

Service Quality At Hospital – A Study Of Apollo Hospital In Mysore

¹Arun kumar.G, ²Dr.S.J.Manjunath, ³Chethan K.C

¹Research scholar, MBA Department, BIMS, University of Mysore, Mysore, Karnataka, India

²Associate professor, MBA Department, BIMS, University of Mysore, Mysore, Karnataka, India

³Assistant professor, M.Com Department, Vidyavardhaka First Grade college, Mysore, Karnataka, India

Abstract - 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 on patient loyalty in Apollo hospital of Mysore, service quality measures are based on some of the dimensions of the SERVQUAL, in this study four dimensions namely responsiveness, empathy, reliability and tangible were considered. The research is purely based on primary data, the data has been collected by 185 respondents by using structures questionnaire. The data has been analyzed by using one sample t test and regression analysis. The results revealed that all the four dimensions were positively related to patient's loyalty.

Keywords –Apollo hospital, customer loyalty, service quality

I. Introduction

During the last few decades, the number of private centers providing health care services in Mysore has been growing, and the private sector health care services market has turned out to be a competitive environment. Quality is such an important aspect that it is considered a really major concept in our real life. It is considered as a strategic weapon. 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. Hospitals provide the various types of services but with different quality if the therefore quality can be considered as one of the important as one of the important strategy to create the competitive advantage.

II. Literature Review

Crosby defined Quality as constancy with fixed stipulation and this agrees with Karim's definition, who defined Quality as everything that accords with the features of the product to convene the external customer's needs. Service is also defined in a different way by The American Society for Marketing, defines service as activities or benefits that are offered for sale or that are offered for being related to a particular product. Kotler, defined service as 'any behavior based on a contact between the provider and the receiver, and the core of this mutual process in intangible. Beer defined service as a set of features and overall properties of the service which aim to satisfy the customers and meet their taste and preferences. Ghobadian. hypothesize that most of the service quality definitions fall within the "customer led" groups. Juran elaborates the definition of customer led quality as "features of products which meet customers' needs and thereby provide customer satisfaction." As service quality relates to meeting customers' needs, we will be looking at "perceived service quality" in order to understand consumers. Grönroos (1984) and Parasuraman (1985) looks at perceived quality of service as the difference between customers' expectation and their perceptions of the actual service received. Other researchers look at perceived service quality as an approach. Arnould et al., defined perceived quality "whether in reference to a product or service" as "the consumers' evaluative decision about an entity's overall superiority in providing preferred benefits". Hoffman & Bateson defines service quality as an attitude "formed by a long-term, overall evaluation of a performance". Attitude is defined as "a consumer's overall, lasting assessment of a concept or object, such as a person, brand and service." Service quality as "an attitude" is consistent with the views of Parasuraman, & Sureshchandar, (2002). Basis of the view is elaborated by the latter: Competitiveness of a firm in the post-liberalized era is determined by the way it delivers customer service. Service quality is a concept that has aroused considerable attention and discuss in the research literature because of the difficulty in both defining it and measuring it with no overall agreement emerging on either. Firms with high service quality pose a challenge to other firms. Many scholars have explored consumers' cognitive and affective responses to the insight of service attributes in order to benefit by providing what consumers need in an effective and efficient manner. Organizations can business superiority through quality control in services. Again service quality considered as the difference between customer expectations and preciseness of service. If expectations are greater than performance, then perceived quality is less than satisfactory and hence customer dissatisfaction

occurs. There is general conformity that the aforementioned constructs are important aspects of service quality, but scholars have been cynical about whether these dimensions are valid when evaluating service quality in other service industries (Cronin & Taylor, 1992). Mohamed & Shirley emphasized that hospitals have to care about the quality of their services since this quality is considered core of strategic competition. Walfried, defined service as a set of characteristics that meet the clients' needs, strengthen the associations between the organization and them, and improve the clients' value as well. Huseyin, believes that the characteristics and advantages of service quality on the part of hospitals do donate for their success and their perseverance in the international competitive environment. We can conclude that the quality of hospitals service is an integrative evaluation of the services offered to the external client, for clients are considered to be individuals with various necessities on the basis of which services are provided, based on certain requirement. This requires that hospitals have to carefully select resourceful employees with high qualifications and capabilities. Customer satisfaction involves customer expectation of the service delivery, actual delivery of the customer experience, and expectations that are either exceeded or unmet. If expectations are exceeded, it reacts positively; it negatively results when customer experience is poorer than expected. In today's world of competition, the key to retain competitive advantage lies in delivering high quality service that will in turn result in satisfied customers. Oliver defines satisfaction as the consumer's completion response, a post consumption decision by the consumer that a service provides a pleasant level of consumption-related execution, including under or over-completion. Caepiel recommended using overall measurement to record customers' response to diverse attributes of products and services. Kuo recognized seven factors that influence customer satisfaction: price, service content, convenience, equipment, procedure and corporate image staff. Huang also defined five factors used to appraise customer satisfaction: service, staff, product, overall performance of products, and closeness to expectation.

Different methods subsist for formative the patients' expectations and the way they are met. However, the SERVQUAL model, developed by Parasuraman, is one of the best and most used models for evaluating customer expectations and perceptions of the service quality. SERVQUAL is based on the idea that the quality is a slanted evaluation of the customer, as the service is an experience. SERVQUAL is useful in showing the dissimilarity between the patients' preferences and his actual experience and specify the areas that require improvement. The analysis of service quality helps hospital to allocating the resources for improving performance in the areas that have more important on the customers' perception of service quality.

III. Objective Of The Study

The objective of the study is to determine whether the dimensions of service quality significantly affect patient loyalty in Apollo hospital.

IV. METHODOLOGY

The data for the study has been collected from both primary and secondary sources. Research method used in the study is simple random sampling to collect the required information. The data was analyzed by using one sample t test and regression analysis. Data was collected through structured questionnaire by using five point likert scale. A sample of 185 respondents was selected for the study.

V. HYPOTHESIS

- 1) Ho-The reliability have no significant positive relationship on patient loyalty
- 2) Ho-The responsiveness have no significant positive impact on patient loyalty
- 3) Ho-The empathy have no significant positive relationship on patient loyalty
- 4) Ho-The tangibles have no significant positive impact on patient loyalty

VI. ANALYSIS AND INTERPRETATION

1) Demographic

Analysis of demographic information revealed that 43 percent customers were aged between 40 years to 60 years and 58 percent of the respondents were males. Around 48 percent of the sample respondents had graduation and 64 percent were employed; out of the total sample 46 percent of the respondent's annual income was in between 300000 to 500000;

2) One-Sample t test

Table-1 One-Sample Statistics

RELIABILITY	N	Mean	Std. Deviation	Std. Error Mean
Sincere interest of personnel in solving patients' problems	185	2.0649	1.02475	.07534
Carrying out of the services right at the first time	185	2.1243	1.00038	.07355
Prompt performance of medical and non-medical service	185	2.0486	.77517	.05699
Telling when services will be performed	185	2.1081	.75122	.05523

One-Sample Test

RELIABILITY	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Sincere interest of personnel in solving patients' problems	12.412	184	.000	-.93514	-1.0838	-.7865
Carrying out of the services right at the first time	11.906	184	.000	-.87568	-1.0208	-.7306
Prompt performance of medical and non-medical service	16.693	184	.000	-.95135	-1.0638	-.8389
Telling when services will be performed	16.148	184	.000	-.89189	-1.0009	-.7829

Based on the results of the One sample t-test analysis at 95% confidence level, Mean values fall in positive side of rating (less than 3), t_{cal} value $>$ t_{tab} value and p-value $<$ $\alpha = 0.05$ for all the select reliability factors under study. Hence Hypothesis H_0 - There are no significant effects of reliability on patients loyalty at Apollo hospital in Mysore is rejected, and H_a - There is a significant effects of reliability on patients loyalty at Apollo hospital in Mysore is not rejected since one sample t-test successfully revealed a statistically significant values for reliability factors.

One-Sample Statistics

RESPONSIVENESS	N	Mean	Std. Deviation	Std. Error Mean
Providing services at appointed time	185	1.4432	.75776	.05571
Error-free and fast retrieval of documents	185	1.6919	.93087	.06844
Willingness of personnel to help patients	185	1.8162	.83974	.06174
Feeling safety and security in interaction with personnel	185	1.7892	.82349	.06054

One-Sample Test

RESPONSIVENESS	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Providing services at appointed time	-27.943	184	.000	-1.55676	-1.6667	-1.4468
Error-free and fast retrieval of documents	-19.114	184	.000	-1.30811	-1.4431	-1.1731

Willingness of personnel to help patients	-19.174	184	.000	-1.18378	-1.3056	-1.0620
Feeling safety and security in interaction with personnel	-19.999	184	.000	-1.21081	-1.3303	-1.0914

Based on the results of the One sample t-test analysis at 95% confidence level, Mean values fall in positive side of rating (less than 3), t_{cal} value $>$ t_{tab} value and p -value $<$ $\alpha = 0.05$ for all the select responsiveness factors under study. Therefore Hypothesis H_0 . There are no significant effects of responsiveness on patient loyalty at Apollo hospital in Mysore is rejected, and H_a . There are significant effects of responsiveness on patient loyalty at Apollo hospital in Mysore is not rejected since one sample t-test successfully revealed a statistically significant values for responsiveness factors.

One-Sample Statistics

EMPATHY	N	Mean	Std. Deviation	Std. Error Mean
Polite and friendly dealing of personnel with patients	185	1.6757	.93988	.06910
Knowledgeable personnel to answer patients' questions	185	1.6595	.87086	.06403
Individual attention to patients	185	1.8919	.92618	.06809
Understanding specific needs of patients	185	1.8054	.86286	.06344
Having patients' best interest at heart	185	1.6811	.95606	.07029

One-Sample Test

EMPATHY	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Polite and friendly dealing of personnel with patients	-19.165	184	.000	-1.32432	-1.4607	-1.1880
Knowledgeable personnel to answer patients' questions	-20.937	184	.000	-1.34054	-1.4669	-1.2142
Individual attention to patients	-16.273	184	.000	-1.10811	-1.2425	-.9738
Understanding specific needs of patients	-18.831	184	.000	-1.19459	-1.3198	-1.0694
Having patients' best interest at heart	-18.764	184	.000	-1.31892	-1.4576	-1.1802

Based on the results of the One sample t-test analysis at 95% confidence level, Mean values fall in positive side of rating (less than 3), t_{cal} value $>$ t_{tab} value and p -value $<$ $\alpha = 0.05$ for all the select empathy factors under study. Hence Hypothesis H_0 . There is no significant influence of empathy on patient loyalty at Apollo hospitals in Mysore is rejected, and H_a . There is a significant influence of empathy on patient loyalty at Apollo hospitals in Mysore is not rejected since one sample t-test successfully revealed a statistically significant values for empathy.

One-Sample Statistics

TANGIBLE	N	Mean	Std. Deviation	Std. Error Mean
Neat and well-dressed personnel	185	1.5297	.69190	.05087
Clean and comfortable environment of the hospital	185	1.6919	.97646	.07179
Modern and up-to-date equipment	185	1.5622	.65746	.04834
Visually appeal of physical facilities	185	1.3514	.62625	.04604

One-Sample Test

TANGIBLE	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Neat and well-dressed personnel	-28.903	184	.000	-1.47027	-1.5706	-1.3699
Clean and comfortable environment of the hospital	-18.221	184	.000	-1.30811	-1.4497	-1.1665
Modern and up-to-date equipment	-29.746	184	.000	-1.43784	-1.5332	-1.3425
Visually appeal of physical facilities	-35.807	184	.000	-1.64865	-1.7395	-1.5578

Based on the results of the One sample t-test analysis at 95% confidence level, the Hypothesis H_0 . There is no significant influence of tangibles on patient loyalty at Apollo hospital in Mysore is rejected, and H_a . There is a significant influence of tangibles on patient loyalty at Apollo hospital in Mysore is not rejected since one sample t-test successfully revealed a statistically significant values for tangibles. Mean values fall in positive side of rating (less than 3), t_{cal} value > t_{tab} value and p-value < $\alpha = 0.05$ for all the select tangibles under study

REGRESSION ANALYSIS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.544 ^a	.296	.292	1.93713
2	.696 ^b	.485	.479	.51942
3	.907 ^c	.823	.820	.48266
4	.705 ^d	.560	.549	.76520

a. Predictors: (Constant), Reliability

b. Predictors: (Constant), Reliability, Responsiveness

c. Predictors: (Constant), Reliability, Responsiveness, Empathy

d. Predictors: (Constant), Reliability, Responsiveness, Empathy, Tangible

ANOVA^e

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	664.531	1	664.531	77.032	.000 ^a
	Residual	1578.691	183	8.627		
	Total	2243.222	184			
2	Regression	1087.978	2	543.989	85.701	.000 ^b
	Residual	1155.243	182	6.347		
	Total	2243.222	184			
3	Regression	1845.333	3	615.111	279.815	.000 ^c
	Residual	397.889	181	2.198		
	Total	2243.222	184			
4	Regression	2243.222	4	560.805	96.256	.000 ^d
	Residual	.000	180	.000		
	Total	2243.222	184			

a. Predictors: (Constant), Reliability

b. Predictors: (Constant), Reliability, Responsiveness

- c. Predictors: (Constant), Reliability, Responsiveness, Empathy
 d. Predictors: (Constant), Reliability, Responsiveness, Empathy, Tangible
 e. Dependent Variable: Overall patient loyalty

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	21.684	.965		22.479	.000
	Reliability	.989	.113	.544	8.777	.000
2	(Constant)	14.302	1.225		11.671	.000
	Reliability	1.079	.097	.594	11.094	.000
	Responsiveness	.983	.120	.437	8.168	.000
3	(Constant)	5.203	.872		5.966	.000
	Reliability	1.001	.057	.551	17.449	.000
	Responsiveness	1.060	.071	.471	14.938	.000
	Empathy	1.059	.057	.584	18.561	.000
4	(Constant)	2.2814	.960		6.860	.000
	Reliability	1.680	.080	.551	14.0228	.000
	Responsiveness	1.080	.064	.445	11.2458	.000
	Empathy	1.020	.043	.551	12.0338	.000
	Tangible	1.101	.010	.423	13.1058	.000

a. Dependent Variable: Overall patient loyalty

The above results indicate that p value is .000 hence the regression model was fit. The R square is .296 it implies that there is 29.6% variance by reliability factor on customer satisfaction. The adjusted R square shows the amount of variance explained by independent variable on dependent variable. From the coefficient table it was revealed that reliability of hospital is (β -.544 and significance p-.000).Hence there is a significance difference between reliability and customer satisfaction. In terms of responsiveness the R square is .485 it implies that there is 48.5% variance by responsiveness factor on customer satisfaction β value is .437 and the p value is .000 it shows that responsiveness also positively influence overall patient loyalty of hospital. The next dimension was empathy the R square variance is 82.3%, β value was .584 and the p value was .000 it shows that the empathy aspect also have positive influence and overall satisfaction of hospitals. The tangible dimension has the R square value of .560, β value of .423 and the p value was .000 it shows that the tangible dimension is also positively related to customer satisfaction.

VII. CONCLUSION

Service is the global judgement related to overall superiority of service. The Apollo hospital has maintained the best services with the patients and therefore it has lead to customer loyalty. The hospital has considered all the four dimensions as important in making the customer loyal and retaining the customers with them it. Hence it will be profitable to both the customer and the hospital.

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