
Patients Satisfaction and Expectation Towards Different Dimensions of Health Care Service Quality of Private Hospitals

S. MOHAMED MOSSA HARUN RAZEED¹, DR. C. VETHIRAJAN*²

¹Ph.D, Scholar, Alagappa Institute of Management, School of Management, Alagappa University, Karaikudi, Tamilnadu, India.

²Professor and Head, Department of Corporate Secretaryship, School of Management, Alagappa University, Karaikudi, Tamil Nadu, India.

*Corresponding Author

Email: drvethirajan@gmail.com²

Abstract: The main aim of the study is to bring out the patient satisfaction and the quality of health care service. The research has taken different dimensions of service quality namely Tangibility, Reliability, Responsiveness, Empathy and Assurance. The study is based on primary and secondary data and discussions with hospital officials including doctors, nurses and administrative staff members etc. In order to fulfill the objectives, a sample study was undertaken by using a well framed interview schedule. The respondents (Patients) were selected with various background based on important aspects of their occupation, education, age and other demographic variables from the study area i.e., Tirunelveli district. The primary data relating to the study are collected through personal interview with the patients of the private hospitals in Tirunelveli district. Personal interview by the researcher is the major tool used for the data collection. The Sample Size of the present study is 600 from 12 selected hospitals from Tirunelveli District. The primary data is gathered from the patients who are using hospital services of private Hospitals in Tirunelveli District. The data were analysed using t' test and ANOVA. This study brought to light the fact that the patients were very much satisfied on the service quality of the private hospitals in the region but at the same time they expect a lot more from the private hospitals in the present scenario of technological developments in health care industry. Hence, this study will pave way to further research to explore this mechanism in depth to provide quality health care services to facilitate the patients, the society as a whole.

Keywords: Service Quality, Health care, Patient satisfaction, Expectation

INTRODUCTION

Hospital is an integral part of a social and medical organization. The function of a hospital is to provide complete healthcare, both curative and preventive. The healthcare industry in India is becoming increasingly more competitive. There are different types of hospitals like the government hospital, private hospital, and single and multi-specialty hospital, trust hospital which provide different kinds of facilities to the patients. This has necessitated each hospital to identify the functions or services which could provide a competitive edge. The products or the services in one hospital differ from another hospital. Due to an increasing proportion of people are using private health care facilities, rather than public, though the costs in the latter are much more affordable. The patients preferred to go to private hospitals because there more number of private health care centers near to their home.

Statement Of The Problem

Healthcare services have a distinct position among the various services due to the highly involving and risky nature of it. While, the large number of public and private hospitals existing all over the country, it is found that many government hospitals are not able to provide quality services to patients. The main problem of hospitals is that they are not able to provide quality service based on the needs and expectations of the patients. One of the main problems is lack of adequate and timely medical treatment to patients. The other problems are non availability of medical facility, inadequate competent doctors, nurses and employees etc. The majority of the population in India lives in the rural areas that are not aware of the diseases generated by water, bad sanitation and food. Further, a majority of people are affected by Heart disease, Tuberculosis, Dengue Fever, AIDS and various cancer diseases etc. The government hospitals have found that they are not able to fulfill the healthcare requirements of the people and the rural health centres virtually become nonexistent. Even in private hospitals, the quality of medical care is not satisfactory, though they charge high fees. Based on the issues stated above and development in healthcare services, the researcher has raised the following questions.

- 1) How do the demographic factors influence the patients' satisfaction on healthcare services of private hospitals?
- 2) What is the level of satisfaction of the patients towards the various facilities provided by the private hospitals?
- 3) What is the difference between expected service and the perceived (Derived) service based on five important dimensions (Such as Tangibles, Reliability, Responsiveness, Assurance and Empathy) of service quality measurement of the private hospitals and their relative importance?

In order to find out the answers for the above questions, the researcher has undertaken the present study. It is hoped that the present study will contribute towards a better understanding of the healthcare services rendered by private hospitals in Tirunelveli district. This will also bring out awareness and satisfaction of patients and quality measurement of healthcare services in the study area.

Scope Of The Study

The scope of study is to bring out the patient satisfaction and the quality of health care service. The research has taken Tangibility, Reliability, Responsiveness, Empathy and Assurance. This research is also conducted to suggest some measures to improve the patient satisfaction which are not yet reach the patient and the improvement health care service quality which will in turn contribute to the overall in the performance of the health care industry not only in Tirunelveli region but also in the other parts of India.

Objectives Of The Study

1. To assess the patient satisfaction towards private hospitals service quality in Tirunelveli District
2. To identify the perception and expectation of patients towards service quality of private hospitals in Tirunelveli district
3. To offer the suggestions to the respective service providers on the basis of the research findings

Hypotheses

Based on the objectives of the study, the following null hypotheses are framed and tested.

H₀1: The demographic profile variable of respondents does not have a significant impact on satisfaction towards service quality of private hospitals

H₀2: There is no significant relationship between demographic profile variables of the respondents and expectation towards service quality of private hospitals

H₀3: There is no significant relationship between demographic profile variables of the respondents and perception towards service quality of private hospitals

RESEARCH METHODOLOGY

The validity of research depends on the systematic method of collecting the data and analyzing the same in a sequential order. The present study is empirical in nature based on survey method. In this study, data collection consists of three stages. The study is based on primary and secondary data and discussions with hospital officials including doctors, nurses and administrative staff members etc. In order to fulfill the objectives, a sample study was undertaken by using a well framed interview schedule. The respondents (Patients) were selected with various background based on important aspects of their occupation, education, age and other demographic variables from the study area i.e., Tirunelveli district. The primary data relating to the study are collected through personal interview with the patients of the private hospitals in Tirunelveli district. Personal interview by the researcher is the major tool used for the data collection.

Sample Size

Sample size is the number of respondents included in a research. The Sample Size of the present study is 600 from 12 selected hospitals from Tirunelveli District. The primary data is gathered from the patients who are using hospital services of private Hospitals in Tirunelveli District

Sampling Technique

The following formula was used for sample size calculation when estimating the proportions:

$$n = \frac{Z^2 pq}{e^2}$$

Where,

n = Sample size

p = The probability value for 'p' is not known, if past information not available it can simply set the value of 'p' to 0.5.

q = (1 - p) = 0.5

Z = Confidence level of 95%, with Z Value of 95% is 1.96

E = Tolerance level of error is 0.04, i.e., 4% of error is estimated.

$$N = \frac{1.96^2 (0.5)(1-0.5)}{0.04^2} = 600.25 \text{ i.e., } 600$$

The sample size of 600 respondents (Patients) were selected from the above selected hospitals by applying Stratified Random Sampling Technique i.e., an equal number 50 respondents (Patients) were selected from each stratum (Hospital) regardless of their existence in the population. In all the twelve hospitals totally 600 patients were taken into account for the study.

RESULTS AND DISCUSSION

Age-wise ANOVA regarding the influence on Patient's satisfaction towards health care service quality of Private hospitals in Tirunelveli District

It has been documented that the mean score is not statistically significant difference between age group of patients and Satisfaction towards health care service quality of Private hospitals as $p > 0.05$ at 5% level of significance. The test of difference has been documented on a parametric scale, using the Analysis of Variance (ANOVA), which has been found to be significant ($F = 1.853$, $p = 0.101 > 0.05$). The mean score is shown to be the highest for the patients who are in the age group between 21-30 years and the lowest for those who are in the age group between 61-70 years. Hence, the null hypothesis (H_0) is accepted and it is proven that there is no significant difference in the Satisfaction towards health care service quality of Private hospitals among different age group of patients.

Table 1: Analysis of variance (ANOVA) on the basis of Age group of patients and Satisfaction towards health care service quality of Private hospitals

Age group	N (Valid)	Mean	S.D	Lower Bound	Upper Bound	F [Significance Level]
21-30 years	56	125.21	13.73	103.23	107.20	1.853 (0.101)
31-40 years	112	104.65	13.79	102.78	106.52	
41-50 years	179	101.33	14.19	98.47	104.19	
51-60 years	153	100.49	16.24	96.40	104.58	
61-70 years	74	100.29	11.66	99.22	107.36	
Above 70 years	26	102.50	17.11	90.26	114.74	

Source: Computed Data

Marital Status-wise ANOVA regarding the influence on Patient's satisfaction towards health care service quality of Private hospitals in Tirunelveli District

It has been documented that the mean score is not statistically significant difference between marital status of patients and Satisfaction towards health care service quality of Private hospitals as $p < 0.05$ at 5% level of significance. The test of difference has been documented on a parametric scale, using the Analysis of Variance (ANOVA), which has been found to be significant ($F = 1.853$, $p = 0.101 > 0.05$). The mean score is shown to be the highest for the patients who are unmarried and the lowest for those who are widow. There is no statistical significant difference between marital status of patients and Satisfaction towards health care service quality of Private hospitals as determined by one way ANOVA ($F = 1.222$, $p = 0.201 > 0.05$). Hence, the null hypothesis (H_0) is accepted and it is proven that there is no significant difference in the Satisfaction towards health care service quality of Private hospitals among different marital status of patients.

Table 2: Analysis of variance (ANOVA) on the basis of Marital Status of patients and Satisfaction towards health care service quality of Private hospitals

Marital Status	N (Valid)	Mean	S.D	Lower Bound	Upper Bound	F [Significance Level]
Married	263	103.29	14.45	100.89	105.67	1.222 (0.201)
Unmarried	188	103.99	13.84	102.65	105.31	
Widow	149	102.83	15.69	97.87	107.78	

Source: Computed Data

Gender Group of Patients and Expectation regarding different dimensions of health care service quality of private hospitals

The following null hypothesis was formulated to assess the significant difference between the gender group of patients and expectation towards different dimensions of the health care service quality of private hospitals.

Null Hypothesis: There is no significant difference in expectation regarding different dimensions of health care service quality of private hospitals among different gender group of patients in Tirunelveli district.

Table 3: 't' test for Significant difference among Gender Group of Patients regarding expectation towards different dimensions of health care service quality of private hospitals

Dimensions	Gender group				t Value	p Value
	Male		Female			
	Mean	SD	Mean	SD		
Tangibility	23.17	2.17	22.21	2.43	3.113*	0.016
Reliability	22.94	2.27	22.54	2.02	2.017*	0.047
Responsiveness	18.27	2.08	17.50	2.01	2.615*	0.030
Assurance	22.29	2.32	22.04	2.24	0.796	0.367
Empathy	22.95	2.29	22.59	2.28	1.096	0.274
Overall Expectation	108.93	7.16	108.09	7.19	3.307*	0.009

Source: Computed Data

Note: 1. The values within parentheses refer to SD.

Since the 'p' value is less than 0.05, the null hypothesis is rejected at a 5 percent level of significance about expectations regarding different dimensions of health care service quality of private hospitals namely tangibility, responsibility, responsiveness and overall expectation. Hence there is a significant difference among the male and female patients with regard to expectations regarding different dimensions of health care service quality of private hospitals namely tangibility, responsibility, responsiveness and overall expectation. Based on Duncan Multiple Range Test (DMRT) the male patients are significantly differs with the female patients on expectations regarding different dimensions of health care service quality of private hospitals namely tangibility, responsibility, responsiveness and overall expectation.

Age Group of Patients and Expectation regarding different dimensions of health care service quality of private hospitals

The following null hypothesis was formulated to assess the significant difference between the age group of patients and expectation towards different dimensions of the health care service quality of private hospitals.

Null Hypothesis: There is no significant difference in expectation regarding different dimensions of health care service quality of private hospitals among different age group of patients in Tirunelveli district.

Table 4: 'ANOVA' test for Significant difference among Age Group of Patients regarding expectation towards different dimensions of health care service quality of private hospitals

Dimensions	Age Group						F Value	p Value
	21- 30 years	31-40 years	41-50 years	51-60 years	61-70 years	71 years and above		
Tangibility	22.00 (3.31)	22.58 (2.37)	22.61 (2.35)	22.52 (2.39)	22.90 (2.01)	23.16 (1.97)	1.793	0.112
Reliability	22.18 (2.21)	22.68 (2.05)	22.59 (2.18)	22.14 (2.11)	21.91 (2.51)	23.18 (2.19)	2.776*	0.017
Responsiveness	17.90 (2.08)	17.98 (2.13)	18.14 (1.92)	18.25 (1.86)	17.52 (2.20)	17.57 (1.95)	1.274	0.273
Assurance	21.96 (2.30)	22.26 (2.34)	22.23 (2.24)	22.31 (2.16)	22.09 (2.34)	22.71 (2.05)	0.874	0.498
Empathy	22.56 (2.27)	22.69 (2.33)	22.73 (2.30)	22.96 (2.17)	22.73 (2.29)	22.00 (2.18)	0.783	0.562
Overall Expectation	107.54 (7.26)	108.20 (7.31)	108.60 (7.07)	109.87 (6.37)	106.78 (7.27)	106.43 (7.24)	2.364*	0.038

Source: Computed Data

Note: 1. The value within bracket refers to SD

Since the 'p' value is less than 0.05, the null hypothesis is rejected at 5% level of significance with regard to expectation towards different dimensions of the health care service quality of private hospitals namely reliability and overall expectation. Hence there is a significant difference among the age group of patients with regard to expectation towards different dimensions of the health care service quality of private hospitals namely reliability and overall expectation. Based on Duncan Multiple Range Test (DMRT) the patients who belong to the age group of above 71 years are significantly differs with the patients who belong to the age group of 21 to 30 years, 31 to 40 years, 41 to 50 years, 51 to 60 years and 61 to 70 years on reliability. In the overall expectation,

patients who belong to the age group of 61 to 70 years are significantly differs with the patients who belong to the age group of 21 to 30 years, 31 to 40 years, 41 to 50 years, 51 to 60 years and 71 years and above.

Perception towards different dimensions of health care service quality of private hospitals and Gender Group of Patients

The following null hypothesis was framed to study the significant relationship between the gender group of patients and perception towards different dimensions of the health care service quality of private hospitals.

Null Hypothesis: There is no significant difference in perception regarding different dimensions of health care service quality of private hospitals among different gender group of patients in Tirunelveli district.

Table 5: 't' test for Significant difference among Gender Group of Patients regarding perception towards different dimensions of health care service quality of private hospitals

Dimensions	Gender group				t Value	p Value
	Male		Female			
	Mean	SD	Mean	SD		
Tangibility	17.00	1.38	17.72	1.31	2.254*	0.038
Reliability	16.90	1.50	17.25	1.46	1.072	0.284
Responsiveness	13.62	1.28	13.94	1.30	1.452	0.147
Assurance	16.63	1.35	16.92	1.25	1.047	0.296
Empathy	16.31	1.30	16.97	1.33	2.088*	0.044
Overall Perception	80.92	4.96	81.30	4.72	1.224	0.221

Source: Computed Data

Note: 1. The values within parentheses refer to SD.

Since the 'p' value is less than 0.05, the null hypothesis is rejected at a 5 percent level of significance with regard to perception towards different dimensions of health care service quality of private hospitals namely tangibility and empathy. Hence there is a significant difference among the male and female patients with regard to perception towards different dimensions of health care service quality of private hospitals namely tangibility and empathy. Based on Duncan Multiple Range Test (DMRT) the female patients are significantly differs with the male patients on tangibility and empathy.

Age Group of Patients and Perception regarding different dimensions of health care service quality of private hospitals

The following null hypothesis was formulated to assess the significant difference between the age group of patients and different dimensions of the health care service quality of private hospitals.

Null Hypothesis: There is no significant difference in perception regarding different dimensions of health care service quality of private hospitals among different age group of patients in Tirunelveli district.

Table 6: 'ANOVA' test for Significant difference among Age Group of Patients regarding perception towards different dimensions of health care service quality of private hospitals

Dimensions	Age Group						F Value	p Value
	21-30 years	31-40 years	41-50 years	51-60 years	61-70 years	71 years and above		
Tangibility	16.95 (1.29)	17.08 (1.37)	17.00 (1.35)	16.88 (1.47)	17.13 (1.18)	17.57 (1.22)	1.063	0.379
Reliability	16.88 (1.45)	16.95 (1.43)	17.06 (1.55)	16.82 (1.64)	17.19 (1.47)	16.86 (1.75)	0.746	0.589
Responsiveness	13.53 ^{ab} (1.21)	13.76 ^{ab} (1.27)	13.93 ^b (1.37)	13.44 ^{ab} (1.32)	14.04 ^a (1.28)	13.14 ^c (1.09)	3.666*	0.003
Assurance	16.91 (1.36)	16.72 (1.31)	16.56 (1.21)	16.80 (1.32)	16.89 (1.23)	16.71 (1.38)	1.891	0.093
Empathy	16.79 (1.39)	16.78 (1.26)	16.46 (1.18)	16.59 (1.46)	16.74 (1.27)	16.64 (1.50)	1.585	0.161
Overall Perception	81.04 (4.84)	81.27 (4.64)	80.92 (5.00)	80.54 (5.55)	82.00 (4.14)	80.95 (5.28)	0.756	0.582

Source: Computed Data

Note: 1. The value within bracket refers to SD

2. Different alphabet among Age group denotes significant at 5% level using Duncan Multiple

Range Test (DMRT)

Since the 'p' value is less than 0.05, the null hypothesis is rejected at 5% level of significance with regard to perception towards different dimensions of health care service quality of private hospitals namely responsiveness. Hence there is a significant difference among the age group of patients with regard to perception towards different dimensions of health care service quality of private hospitals namely responsiveness. Based on Duncan Multiple Range Test (DMRT) the patients who belong to the age group of 61 to 70 years are significantly differs with the patients who belong to the age group of 21 to 30 years, 31 to 40 years, 41 to 50 years, 51 to 60 years and 71 years and above on reliability.

Suggestions

- ✓ The accessibility of services with regard to reasonable charges of private hospitals can be helpful in improving level of satisfaction of the patients. Due care in providing hospital services would help the private hospitals in improving patients' satisfaction.
- ✓ Though, the patients of Private hospitals expressed better responses for assurance, responsiveness, empathy, reliability and tangible facilities of the hospital services, but, still variation in patients' responses were observed that calls for an improvement as it adversely affects ability of Private hospitals in providing satisfactory hospital services to its patients.

CONCLUSION

This study brought to light the fact that the patients were very much satisfied on the service quality of the private hospitals in the region but at the same time they expect a lot more from the private hospitals in the present scenario of technological developments in health care industry. Hence, this study will pave way to further research to explore this mechanism in depth to provide quality health care services to facilitate the patients, the society as a whole. Private hospitals are providing voluminous services to their patients in an effective and efficient way due to heavy competition among private hospitals and to sustain their business in the health care industry. The performance of private hospitals always depends on quality of services they provide to their patients. This study has focused to assess and evaluate quality aspects in various services of private hospitals and their approaches to the patients.

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REFERENCES

1. Rama, K.R., and Panda, R. K. (2015). Customer perceived service quality, satisfaction and loyalty in Indian private healthcare. *International Journal of Health Care Quality Assurance*, 28(5), 452-467.
2. Bahadori, M., Raadabadi, M., Ravangard, R., & Baldacchino, D. (2015). Factors affecting dental service quality. *International Journal of Health Care Quality Assurance*, Vol.28, No.(7), pp.678-689
3. Dheepa, T. and Gayathri, N. and Karthikeyan, P. (2015). Patient's Satisfaction towards the Quality of Services Offered in Government Hospitals in Western Districts of Tamil Nadu. *International Research Journal of Business and Management*, Vol.III. No.1, pp.25-33
4. Raj, A.K.S. (2014). Assessment of service quality dimensions in healthcare industry-A Comparative study on patient's satisfaction with Mayiladuthurai Taluk Government vs. Private Hospitals. *The National Conference on Contemporary Management Practices in Competitive World*, 01-09.
5. Augustine, P, B. A. (2014). Assessing Patient's Satisfaction Using SERVQUAL Model: A Case of Sunyani Regional Hospital, Ghana. *International Journal of Business and Social Research*.