Research studies pertaining to the assessment of patient satisfaction have been voluminous, depicting areas of hospital services improvement. Many of them are customized for certain types of hospitals as they are varied in nature, ownership, specialty and so on. However, SERVQUAL approach, which centers around the quality aspects of patient satisfaction, is being increasingly given importance to in these days. This study attempts to address patient satisfaction assessment with the help of SERVQUAL approach. Results reveal that patients satisfaction patients is not dependent on, or influenced by, the referral pattern, period of stay, previous exposure to the hospital's services, sex and age of the patient, household income, or educational qualification. Implications are drawn for healthcare marketing.

Introduction

Quality of care is difficult to define, even harder to measure. And the problem is made more complex by the lack of consensus among health care providers on which measurement approach to use. To a hospital administrator, quality can mean an absence of adverse publicity, a larger market share than competitors; To clinicians, quality is tied to medical outcome. For many hospitals, quality is best measured by patient satisfaction. "Client satisfaction is of fundamental importance as a measure of quality of care because it gives information on the provider's success at meeting those client values and expectations which are matters on which the client is the ultimate authority. The measurement of satisfaction is therefore an important tool for research administration and planning" (Donabedian, 1982).

Teresa et.al (1996), define satisfaction as a function of confirmation or disconfirmation of expectations. According to Ware (1987), choice of healthcare system, use of services, complaints and malpractice suits, all have a common determinant: Patient satisfaction.

A comprehensive service quality measurement scale, SERVQUAL, was developed on a marketing perspective by Parasuraman, Zeithaml and Berry in 1988, to provide an instrument for measuring service quality across a broad range of service industries. The Indian consumer being typically different from his western counterpart, the methods
perfected elsewhere cannot be copied here in toto. We have therefore, tried to adapt the SERVQUAL scale to the Indian hospital climate to measure the level of satisfaction among the hospital patients.

**Objective:** the objective of the study is to determine the patients assessment of the quality of services provided by a private hospital in Hyderabad and to identify areas that need improvement. The modified SERVQUAL scale, was used to measure the satisfaction level of the patients of the hospital. This has resulted in 23 questions based on the five SERVQUAL attributes were Reliability Coefficient Test. This test yielded an Alpha value of 0.6703, which means that the scale is highly reliable.

**METHOD**

Seventy five patients were randomly selected from the 300 bedded private hospital, to whom, a structured interview schedule was administered. This schedule consisted some demographic related questions and the SERVQUAL questionnaire to measure the patients satisfaction with the quality of services in the hospital.

In order to study the association between the overall satisfaction levels and the following variables, statistical analysis were done.

(a) Referral pattern, (b) Length of stay, (c) Previous exposure to the hospital services, (d) Sex of the patient, (e) Age of the patient, (f) Household Income, (g) Qualification of the patient
To validate the relevance of the above given classes, the following Null Hypothesis was framed:

\[ \text{H}_0 1. \text{ There is no association between 'referral pattern', 'period of stay', 'previous exposure to the hospital', 'sex of the patient', 'age of the patient', 'income of the patient', 'educational qualification of the patient', and the overall satisfaction of the patient.} \]

Chi - Square test was applied to the variables mentioned above and total satisfaction level. The results of the data analysed and their implications are discussed in the following. However, for the sake of brief presentation tables were avoided.

RESULTS

The overall satisfaction level was classified into low, medium and high satisfaction groups based on the quartiles of sum of the scores of 23 variables by the 75 respondents. The first quartile represents low satisfaction group, the second and third quartiles represent medium satisfaction group and the fourth quartile represents high satisfaction group. The following table 1 elucidates the above information.

<table>
<thead>
<tr>
<th>Sl.no</th>
<th>Groups</th>
<th>Score-range</th>
<th>Frequency</th>
<th>percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Low</td>
<td>66-90</td>
<td>17</td>
<td>22.6</td>
</tr>
<tr>
<td>2</td>
<td>Medium</td>
<td>92-103</td>
<td>39</td>
<td>51.9</td>
</tr>
<tr>
<td>3</td>
<td>High</td>
<td>104-115</td>
<td>19</td>
<td>25.5</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>75</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Analysis Of Referral Pattern And Overall Satisfaction

It was found that among the respondents referred by the doctors, 21 percent fell in the low satisfaction category. Among non-doctor referrals 35.1 percent were reported to have a high level of satisfaction with the hospital services. However, the chi-square value
showed that such difference was not statistically significant. In other words, satisfaction does not depend on the referral pattern.

**Analysis of period of stay and overall satisfaction**

Among the respondents, 73.3 percent were admitted for 3 days or more and 26.7 percent for less than 3 days. Of those who were admitted for over 3 days, 25.5 percent were found to have low satisfaction, while 25.5 percent showed high satisfaction. 25 percent of the patients whose period of stay was less than three days reported a high level of satisfaction and 15 percent, low satisfaction. Chi-square value showed that there is no association between period of stay and overall satisfaction level of the patients.

**Analysis of previous exposure and overall satisfaction**

The bivariate analysis between the previous exposure to the hospital and the overall satisfaction level indicated 33.3 percent with previous exposure and 66.7 percent without it. Among those with previous exposure, 24 percent showed a high level satisfaction, while 56 percent showed the opposite. 26 percent of those without any previous exposure, fell in the high satisfaction category and 24 percent in the low satisfaction category. The chi-square value revealed that there is no association between previous exposure to the hospital and the overall satisfaction level of the patient.

**Analysis of sex and overall satisfaction**

The analysis of the sample studied, shows that 47 patients were males and 28 were females. Of the male respondents, 27.7 percent felt high satisfaction and 21.3 percent low satisfaction. Low satisfaction was indicated by 25 percent of the female group. High satisfaction group was lower at 21.4 percent. Chi-square value proved that there is no association between sex of the patient on the overall satisfaction level.

**Analysis of age and overall satisfaction**

The analysis of age of the patient against the overall satisfaction showed 45 patients were above 45 years of age, 21 patients between 30 and 45 years of age and 9 patients
between 15 and 30 years of age. 22.2 percent of the patients aged 45, 33.3 percent of those between 30 and 45, and 22.2 percent of those between 15 and 30 showed a high degree of satisfaction. Low satisfaction group included 22.2 percent of the over 45 group, 28.6 percent between 30 and 45, and 11.1 percent between 15 and 30. The chi-square value supports that there is no association between age of the patient and the overall satisfaction level.

**Analysis of income and overall satisfaction**

Of the 75 respondents studied, 37.3 percent had a household income of rupees ten thousand and above, 44 percent were in the rupees five thousand to ten thousand group and 18.7 percent had an income below rupees five thousand. 28.6 percent of those with income less than rupees 5,000, 24.2 percent of those in the 5,000 to 10,000 category and 17.9 percent of the above 10,000 category showed low satisfaction. High satisfaction was indicated by 28.6 percent of those with an annual household income of less than 5,000. 27.3 percent of 5,000 to 10,000 group and 21.4 percent of the 10,000 and above group also indicated the same.

The chi-square value also suggest that there is no association between income of the patient and the overall satisfaction level.

**Analysis of qualification and overall satisfaction**

Of the 75 respondents studied on the basis of qualification, 32 percent were postgraduates or professionals, 44 percent were graduates and 24 percent had upto high-school education. Of the post-graduates/professionals category, 16.7 percent had low levels satisfaction and 29.2 percent had high levels of satisfaction. Low satisfaction group is indicated by 24.2 percent of graduate group and high level of satisfaction by 27.3 percent in the same. 27.8 percent of the respondents with education upto high-school group, showed low level of satisfaction, 16.7 percent showed high level of satisfaction. Chi-square value proves that there is no effect of the educational qualification of the patient on the overall satisfaction.
Discussion and Implications

From the above analysis the following issues are discussed in the light of healthcare marketing.

- The overall satisfaction of the patients was found to be high at 80.34 percent during the period of the study. It is necessary to keep in mind here that the Indian patient is always found to be reluctant to express his negative views at the time of discharge, unless his dissatisfaction is very strong. Considering this, the value could be exaggerated to a point. Another limiting factor to be considered while studying the overall satisfaction of the services of any organisation is the 'masking effect' of a variable with high degree of satisfaction over another with a relatively lower level of satisfaction. But one can safely assume that the service is of quality and therefore the satisfaction level is above average.

- The analysis reveals certain areas of low satisfaction. The low scores awarded to nursing care point to the fact that although the quality of nursing care is average, patients felt that the nurses had to be prompted and reminded of the needs of the patient. In a hospital, the most common interface is that of the nurse and the patient. The quality of the hospital is as often judged by its nursing care as by its doctors, and other facilities. Patients expect nurses to understand their needs and to provide them, without repeated requests. Therefore it is imperative to have better trained nursing staff.

- Many patients found the hospital clean and conducive for their recovery. However they felt that certain areas of the hospital are crowded and noisy. Areas repeatedly mentioned were, the lobby, corridors, waiting areas outside the operation theatre and the restaurant. Many patients suggested that dustbins be kept along the corridors and near the consultants' rooms. They also felt that areas frequented by attendants and visitors to the hospital should be kept more clean and hygienic, especially the laboratories and the restaurant.

- The patients felt that the expenses incurred were comparatively high. The consumers need to be convinced of the necessity of the tests and the costs incurred. Special efforts need to be made in this direction.
personalised care was found to be lacking by many patients. It has to be emphasised that it is this care that patients seek. The limiting factors could be poor communication skills and inadequately trained staff.

Since patient’s satisfaction is at the very heart of the practice of hospital services marketing, re-designing of the marketing strategy proves the efficiency and effectiveness of the hospital. In these days of competition among the service organisations, it is advisable for hospitals to give importance to the function of marketing of the hospital services as patient’s satisfaction has long-reaching impact on the current and future viability of a hospital.

**Conclusion**

As the null hypothesis proved true, it is evident from the study that the overall satisfaction of the patients at the study hospital is not dependent on, or influenced by, the referral pattern, period of stay, previous exposure to the hospital’s services, sex and age of the patient, household income, or educational qualification. Therefore the administrative efforts of the hospital need not target any specific patient group. An improvement in the quality of services provided, holistic in nature, will result in increased patient satisfaction.

**References**


