

SERVICE QUALITY IN CORPORATE HEALTHCARE SECTOR: AN EMPIRICAL STUDY IN TAMILNADU

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Abstract

The purpose of this study is to identify the gap between patients' expected and perceived service with respect to corporate healthcare sector, Tamilnadu. In order to identify the gap, Gap 5 model was chosen for the study based on five service quality dimensions namely tangibility, reliability, responsiveness, assurance and empathy (Parasuraman, et.al. 1985). The research design was empirical in nature. The study collected the data both from primary and secondary sources. Primary data was collected using structured interview schedule method consisting of open and closed ended questions. Books, magazines, journals, thesis and websites were referred to collect data from secondary sources. Convenient sampling technique was used to collect data from 100 patients of top seven multi-specialty hospitals of Tamilnadu. Analyses such as paired sample T test and Friedman test were applied. Based on the findings, it is found that there exists a gap between the expected and perceived service of patients with respect to corporate healthcare sector. Therefore, the study concluded that the patients were moderately satisfied with the service quality of corporate healthcare sector.

Key words: Patients' Expected Service, Perceived Service, Service Quality Dimensions, Gap 5 Model, Corporate Health Sector, Tamilnadu.

I. Introduction

In India, service sector plays major role and key driver of economic growth. It is not only the dominant sector in India's GDP, but also attracted significant foreign investment flows in order to provide large-scale employment. The sector has contributed 54.17 per cent of India's Gross Value Added at current price in 2018-19 (www.ibef.org). India's services sector covers a wide variety of activities such as trade, hotel and restaurants, transport, storage and communication, financing, insurance, etc. From among all, healthcare has become one of India's largest sectors both in terms of revenue and employment. It has witnessed a tremendous growth due to its strengthening coverage, services and increasing expenditure by public as well private players. Both private and public hospitals are competing with each other in providing high-end diagnostic services with great capital investment for advanced diagnostic facilities. In particular, corporate healthcare sectors are updating their technology with latest equipments to offer ample services at one place in order to earn higher profit. It undergoes a rapid transformation to meet the increasing needs and expectations of their patient. Thus, this study has been chosen to identify the quality of services offered by corporate healthcare sectors in Tamilnadu.

II. Problem Definition

Due to the awareness of health through social media and others, changes in the life style of people, increased percentage of diseases, rise in income level of people and enhanced access to health insurance; corporate healthcare sectors are growing immensely and contribute to higher percentage of GDP. They offer world-class treatment with good infrastructure, competent and experienced doctors, hi-tech imported equipments and medicines in cure of all kinds of disease, surgeries, diagnosis, operations and other treatments. In order to offer all the above, they incur huge capital expenditure and is reimbursed from the patients by charging high from them. In addition, the service offered by corporate healthcare equalizes the treatment offered by them is questionable. They are commercializing their services in order to earn more profit to compensate the expenditure incurred by them in running their hospitals. This study aims to find out the services expected by patients from corporate health care sector and the actual services perceived by them while consuming the same. The study also measures the gap exists between patients' expected and perceived service of corporate healthcare hospitals in Tamilnadu.

III. Literature Review

Sasikanth, J. (2019) examined the promotional strategies on patient satisfaction with respect to health care services of select multi-specialty hospitals at Chennai city. The study is descriptive and analytical in nature. The sample size of the study was 660 patients selected based on convenient sampling technique. The study revealed that the patients have very minimal satisfaction towards health care services. It is also found that there exists a gap between patients' perception towards promotional strategies and their satisfaction on health care services. The study concluded that the effect of patients' perception on promotional strategies towards their satisfaction on health care services mediated by their opinion regarding its effectiveness promotional strategies is statistically significant.

Upadhyai, R., et al. (2019) explored and summarized various reviews to understand what comprises healthcare service quality, the underlying dimensions of healthcare service quality, and how it is measured. The study concluded that dimensionality in the healthcare service quality is context specific and patients weigh them differently. Healthcare service quality constructs and its measurement has been primarily done from the patient's perspective, however, the provider's perspective of the healthcare service quality has not been taken into consideration.

Andal, V. (2017) assessed the relationship between service quality and satisfaction with respect to health care and hospital services in Chennai city. The study is analytical in nature. A sample of 756 customers was selected based on judgment sampling method to collect data from them. the study found that there is a strong relationship between the service quality and satisfaction of customers in healthcare and hospitals in Chennai city. It is also found that all the variables are positively related to each other. Particularly, customer relationship quality variables are highly correlated with the other variables. The customer expectations highly influence than the fulfillment of hospital and healthcare centres. The study concludes that there is significant influence on the relationship of patient expectations and satisfactions.

Dr. Madan, M and Goel, N. (2015) assessed the factors affecting the quality of services being offered by the private hospital to its patients in Delhi and NCR. Descriptive research design was adopted for the study. The sample size of 122 patients was chosen to collect primary data from the respondents. The study found that various statements like visually appealing physical facilities, professional doctors and staff of hospital, understanding and fulfillment of specific needs of the patients were found to be significant. The study concluded that private hospitals are performing sufficiently well in terms of the dimensions of the service quality model.

Zarei, Ehsan et al (2014) investigated impact of service quality on patient's overall satisfaction in Tehran city private hospitals. The study was chosen four dimensions in order to measure the service quality of private hospitals namely environmental quality, process quality, interaction quality and cost. The study is empirical in nature. The sample size in this study was 969 patients who were questioned on the day of discharging from hospital. The findings of this study showed that patients of Tehran's private hospitals were highly satisfied with the quality of services they received. It is also found a strong relationship between service quality and patient satisfaction. The cost of services, the quality of the process and the quality of interaction had the greatest effects on the overall satisfaction of patients, but not found a significant effect on the quality of the physical environment on patient satisfaction.

IV. Objectives of the Study

1. To examine the level of patients' expected and perceived service quality in corporate healthcare sector in Tamilnadu.
2. To measure the gap between expected and perceived level of service quality offered by corporate healthcare sector in Tamilnadu.
3. To identify the consumer preference towards private hospitals in Tamilnadu.
4. To offer suggestions to enhance the service quality of corporate healthcare sector in Tamilnadu.

V. Significance of the Study

This study examines the level of quality of services offered by corporate healthcare hospitals in Tamilnadu, which aids in knowing clearly the level of service quality by hospitals and take measures in improving their services with respect to infrastructure, working conditions, quality medicines at affordable cost, innovative treatment by using latest equipments and accreditation of healthcare facilities. It identifies the gap between patients' expected and perceived services from hospitals which help the corporate healthcare sector to take possible steps in order to fill the gap between expected and perceived services.

VI. Scope of the Study

The study deals with the service quality dimensions of corporate healthcare sector in Tamilnadu. It studies the gap between expected and perceived service by using gap five analysis of SERQUAL dimensions namely tangibility, reliability, responsiveness, assurance and empathy. The study covers top seven multi-

specialty hospitals of Tamilnadu namely Apollo Hospitals, Christian Medical College (CMC), Sankara Nethralaya, Manipal Hospitals, G Kuppuswami Naidu Memorial hospital, Saravana Multi-Specialty Hospital Private Limited and Jeyam Multi-Specialty Hospital.

VII. Research Methodology

The research design is empirical in nature. The data are collected from both primary and secondary sources. The primary data is collected using structured interview schedule method with open and closed ended questions consisted with nominal, ordinal, interval and ratio scale. Books, magazines, journals, thesis and websites are referred to collect secondary data. The population of the study consists of top seven multi-specialty hospitals in Tamilnadu. The sample size of the study is 100 patients are chose by using convenient sampling technique. Data was presented in tables. Analyses such as descriptive statistics, paired sample T test and Friedman test were applied by using SPSS 21 software.

VIII. Hypotheses Development

H₁₁: There is a significant difference between patients' expected and perceived service quality towards corporate healthcare sector.

H₁₂: There is a significant difference in the mean score of patients' preference towards private multi-specialty hospitals.

IX. Data Analysis and Interpretation

a. Paired Sample T Test

Null Hypothesis: There is no significant difference between patients' expected and perceived service quality towards corporate healthcare sector.

Alternative Hypothesis: There is a significant difference between patients' expected and perceived service quality towards corporate healthcare sector.

Table 9.1.a serqual dimension gap (mean, sd and correlation)

SERQUAL Dimensions		Mean	SD	Correlation
Pair 1	E – Tangibility	2.25	0.711	0.714**
	P – Tangibility	1.72	0.665	
Pair 2	E – Reliability	2.22	0.730	0.629**
	P – Reliability	1.80	0.649	
Pair 3	E – Responsiveness	2.20	0.778	0.663**
	P – Responsiveness	1.84	0.629	
Pair 4	E – Assurance	2.22	0.794	0.510**
	P – Assurance	1.78	0.673	
Pair 5	E – Empathy	2.31	0.752	0.705**
	P – Empathy	1.89	0.647	

(Source: Primary Data) ** Denotes significant at 1% level.

Table 9.1.b serqual dimensions gap (paired sample t test)

SERQUAL Dimensions		Paired Differences				t-test	P value
		Mean	SD	95% Confidence Interval of the Difference			
				Lower	Upper		
Pair 1	E – Tangibility	0.532	0.522	0.490	0.574	24.935	<0.001
	P – Tangibility						
Pair 2	E – Reliability	0.422	0.598	0.374	0.470	17.267	<0.001
	P – Reliability						
Pair 3	E - Responsiveness	0.353	0.594	0.306	0.401	14.579	<0.001
	P – Responsiveness						
Pair 4	E – Assurance	0.442	0.733	0.383	0.500	14.757	<0.001
	P – Assurance						

Pair 5	E – Empathy	0.422	0.546	0.378	0.465	18.930	<0.001
	P – Empathy						

(Source: Primary Data)

Note:

1. E – Average of Patients’ Expected Service Quality towards Corporate Healthcare Sector
2. P - Average of Patients’ Perceived Service Quality towards Corporate Healthcare Sector



Figure 9.1: Equal dimension gap (mean score)

Tangibility Services

It is inferred from the above table that there is a statistically significant difference between expected mean score (M = 2.25, SD = 0.711) and perceived mean score ((M = 1.72, SD = 0.665) of tangibility services. Since the P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, it is concluded that there is a positive relationship between patients’ expected and perceived tangibility services of corporate healthcare hospitals (0.714**).

Since the P value is less than 0.05, the null hypothesis is rejected at 5 percent level of significance. Hence, it is concluded that there is a significant difference between patients’ expected and perceived tangibility services of corporate healthcare hospitals. The mean difference score of patients’ expected and perceived tangibility services of corporate healthcare hospitals is 53.2% with a 95% confidence interval ranging from 49% to 57.4%.

Reliability Services

It is inferred from the above table that there is a statistically significant difference between expected mean score (M = 2.22, SD = 0.730) and perceived mean score ((M = 1.80, SD = 0.649) of reliability services. Since the P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, it is concluded that there is a positive relationship between patients’ expected and perceived reliability services of corporate healthcare hospitals(0.629**).

Since the P value is less than 0.05, the null hypothesis is rejected at 5 percent level of significance. Hence, it is concluded that there is a significant difference between patients’ expected and perceived reliability services of corporate healthcare hospitals. The mean difference score of patients’ expected and perceived reliability services of corporate healthcare hospitals is 42.2% with a 95% confidence interval ranging from 37.4% to 47%.

Responsiveness Services

It is inferred from the above table that there is a statistically significant difference between expected mean score (M = 2.20, SD = 0.778) and perceived mean score ((M = 1.84, SD = 0.629) of responsiveness services. Since the P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence it is concluded that there is a positive relationship between patients’ expected and perceived responsiveness services of corporate healthcare hospitals(0.663**).

Since the P value is less than 0.05, the null hypothesis is rejected at 5 percent level of significance. Hence it is concluded that there is a significant difference between patients' expected and perceived responsiveness services of corporate healthcare hospitals. The mean difference score of patients' expected and perceived responsiveness services of corporate healthcare hospitals is 35.3% with a 95% confidence interval ranging from 30.6% to 40.1%.

Assurance Services

It is inferred from the above table that there is a statistically significant difference between expected mean score ($M = 2.22$, $SD = 0.794$) and perceived mean score ($M = 1.78$, $SD = 0.673$) of assurance services. Since the P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, it is concluded that there is a positive relationship between patients' expected and perceived assurance services of corporate healthcare hospitals (0.510**).

Since the P value is less than 0.05, the null hypothesis is rejected at 5 percent level of significance. Hence, it is concluded that there is a significant difference between patients' expected and perceived assurance services of corporate healthcare hospitals. The mean difference score of patients' expected and perceived assurance services of corporate healthcare hospitals is 44.2% with a 95% confidence interval ranging from 38.3% to 50%.

Empathy Services

It is inferred from the above table that there is a statistically significant difference between expected mean score ($M = 2.31$, $SD = 0.752$) and perceived mean score ($M = 1.89$, $SD = 0.647$) of empathy services. Since the P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, it is concluded that there is a positive relationship between patients' expected and perceived empathy services of corporate healthcare hospitals (0.705**).

Since the P value is less than 0.05, the null hypothesis is rejected at 5 percent level of significance. Hence it is concluded that there is a significant difference between patients' expected and perceived empathy services of corporate healthcare hospitals. The mean difference score of patients' expected and perceived empathy services of corporate healthcare hospitals is 42.2% with a 95% confidence interval ranging from 37.8% to 46.5%.

b. Friedman Test

In order to find out the significant difference in the mean score of patients' preference towards private multi-specialty hospitals, Friedman test is used.

H_{02} : There is no significant difference in the mean score of patients' preference towards private multi-specialty hospitals.

H_{12} : There is a significant difference in the mean score of patients' preference towards private multi-specialty hospitals.

Table 9.2 patients' preference towards private multi-specialty hospitals

Private Multi-Specialty Hospitals	Mean Rank	Chi-square value	P value
Apollo Hospitals	2.68	366.204	0.001**
Christian Medical College (CMC)	1.60		
Sankara Nethralaya	5.84		
Manipal Hospitals	6.36		
G Kuppaswami Naidu Memorial hospital	4.77		
Saravana Multi-Specialty Hospital Private Limited	7.35		
Jeyam Multi-Specialty Hospital	3.31		

[Source: Primary data]

Note: ** Denotes significant at 1% level

Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, it is concluded that there is a significant difference among the mean score of patients' preference towards private multi-specialty hospitals in Tamilnadu. Based on mean rank, the most preferable hospital by

patients is Christian Medical College (CMC)(1.60) followed by Apollo Hospitals(2.68), Jeyam Multi-Specialty Hospital(3.31), G Kuppaswami Naidu Memorial hospital(4.77), Sankara Nethralaya(5.84), Manipal Hospitals(6.36) and Saravana Multi-Specialty Hospital Private Limited(7.35).

X. Findings

It is understandable from the paired sample t test that there is a large gap exists between patients' expected and perceived service quality of corporate healthcare sector in Tamilnadu. Based on the Friedman test, it is found that there is a significant difference among the mean score of patients' preference towards private multi-specialty hospitals.

XI. Suggestions

The purpose of the study is to analyze the service quality of corporate healthcare sector in Tamilnadu which is found to be average. Based on the paired sample t test, it is found that there is a gap between patients' expected and perceived service quality of corporate healthcare sector. Hence, it is suggested for the multi-specialty private hospitals to offer cost effective treatment in the areas of surgery, pediatrics, diabetics, cardiology etc., and to offer state-of-art infrastructure with latest hi-tech equipments, affordable room charges, food court, clean and hygiene ambience. From the Friedman test, it is found that Christian Medical College (CMC) occupies the first place with respect to patients' preference towards private multi-specialty hospitals. Hence, it is advised for the other multi-specialty hospitals to offer competitive service with attractive healthcare schemes, promotional tools, free food, special concession for kids and old age people and discriminatory price according to the classes of people.

XII. Conclusion

Due to the environmental pollution, high fertilizers and chemicals added by the agriculturist to produce more in short period, use of plastics in cooking and storage of food products, high consume of fast food and junk food, increase in variety of diseases, awareness of healthcare through social media, change of life style with respect to fitness enhances the demand for multi-specialty hospitals. Private health sector offers a large variety of treatments and health programs for the survival of people in the society. They are instead doing it as a service work more for profit motive. People feel fear of entering multi-specialty hospitals due to its high cost of service and commercialization of treatment. Hence, it is concluded that even though we are provided with ample facilities for treatment of people in Tamilnadu for all kind of diseases, the service quality is still questionable. The study put forward various suggestions to improve the service quality of private multi-specialty hospitals in order to enhance patient satisfaction and confident in curing of illness while undergoing treatment in their hospitals.

XIII. Limitations of the study

1. The study is limited to five service quality dimensions and Gap 5 Model.
2. The sample size is limited to 100 patients.
3. The population is limited to seven multi-specialty hospitals in Tamilnadu.

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