

Analysis of Patients' Expectation in Hospitals Using Servqual Approach

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ABSTRACT

Day by day new hospitals is started by many private sectors and emergence of new public hospitals. The success of running the hospital, need to analysis the expectation of the general public. In this, questions are framed based on the government hospitals service and what more is needed. Here, the service quality of private and public hospitals are systematically analyzed in the southern part of Tamilnadu namely Dindigul, Madurai, Theni and Thirunelveli using the Servqual approach. The patients' expectation is measured by analyzing the satisfaction and retention of their behavioural intentions using a Servqual approach by measuring t-test and p-test.

Keywords: Demography, Service quality, Servqual, Quality standard and accreditation

I. Introduction

Health is wealth. Health care is not only essential for public welfare but is an indicator of a nation's growth. The healthcare industry gives products and services to treat patients and offers preventive and rehabilitative care. The Indian government spends a huge amount on health care for the people because it is the primary duty of the government to keep its citizens healthy. There are private-sector made a significant investment by setting up top-class hospitals. All the latest medical technology has found its way to India. The health care industry has been fueled to a great extent by the development of maturing populace, a rising economy, expanding salary levels and changing nature of the infection, particularly towards a way of life sickness. This will be a central point driving up social insurance spending in the nation. Even though there are many hospitals, patients today are facing a lot of problems. To overcome these problems the hospital service quality and patients fulfilment have to be increased. Studies stretch the significance of patients' perspectives as a crucial instrument for checking and enhancing service quality. Numerous hospitals are embracing a patient-focused mind is discussed [1].

The major issues in the health care industry are population growth: With the population right now at 1.1 billion and expanding at the rate of 2% p.a., as it assessed by 2050 the populace will reach 1.6 billion. This monstrous populace is expected to some extent to diminish the newborn, child mortality is a general increment in future, more prominent fortune among individuals and better cleanliness. Along with these lines, a developing elderly populace will soon put a tremendous weight on India's human services framework. Expanding Middle Class: Parallel to India's flourishing economy, its rapid urbanization leads to the growth of expanding middle class. Uncontrolled urbanization leads to various health issues and this result in spending more on healthcare. Rise of Disease: There are three types of diseases, namely communicable, acute and chronic diseases. Some of the diseases are more virulent forms and are very difficult to treat because they become resistant to drugs. The present lifestyle has led to various other diseases like diabetes, malignancy, obesity and hypertension. More alarming is the situation, because these diseases are growing faster than infectious diseases. Technology: Medical

technology both in diagnostic and curative fields has been growing tremendously. No nation can lag in giving its citizens the latest medical techniques and tools.

Patient satisfaction predicts supplier decision proposes a pathway through which people normally incline toward higher-quality consideration, despite the troubles natural in assessing service quality. Fulfilled patients are additionally more prone to hold fast to suggested treatment. The nature of human services and patient fulfilment as a standout amongst the most vital markers is measured by [2]. The study planned to recognize elements influencing understanding's fulfilment at essential human services centers. The long drag survival of hospitals facilities relies on faithful patients who come back or prescribe the hospitals' facility to others is discussed [3]. The idea of patient fulfillment is quickly changing to patients' delight which implies the patient is not just cured of his affliction amid the hospitals' facility stay details are in [4]. Service quality is a function of the differences between expectation and performance along the quality dimensions. A service quality model is developed based on the gap. Services have three essential qualities: physical offices and procedures; individuals' conduct; and expert judgment. GAP model is developed [5]: Internet banking model is explained [6]. The creators have added to an inward service quality model given the idea of Whole model is available [5]. The model assessed the measurements, and their connections, that focus on service quality among inside patients and inside suppliers inside of an expansive service association. IT-based model [7]: This model highlights the significance of data innovation - based service alternatives. Service suppliers are utilizing IT to lessen expenses and make quality included services for their patients. It proposes a service quality model those connections patient seen IT-based service choices to customary service measurements. All the above models are not easy to evaluate perceived and expected service quality. Hence SERVQUAL tool is better to make this analysis.

2. Methodology

In the modern world, quality has become the deciding factor in the patients' hospital choice. Patients' satisfaction and retention are the results of good quality health care services. Thus the satisfied patients would show their loyalty; in turn, it results in good behavioural intention.

Measurement of Service Quality of hospitals becomes very essential for patients' satisfaction and retention. There is no exclusive study, which covers the profile of the patients, their level of expectations and perceptions on the service quality of hospitals and their behavioural intentions.

Behavioural intention acts as a signpost to know whether the patients maintain or strain the relationship with the service provider is defined [8]. They identified the dimensions – favorable and unfavorable to measure behavioural intention. Favorable intentions are manifested in the form of positive word of mouth, loyalty and repurchase intention [8] whereas unfavorable intention leads to negative word of mouth and is reflected in their switching over to competitors behaviour are explained [9]. The relationship between service quality and behavioural intention among patient is indicated [10]. This includes the following criteria: Word of mouth, positive problem response in the health care sector, non-switching to a competitor in the health care system and willing to pay more.

The service quality of hospitals are concluded that health scape perceptions of the patients affect personnel quality and overall service quality; personnel quality affects overall service quality and overall service quality positively affects behavioural intentions of the patients is measured [11].

2.1 Word of Mouth

The decline of prohibitive types of oversight consideration and quick increments in the accessibility of health care sector data utilizing the Internet may create a circumstance in which buyer gave data is all the more profoundly esteemed by beneficiaries amid their data pursuits and choice [12] and [13]. In this manner, word of mouth or referrals have noteworthy significance for the good care framework, both generally as a way to slice through data asymmetry and all the more as of late as an instrument for medicinal services suppliers to increase understanding about what patients esteem. Exploration affirms the significance of informal ("a trade of musings, thoughts, or remarks between two or more patients, none of whom is a promoting source[14] in the medicinal services industry.

Tolerant verbal exchange specifically is turning out to be progressively vital for hospitals and treatment suppliers, because patients 'can assume an imperative part in accomplishing ideal good by taking a dynamic and educated part in treatment choices and exchanging doctors if consideration is unsuitable' [15]. Buyers use word-of-mouth referrals for consolation or affirmation that they are making the privilege choice, for example, 'What do you think about that specialist?', or to deal with various choices, for example, 'Which birthing healing center do you believe is best?' [16]. The supplier's aim to offer positive verbal correspondences associates decidedly with a patient impression of worth and quality is explained in [17].

2.2 Positive Problem Response in Health Care Sector

With an end goal to conquer any obstruction of understanding, numerous health care sector suppliers will offer patients printed good data as pamphlets, articles, and/or books. Some insurance agencies, centers and other good associations will mail content-based data to their publics or give nearby libraries of security data. Unfortunately, these endeavors at advancing good data are a conflicting and exceedingly endless supply of open subsidizing and geographic area, with the poorer and more country populaces at a more noteworthy hindrance. People who can't consistently visit health care sector associations might not have entry to these materials, and the individuals who have admittance may not see how to explore a library or even good reference content on the off chance that it is excessively unpredictable or logical.

There are additional difficulties identified with acquiring data utilizing the Internet. The patients with access to the Internet will probably be White, have higher pay levels and more training, be less than 65 years old, and have higher-good education data are available [18]. Conversely, underestimated populaces, for example, ethnic gatherings that communicate in English as a second dialect, poor people, and the elderly have less access to online good data. Notwithstanding when patients have entry to the Internet, because no service specialists are guarding the nature of good data on the Internet, the data is regularly incorrect and obsolete.

2.3. Non Switching to Competition in Health Care System

Challenge is an instrument for sorting out the utilization of assets, keeping in mind the end goal to accomplish security arrangement objectives. Specifically, competition is frequently utilized as an instrument for assigning assets to their most important uses and for enhancing productivity. Competition is characterized here as contention among suppliers of the health care sector, bringing about motivating forces for customizing health care sector procurement to the inclinations of buyers in the end influencing costs, quality, service level, and so on. Competition among health care sector suppliers ought to be recognized from the patient decision. A quiet decision may be available in general security frameworks and absentee in frameworks where private suppliers are discounted by medical coverage organizations. The estimation of patient decision has increased essential status in a few nations as a rule supporting their security

framework. Empowering quiet decision does not consequently suggest presenting or reinforcing competition, however, upgrade tolerant strengthening. On the other hand, expanding understanding decision is regularly consolidated with measures to expand the number of potential suppliers.

While considering the utilization of competition among human services suppliers, chiefs should consider the accompanying: 1)Presenting, changing or expanding competition in the procurement of security services is a sensitive and complex approach exercise. 2) It requires extra strategy activities went for permitting the business sector to work legitimately, what's more, ought to be joined via cautious and steady assessment of impacts. 3) It additionally requires, in addition to other things, the authorization of competition guidelines to counteract the creation, reinforcing or manhandle of overwhelming positions. 4) even though there is no broad assumption about the effect of competition on value goals, arrangement worries about antagonistic impacts fortify the requirement for watchful checking. 5) There is an earnest need to create an experimental proof, on when and how competition among health care sector suppliers works, in ways that are helpful for arrangement.

2.4 Willing to Pay More

Numerous financial experts inspire individuals' willingness to pay (WTP) for medicinal services mediations through unforeseen valuation studies so that the advantages of those intercessions can be esteemed in fiscal terms Smith (2003). Much writing spotlights on creating an agreement on the most legitimate technique for evoking WTP; setting aside any philosophical issues that question the legitimacy of inspiring WTP through a solitary elicitation. Early WTP overviews evoked qualities utilizing an open-finished inquiry from a self-interest point of view to get individual use-values; e.g. "what amount would you be willing to pay to be cured?" Smith & Richardson (2005). These open-finished organizations request WTP values without displaying beginning stage esteem and without utilizing a pursuit routine to assist respondents with deciding a worth.

3.Result and discussion

Statistical Package for Social Sciences (SPSS) version 18.0 is used for analyzing the test for Frequency, Percentage distribution and Mean & SD and Independent sample t-test. Studies stretch the significance of patients' perspectives as a crucial instrument like the servqual approach is used for checking and enhancing service quality. The t-test is the most commonly used method to evaluate the differences in means between two groups. In this, the t-test is used to find the difference between genders regarding various factors of level of expectation and level of satisfaction. Hypothesis tests are widely used in business and industry for making decisions. So statistical testing of hypothesis is used to analyze the behavioural-based patient satisfaction for choosing the hospital.P-test:This survey is about patients' behavioural intentions toward the Specific Hospital. For each statement, please show the extent of your intended behaviour by picking one of the 5 numbers next to each statement.

	Sl. No.	Statements	Extremely Not At Likely All Likely				
Word Of Mouth	1.	I will say positive things about XXX hospital to other people	5	4	3	2	1
	2.	Consider my first choice to receive services at XXX hospital will be my first choice	5	4	3	2	1

	3.	I will encourage friends / relatives to do treatment with XXX hospital	5	4	3	2	1
	4.	I will recommend XXX hospital to anyone who seeks my advice	5	4	3	2	1
Positive Problem Response	5.	I will plan to continue to get treatment with XXX hospital in the next few years	5	4	3	2	1
	6.	Take your treatment to another hospital (competitor) that offers better treatment in prices.	5	4	3	2	1
	7.	Continue to do treatment with XXX hospital of its prices increase some what	5	4	3	2	1
Non – Switching To Competitor	8.	Switch to a competitor, if I have experience a problem with XXX hospital service	5	4	3	2	1
	9.	Complain to other customers if you experience a problem with XXX hospital service.	5	4	3	2	1
	10.	Complain to external agencies, such as the better business bureau, if you experience a problem with hospital service.	5	4	3	2	1
	11.	Complain to hospital personnel, if you have experience a problem with hospital service	5	4	3	2	1
Willingness To Pay More	12.	Pay a higher price than competitors charge for the benefits you currently receive from XXX hospital	5	4	3	2	1
	13.	I will consider the XXX hospital to be my first choice for all treatment that I need	5	4	3	2	1

After getting the report from the patient, five different hypothesis t-test are taken and the results are analyzed.

Factors of Behavioural Intention	Gender				t value	P value
	Male		Female			
	Mean	SD	Mean	SD		
Null Hypothesis 1:There is no significant difference between Male and Female with respect to Factors of Behavioural Intention of Patients						
t-test for significant difference between Male and Female with respect to Factors of Behavioural Intention of Patients						
Word of Mouth	14.58	3.63	14.96	3.05	1.249	0.212
Positive Problem Response	9.71	3.16	10.49	2.39	3.075	0.002**
Non - Switching to Competitor	11.84	4.64	12.90	4.15	2.644	0.008**
Willingness to Pay More	6.43	2.70	6.72	1.97	1.362	0.174
Overall Behavioural Intention	42.55	12.73	45.07	10.71	2.351	0.019*
Null Hypothesis 2:There is no significant difference between Married and Unmarried with respect to Factors of Behavioural Intention of Patients						
t test for significant difference between Married and Unmarried with respect to Factors of Behavioural Intention of Patients						
Word of Mouth	14.87	3.38	14.42	3.14	1.163	0.245
Positive Problem Response	10.02	2.89	10.58	2.34	1.741	0.082
Non - Switching to Competitor	12.52	4.81	11.92	1.89	1.159	0.247

Willingness to Pay More	6.52	2.41	6.87	2.00	1.286	0.199
Overall Behavioural Intention	43.92	12.49	43.79	7.83	0.094	0.925
Null Hypothesis 3: There is no significant difference between government and private hospitals with respect to Factors of Behavioural Intention of Patients						
t test for significant difference between government and private hospitals with respect to Factors of Behavioural Intention of Patients						
Word of Mouth	15.44	2.88	14.07	3.64	4.581	<0.001**
Positive Problem Response	10.43	2.88	9.79	2.69	2.532	0.012*
Non - Switching to Competitor	12.76	4.72	12.02	4.03	1.859	0.064
Willingness to Pay More	6.89	2.28	6.25	2.36	3.025	0.003**
Overall Behavioural Intention	45.53	11.86	42.13	11.38	3.200	0.001**
Null Hypothesis 4: There is no significant difference between joint and nuclear family with respect to Factors of Service Quality and Behavioural Intention of Patients						
t test for significant difference between joint and nuclear family hospitals with respect to Factors of Behavioural Intention of Patients						
Word of Mouth	14.43	3.16	15.04	3.44	2.009	0.045*
Positive Problem Response	9.48	3.14	10.59	2.44	4.356	<0.001**
Non - Switching to Competitor	11.37	4.79	13.15	3.96	4.459	<0.001**
Willingness to Pay More	5.93	2.41	7.06	2.18	5.400	<0.001**
Overall Behavioural Intention	41.20	12.28	45.85	10.96	4.358	<0.001**
Null Hypothesis 5: There is no significant difference between health insurance covered and not covered with respect to Factors of Behavioural Intention of Patients						
t test for significant difference between health insurance covered and not covered with respect to Factors of Behavioural Intention of Patients						
Word of Mouth	14.66	3.57	14.92	3.05	0.839	0.402
Positive Problem Response	10.14	2.66	10.10	2.96	0.150	0.881
Non - Switching to Competitor	13.03	4.35	11.69	4.39	3.354	<0.001**
Willingness to Pay More	6.41	2.43	6.78	2.22	1.743	0.082
Overall Behavioural Intention	44.25	12.29	43.50	11.10	0.697	0.486
There is no significant difference between CM health insurance covered and not covered with respect to Factors of Behavioural Intention of Patients						
t test for significant difference between CM health insurance covered and not covered with respect to Factors of Behavioural Intention of Patients						
Word of Mouth	13.80	3.05	16.23	3.21	8.372	<0.001**
Positive Problem Response	9.39	2.75	11.20	2.52	7.305	<0.001**
Non - Switching to Competitor	11.16	3.96	14.24	4.41	7.982	<0.001**
Willingness to Pay More	5.68	2.24	7.93	1.78	11.729	<0.001**
Overall Behavioural Intention	40.04	10.50	49.60	11.18	9.549	<0.001**
Note :1.** denotes significant at 1% level, 2.* denotes significant at 5% level						

Hypothesis I: Since P value is less than 0.05, the null hypothesis is rejected at 5% level of significance. Hence there is a difference between male and female patients with respect to

the overall behavioural intention. Based on mean score female patients have more behavioural intention than male patients.

Hypothesis 2 : There is no significant difference between married and unmarried with respect to word of mouth, positive problem response, non-switching to competitor, willingness to pay more and over all behavioural Intention, since P value is greater than 0.05. Hence the null hypothesis is accepted with respect to all behavioral Intention.

Hypothesis 3: Since P value is less than 0.01, the null hypothesis is rejected at 1 % level of significance with respect to word of mouth, willingness to pay and overall behavioural intention. Based on mean score government hospital patients have more perception than private hospital with respect to word of mouth, willingness to pay and overall behavioural intention. Since the P value is less than 0.05, the null hypothesis is rejected at 5% level of significance with respect to positive problem response. Based on mean score the government hospitals patients have more perception than private hospital. There is no significant difference between government and private hospital with respect to non-switching to competitor, since the P value is greater than 0.05, null hypothesis is accepted with respect to non-switching to competitor.

Hypothesis 4: Since P value is less than 0.01, the null hypothesis is rejected at 1 % level of significance with respect to positive problem response, non-switching to competitor, willingness to pay more and over all behavioural intention. Hence there is a significant difference between joint and nuclear family of Patients. Based on mean score Nuclear family have more opinion on perception than joint family with respect to positive problem response, non-switching to competitor, willingness to pay more and over all behavioural intention. Since the P value is less than 0.05, the null hypothesis is rejected at 5% level of significance with respect to word of mouth.

Hypothesis 5: Since P value is less than 0.01, the null hypothesis is rejected at 1 % level of significance with respect to non-switching to competitor. Hence there is a significant difference between the health insurance covered and not covered by patients. There is no significant difference between the health insurance covered and not covered with respect to positive problem response, word of mouth, willingness to pay more and over all behavioural intention, since the P value is greater than 0.05. Hence the null hypothesis is accepted with respect to positive problem response, word of mouth, willingness to pay more and over all behavioural intention health insurance covered and expected service quality of hospital.

Conclusion

Even though there are many hospitals, the patients today are facing a lot of problems. To overcome these problems the hospital service quality and patients fulfillment have to be increased. For this SERVQUAL approach is applied and based upon the T test and P test value five different hypothesis are discussed and this analysis will be very helpful for the society to improve the selection of hospital in health sector and also improving the economic status of our country. In future, national level questionnaire based analysis will be taken for more accurate steady of patient expectation for selecting the hospital based on their behavioural intention.

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