap between patient's perception and expectation is in terms of tangibility and responsiveness the largest negative gap is empathy and assurance.

The findings help the hospital management team to understand areas of improvement towards better health care.

Keywords: Hospitals, Service quality, SERVQUAL, Healthcare.

Introduction

In today's changing and developing global world, organizations are facing fundamental challenges of survival and success in the VUCA

world. This competition focuses on before and after services of business to create a unique competitive edge.

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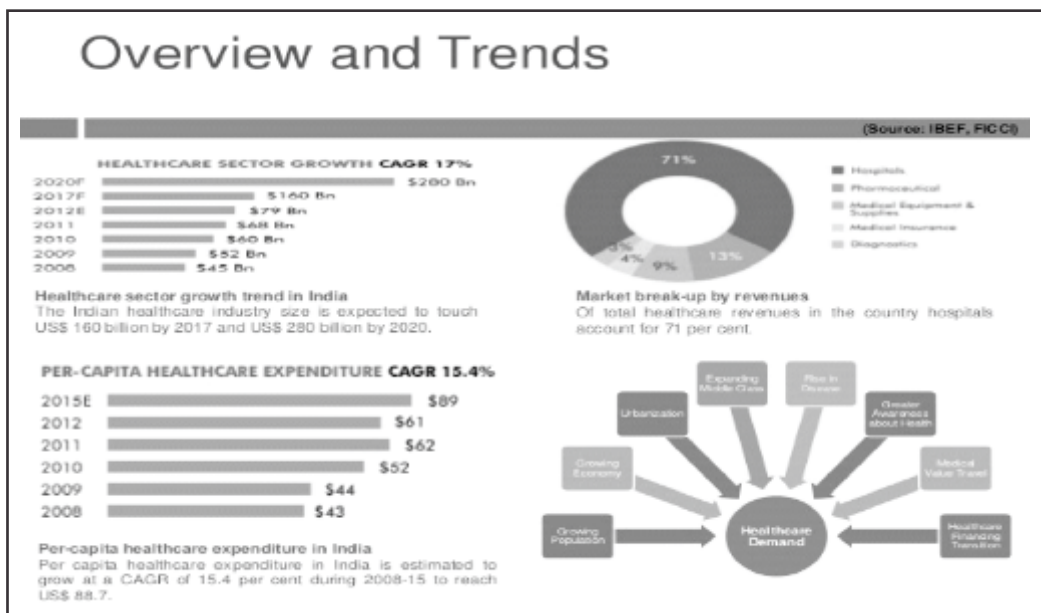
Service industry contributes 57 percent to India's GDP and has emerged as the largest and fastest growing sector of the economy. Service sector has also substantially contributed to foreign investment flows, exports and employment. In 2016, the Indian healthcare market had a turnover of \$110 billion and is expected to touch \$280 billion by 2020. (Global exhibition on Services-CII Report, 2016)

Healthcare delivery constitutes 65% of the overall Indian healthcare market. Due to this phenomenal growth of service sector in modern India, the importance of service management and service quality is also

expected to excel.

Indian health care delivery system is categorized into two major components-public and private sector; the private sector provides majority of secondary and tertiary care institutes with major concentration in major metros, tier1 and tier2 cities.

According to estimates, the overall Indian health care market today is US\$ 65 billion, of which the hospital supplies and health care equipment segment is believed to be only around US\$ 4.5-5 million. Health care delivery, which includes hospitals, nursing homes and diagnostics centers, and pharmaceuticals, constitutes 65 per cent of the overall market.



Source: IBEF, FIC CI

The average investment size by private equity funds in healthcare chains has increased to US\$ 20-30 million which was around US\$ 5-15 million, said Mr. Abhishek P Singh, Associate Director for Healthcare, Pricewaterhouse-Coopers (PwC) there is a significant scope for enhancing healthcare services considering

that healthcare spending as a percentage of GDP is rising.

Though the scope of health care market is promising, there are resource constraints under which services hospitals must function, it has become essential for hospital managers

to understand and measure consumer perspectives, so that any perceived gaps in delivery of services is identified and suitably addressed.

Health care industry has two dimensions of quality:-Technical quality and Functional quality.

Technical quality refers to the accuracy of medical diagnoses and procedures and is generally related to professional quality. Functional quality is essentially how all the services are delivered to the patient.

Numerous studies have shown that provision of high quality services are directly related to increase in profits, market share and cost saving (Devlin & Dong 1994) with competitive pressure and the increasing necessity to deliver patient satisfaction, the element of quality control, quality of services and effectiveness of treatment have become virtually important. Service quality and management determines customer satisfaction, a popular definition of 'service quality' is conformance to consumer expectation.

This study was conducted at peripheral service hospitals for a period of 2 months to ascertain any perceived service gap between consumer expectation and perception about quality of the OPD services offered by 10 hospitals in urban Bengaluru.

Literature Review

According to Parasuraman et al. (1988), service quality can be defined as an overall judgment similar to attitude towards the service and generally accepted as an antecedent of overall customer satisfaction (Zeithaml and Bitner, 1996). Parasuraman et al. (1988) have defined service quality as the ability of the organization to meet or exceed

customer expectations. It is the difference between customer expectations of service and perceived service (Zeithaml et al., 1990).

Perceived service quality results from comparisons by customers of expectations with their perceptions of service delivered by the suppliers (Zeithaml et al., 1990).

If expectations are greater than performance, then perceived quality is less than satisfactory and hence customer dissatisfaction occurs (Parasuraman et al., 1985; Lewis and Mitchell, 1990). Services unlike tangible products are produced and consumed at the same time in the presence of the customer and the service producer.

The presence of the human element during the service delivery process greatly increases the probability of error on the part of employees and customers. This error is due to intangible behavioral processes that cannot be easily monitored or controlled (Bowen, 1986).

However, although a substantial amount of service quality research has focused on service customers' perceived service quality (Parasuraman et al., 1988; Carman, 1990; Parasuraman et al., 1991; Babakus and Boller, 1992; Cronin and Taylor, 1992; Babakus and Mangold, 1992), relatively little attention has been paid to exploring the factors that impact on service employees' behavior with regard to delivering service quality. More than two decades ago, Surprenant and Solomon (1987) stated that service encounters are human interactions.

They suggested that customers and service providers have roles to play during and possibly after service encounters and that these roles are based on "interpersonal interactions" between organizations and customers.

Service quality in all service encounters is thus

intrinsically affected by the perspectives of both the service provider and the service receiver. Similarly, Czepiel (1990) concluded that research on service quality must always include the perspectives of both the provider and the receiver. However, most research on the service quality construct has been restricted to one perspective: that of the service receiver (Parasuraman et al., 1988). A few have applied dual perspectives and considered interactive features of service quality in service encounters (Tam and Wong, 2001; Chow-Chua and Komaran, 2002; Dedek, 2003; Svensson, 2004, 2006)

Because service delivery occurs during the interactions between contact employees and customers, attitudes and behaviors of the contact employees can influence customers' perceptions of service quality (Schneider and Bowen, 1985). Moreover, it is found that perceived employee satisfaction, perceived employee loyalty, and perceived employee commitment had a sizable impact on perceived product quality and on perceived service quality (Jain & Gupta, 2004)

According to Zeithaml and Bitner (1996), contact employees represent the organization and can directly influence customer satisfaction, they perform the role of marketers. Whether acknowledged or not, service employees perform marketing functions. They can perform these functions well, to the organization's advantage, or poorly, to the organization's detriment.

Service providers should encase on the opportunity to build effective services and also the way in which those services are delivered.

Customer actions, reactions and other characteristics can have a profound influence on the actions and mannerisms of front line service personnel (Solomon et al., 1985;

Matzler et al., 2004). Customers largely establish their impressions of the organization's level of service provision based on their encounters with FLE (front line executives). Therefore employees involved in the delivery of front-line services can provide valuable information for improving service. FLE are knowledgeable about the strengths and weaknesses of the service through their contact with customers and this is an important form of feedback that can be used by organizations in decision-making to better serve customers.

In her study "Service quality perspectives and satisfaction in healthcare system A study of select hospitals in Hyderabad" PriyaDeshpande investigated in six hospitals. Of the hospitals selected for the study, three were govt. hospitals and three were private hospitals. The main aim of the study was to evaluate the service quality of select hospitals and to compare quality across hospitals especially those of govt. and private hospitals. In the study, 200 customers were selected to collect the primary data of research. The finding of the study is the performance of private hospitals is better than those of government hospitals.

In their study on "Service quality in a cellular telecommunications company: a South African experience", R.W.E van der Wal, A. Pampallis and C. Bond, they studied the measurement of service quality cellular retail outlets in the South African environment. The focus is on perception and expectation of service quality from the customers perspective. Research reveals that delivering high quality service is closely linked to profits, cost savings and market share in many industries. Several studies conducted in South African business environment have concluded that SERVQUAL is a reliable instrument for the measurement of service quality in

South Africa. This is supported by the fact that the customer section of this study resulted in a total scale reliability of 0.95, which is a strong indicator of reliability compared to the Parasuraman, et. al., study (1984), which indicated a scale reliability of 0.92.

Methodology:

The study was conducted at 5 Private hospitals with peripheral services and basic specialist facilities by designing a cross sectional study of patients attending the OPD of the hospitals, using the SERVQUAL questionnaire.

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:

1. Tangibles – physical facilities, equipment and appearance of personnel.
2. Reliability – ability to perform the promised service dependably and accurately.
3. Responsiveness – willingness to help consumers and provide prompt service.
4. Assurance – competence, courtesy and security.
5. Empathy – caring and individualized attention.

SERVQUAL measure states that the customer's assessment of overall SERVQUAL is established by the degree and direction of the gap between their perception and expectation of actual performance levels.

Perceived SERVQUAL = Customer Perception – Customer Expectation.

This scale has been extensively used in India to measure the quality of services provided by retail stores (Kaul, 2005) Telecommunication companies (Mahadaviah, 2005), Hospitals (Despande, 2006), Hotels (Sivakumar and

Srinivasan, 2003) Fast food restaurants (Jain and Gupta, 2004).

Objectives of the Study:

- To identify the dimension of SERVQUAL that ensures maximum satisfaction for customers in private hospitals using OPD services in Bangalore.
- To identify differences in service quality of private hospitals in Bengaluru.

According the Hypotheses of the study is:

- H0- There is no relation between service quality performance and customer satisfaction of OPD services.

Sampling:

The study population was the patients who had finished their doctor consultation and were waiting for their medicine supply, the total respondents who were asked to fill up the questionnaire were 100 patients but 92 of them were usable, they were patients who had come to hospital for OPD services of 5 private hospitals in Bangalore.

Results and Discussions:

Table No. 1 depicts the demographic profile of the respondents, where there were 61% of female and 39% of male respondents, the age group of majority of respondents were from 30 to 49 years who comprised of 65%, and respondents occupation was either in services in Government or Private sector companies. More than 50% Of the respondents had visited the hospital once before the current visit of the study.

To confirm the reliability and internal consistency of the study instrument,

Table No-1: Demographic Profile of Respondents

Gender	Number of Respondents	Percentages
Male	36	39
Female	56	61
Age groups		
20-29 years	19	20
30 to 39 years	36	40
40 to 49 years	23	25
50 and above	14	15
Occupation		
Student	10	11
Service - Govt and pvt	41	44
Professionals	19	20
Business	16	18
Others/ specify	6	07

Cronbachs co-efficient alpha was calculated for each dimension of the study (Table 2).

By using SERVQUAL instrument, expectation (e) and perception (p) of each respondent was assessed according to 18 items and the service quality gaps evaluated by measuring the gap score(p-e)The score on each dimension of the scale was the calculated as the means of the corresponding items scores and mean

expectation and perception values of each dimension was tested for differences between mean scores of dependent samples at 0.05 level of significance by analyzing the data using SPSS.

Finally, the mean expectation (e)and perception (p) score as well as gap scores of each of 18 items was examined and similarly analyzed for testing differences between the

Table 2: SERVQUAL Dimension Scores of Hospital Outpatient Department Services

Dimension	Cronbach's Alpha	Expectation (E)	Perception (P)	P - E Service gap	P value
Tangibles	0.78	6.61	6.06	0.55	0.001
Reliability	0.72	6.38	6.34	0.04	0.01
Responsiveness	0.68	6.53	5.88	0.65	0.1
Assurance	0.69	6.59	6.31	0.28	0.46
Empathy	0.81	6.39	6.28	0.11	0.15

Total unweight SERVQUAL score is -1.63

p value< value 0.05 is considered statistically significant

Table 3:
Item Score Analysis of Expectation and Perception of Service Quality of OPD Services

Dimensions	E	P	- PE	P value
Tangibles				
1. Modern equipment	5.24	6.74	1.50	<0.001
2. Physical facilities	6.04	6.50	0.46	<0.009
3. Clean and hygiene	6.68	6.38	-0.30	<0.041
4. Smart staff	6.66	6.30	-0.36	<0.003
5. Reasonable wait time	6.50	6.53	-0.03	<.0001
Reliability				
6. Sympathetic to patients	6.52	6.62	-0.10	
7. Puntual OPD staff	6.24	6.24	0	
8. Accurate OPD records	6.00	6.00	0	
Responsiveness				
9. Easy appointment to specialists	6.64	6.34	-0.30	
10. Prompt services	6.64	5.50	-1.14	<0.0001
11. Staff willing to help	5.80	5.68	0.12	<0.001
Assurance				
12. Trust OPD staff	6.46	6.20	-0.26	
13. Feel safe	6.46	6.28	-0.20	
14. Polite OPD staff	6.74	6.52	-0.22	
15. adequate support by hospital	6.58	6.24	-0.34	0.045
Empathy				
16. individual attention to patient	5.56	5.48	-0.12	
17.OPD staff aware of needs of patients	5.76	5.96	-0.20	
18. convenient working hours	6.72	6.62	-0.10	

*p value ,0.05 is considered statistically significant.

mean value for statistically significance, so as to correctly identify the service quality gap in respect of OPD services being studied.

In Health care sector, service delivery has to be qualitative, in accordance to the customer expectations. Specially functional quality is emerging as a critical issue , as this study

throws light on hospitals not having good understanding of customer expectations. Service quality is being increasingly expressed as a function of consumer expectation of services to be provided compared with their perceptions of the actual service experience (14).

Thanks to internet, customers have become more knowledgeable about medical and health care services increasing their expectations on hospitals services.

The high expectations scores, where mean scores across majority of the items are above 5.5 on 7 point scale high quality service expectations of customers at the hospitals.

The results of service encounter is the satisfaction gaps of the customers against their expectations and the actual service perceptions. Mean perception scores observed gives conflicting results, with scores among majority of survey items being less than the expectations expect against two items in 'tangibles'- physical facilities, and modern equipment'. These findings demonstrate that the patient's perception of offered services was falling short of their expectations in all aspects of the SERVQUAL scale of the OPD services. The study findings is 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 gaps across the dimensions of 'tangibles' was observed to be statistically significant at <0.001. The gap score of all items indicates appreciable deficiencies, which can be a areas of improvements of OPD services in the hospitals.

Consumer ratings for paired expectation and perception scores is observed to be similar in reliability items.

Statistically significant quality gaps are also identified in 'responsiveness' in prompt services and 'access to specialist'. This gaps can be referred to the requirement for additional resources and training of the OPD staff on customer service.

The dimension of 'Assurance' also indicates quality gaps, giving scope for improvements in

those areas, however, statistically significant gap exists across the item 'adequate support by staff'. This perception needs further analysis and probing to understand the reason of this gap.

The dimensions of 'empathy' too have significant quality gaps, but there is reasonable convergence in the E/P scores.

The study had significant implications for the hospital management, as service quality gaps of five dimensions were identified thus directing focus on areas of improvements efforts to make OPD services more customers friendly.

Conclusion

This study is exploratory by nature, which holds light of quality gaps in our health care sector, which can be worked upon to make the patients more comfortable and happy. However, some criteria like severity of illness, doctor's characteristics and treatment were not taken into consideration which could have an impact on the responses given.

Scope of Further Studies

- This study can be undertaken on a larger scale to get stronger insights across different cultures and states.
- Comparison of public and private hospitals in India related to service quality gaps can be studied to improve the performance of health care sector.
- Service quality gaps of Health care sector of in-patients can be yet another study.

References

Barbara R Lewis & Vincent Mitchell-1990 'Defining & Measuring the Quality of customer Services-Marketing Intelligence & planning ,

Vol issue 6- p11-17.

Benjamin Schneider & David Brown (1985) Bitner, May J (1996) Service Marketing, McGraw Hill, New York, NY.

Czepiel John A (1990) Managing relationships with customers: A differentiation philosophy of Marketing in Services Management effectiveness. San Francisco, Jossey-Bass, p. 299-323.

David E Brown 1196- 'Measuring Customer as Human resources in Service Organization' HRM Vol-25, Issue-3 pages 371-383.

Devlin, S.J., & Dong, H.K. (1994) 'Service quality from the customers' perspective. Marketing Research, 6(1 (Winter)), 5-13.

Goran Sevansson 2004 'Interactive service Quality in service encounter: Empirical illustration & Models" Managing Service Quality A International Journal, ISSN 09604529: Volume 14, Issue 4.

Jackie L M Tam and YH Wong -2001 Interactive Selling in a dynamic framework for Services" Journal of Service Marketing 1987, ISSN-0887-6045.

Joseph Cronin & Steve Taylor 'Measuring Service Quality -A reexamination & Extension'- Journal of Marketing, July 992, 56-3, p 55.

Justin Beneke, C Hayworth, Robyn Hobson, Zeenat Mia- 'Examining the effect of retail services quality dimension on customer satisfaction & Loyalty- The case of the supermarket shopper' - Meta Commerce 202, ISSN-1680-7537.

Lance A Bettencout & Kevin Gwinner 111996- 'Customization of the service experience , the role of the frontline employee' International Journal of Service Industry Management, ISSN 0956 4233, Volume 7, Issue 2.

Michal Solomon, Andrew Hughes, 1985 "Marketing ; Real people real choice" Pearson Learning Australia.

Parasuraman, Valarie A. Zeithaml and Leonard L. Berry 'A conceptual model of service Quality and its implication for further research' Journal of Marketing Vol. 49, No. 4 (Autumn, 1985), pp. 41-50.

RWE Vander Wal, A Pampallies, C Bond 2002, "Service Quality in a cellular Telecommunication company in a South African experience-Managing Servicequality' An international Journal -ISSN 0960 4529, Volume 12, Issue 2.

Sanjay Jain & Gauma Gupta 2004 "Measuring Service Quality-SERVPERF Scales, WWW. Vikalpa.com/pdf/articles2004 June.

Sivakumar CP & Srinivasan PT (2003) 'A SERUAL model approach for training Hotel staff to deliver Services Quality" -IUP Journal of Management research, Proquest.com.

Surpernant, Carol F C Michael Solomon (1987) 'Predictability & Personalization in the Service Encounter' Journal of Marketing- April, p86-96.

Zeithaml, Parasuraman and Berry, Delivering Quality Service - Balancing Customer Perceptions and Expectations (New York: The Free Press), 1990.