CHAPTER I

INTRODUCTION AND DESIGN OF THE STUDY

1.1 INTRODUCTION

India’s health care service industry has turned out to be a major driver of economic growth with the multi-national healthcare segments parking their funds on Indian soil due to low cost of operation. In India, terms such as health tourism, healthcare outsourcing and medical back office support are suddenly gaining currency. Liberalisation, Privatisation and Globalisation also have brought unprecedented changes in the Indian healthcare industry.

According to the Economic Times healthcare 2001-2002 report, India’s healthcare services industry grow at 13 per cent per annum over the last decade and at present, it is growing at 17 per cent annually. The healthcare industry was contributing to 5.2 per cent of India’s GDP. This contribution has reached up to 6.2 per cent. It is estimated to be around Rs.1000 billion at present and it is expected to reach Rs.2000 billion by 2012. The growth has been attributed to the increasing affluence and changing life styles and technology. Today, the Indian middle class expects healthcare services at higher level of quality.¹

Government run hospitals and those operated by charities were the main providers of subsidized healthcare till the 1980’s. During the last two decades, a number of corporate and private run hospitals had mushroomed in

¹ http://articles.economictimes.indiatimes.com/2013-09-17/news/42148654_1_bpm-council-bpo-sector-industry
the country. The private sector accounts for 70 per cent of primary medical personnel are employed in the private sector. The private sector has played a critical and increasing role in providing healthcare to a growing population. India has 5, 03,000 doctors, 7, 37,000 nurses, 3, 50,000 chemists and 162 medical colleges. There were around 15,100 hospitals accounting for 9,00,000 beds approximately during 2012.2

India’s hospital facilities have been rapidly growing in the last fifty years. Times have changed and specialisation has become the order of the day. However, the hospital-small and big have realised that their survival hinges on patient management. Further, the degree of competition in the private healthcare industry has been increasing over the years. The areas of challenging for the Indian private hospital in the face of stiff competition are increasing customer expectations, increasing customer relationship complexities, new trends and developments, greater mobility, faster development of new services, customers in competitive environment and up graduation of technology to cope up with modern management environment for meeting perceived satisfaction of customers.

Healthcare is a patient oriented service industry where the patient or the service users is in focus and patient service is the differentiated factor. Success and survival of healthcare organisation depends upon the effectiveness and efficiency of the services rendered to its patients. Patients’ satisfaction is the key to secure patient retention/loyalty and to generate superior and long-term performance or optimize long-term value. This

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2 [http://www.ibef.org/industry/healthcare-india.aspx](http://www.ibef.org/industry/healthcare-india.aspx)
patient perception is based on their expectations and perceived in the services offered by the healthcare industry.

1.2 STATEMENT OF THE PROBLEM

In the past two decades, India has made rapid strides in social political and economic fields. In the area of medical science too, commendable progress has been made during the period, however, hospital administration and managing patients have lagging behind.³

Healthcare industry has gone through major changes in the recent years that place new demands on payers, providers and medical product manufactures⁴. Consumers now demand the same choice and convenience from healthcare providers that they enjoy in other segments of life. Payers and providers are focusing on cost while maintaining quality and integrating new medical discoveries into pathways of care.

In this context of growing competition amongst private hospitals, quality of patient service and patient relationship deserve a significant attention to acquire and retain a good reputation.⁵

A quiet revolution is taking place in hospital administration in India. The changing scenario of increasing customer expectations, customer demand, a variety of quality healthcare, the entrepreneurial spirit and professionalised management have compelled the private hospitals to adopt

³ http://en.wikipedia.org/wiki/Health_Administration_Informatics
⁵ http://www.ftc.gov/reports/healthcare/040723healthcerept.pdf
various strategies to gain competitive edge ever each other which ultimately result in the creation of satisfied customers.

Service Quality perception is the buzzword in today’s highly competitive and rapidly fluctuating business domain. Service Quality is a strategy used to learn more about the customer’s needs and behaviours in order to develop stronger relationships at the heart of a successful business. Organisations find that all business processes from customer service to payroll have an impact on the end user. Service Quality Perception helps the service users to achieve the goals of

- Customer expectation from the health care industry and
- Customer perception from the health care industry.

In the light of the developments, it has been pertinent to focus the study on the quality of service providers’ service quality in multi-speciality hospitals. In this process the following points arise:

- The service gap in satisfaction of the patients while in utilizing the services of health care industry in Salem district.
- To the extent of the patients’ expectations on hospital services fulfilled
- Factors underlining of service quality and patient relationship perceptions in a multi-speciality hospital encounter and
- The service qualities singularly and collectively influence the overall patients’ satisfaction.
1.3 OBJECTIVES OF THE STUDY

- To present a profile of health care sector in Tamil Nadu with special reference to Salem District.
- To identify the level of perception of the patients about the health care industries in the study area.
- To examine whether or not the expectations of patients on different dimensions of health care service fulfilled.
- To analyse the satisfaction level of the patients on the service quality offered by the health care industry.
- To find out the problems faced by the patients while utilizing the services offered by the health care industry.
- To offer suggestions regarding service quality initiatives to improve service user satisfaction.

1.4 SIGNIFICANCE AND SCOPE OF THE STUDY

India’s health care sector has made impressive strides in the recent years and the expectations of the people have risen greatly. The services have also increased and the patients expect qualitatively better and timely services form the hospital. There is a growing need for quality hospital services to satisfy the patients. Hence, the evaluation of patient perception has become a need of the time. This helps the marketers in bringing out adequacies and inadequacies in a hospital and paves ways for innovative efforts. Besides understanding and satisfying inefficiently satisfied needs marketers also strive to identify the unfelt needs of the patients, make the patient aware of the need and satisfies the need more efficiently than the competitors. Competitive quality creates satisfied patients. The dissatisfied
patients stop using the services and will lead to unfavourable publicity regarding the quality of the services offered. This affects the growth and market share of the hospitals. Competitive service with better quality attracts dissatisfied and lost customers.

Quality service is appreciated worldwide and developing economy like India is no exception to it. Service quality is important to establish and sustain satisfying relationships with customers. It is important indicator of patients’ satisfaction.

1.5 HYPOTHESIS OF THE STUDY

Necessary hypothesis have been formulated and tested and they are presented in the appropriate places in the analysis chapter.

1.6 RESEARCH METHODOLOGY

The Patient is the focal point in the hospitals, and his response depends on the satisfaction derived by his family members from the hospital administration and services. It gives confidence to the patient in facing the diseases. In the changing environment, it is difficult to determine the real feelings of a patient. It is the responsibility of the administration to keep the patient and his attendants in a satisfied state. In order to study the satisfaction of patient and his attendants about the service provided by the multi-speciality hospitals in Salem District, the primary data were collected from patients by using Interview schedule. The researcher has selected seven major multi-speciality hospitals in Salem District, having more than 150 beds.6

6 http://www.salem.tn.nic.in
- Sri Gokulam Hospital, Maiyanur, Salem-4
- Pranav Hospital, Brindavan Road, Salem-4
- SKS Hospital, Salem-4
- Kamala Hospital, Salem-1
- Gopi Hospital, Salem-7
- Shanmuga Hospital, Salem-16
- Manipal Hospital, Karappur, Salem-12.

The total respondents selected for the study was 720 patients. Out of 720 patients, 100 respondents were selected from each multi-speciality hospitals except Sri Gokulam Hospital. As Gokulam Hospital has one annexure, 120 patients were selected in Gokulam Hospital. Therefore totally 720 respondents were selected. As majority of the respondents were not highly educated, the schedule was mostly filled by the researcher. In some cases, where the respondents were highly literate, they filled the schedule themselves. If the patients were unable to fill the schedule their attendants helped to fill it. In this study, disproportionate stratified sampling was administrated.

In order to assess and evaluate the quality of service provided to the patients, the following dimensions were taken for evaluating service quality of health care and satisfaction level of patients towards the healthcare services in the present study. The important dimensions are responsiveness, competence, reliability, empathy, courtesy, access, communication, security and physical environment.

**Area of the Study**

The area of the study is conducted in the Salem district because multi-speciality health care facilities are available in Salem only. Due to existence
of more number of famous, advanced and important multi-speciality hospitals, patient from Namakkal, Dharmapuri, Krishnagiri, Erode and South Arcot districts are coming to Salem for treatment.

**Sample Design**

The study is conducted under disproportionate stratified random sampling method.

**Sample Size**

In the sampling methods 720 patients were selected as samples by interview schedule method.

**Source of the data**

The researcher has collected the data from both primary and secondary.

**Data Collection**

**Primary Data Collection and interview schedule**

In order to fulfil the set objectives a sample study was undertaken by using a well framed interview schedule that was duly filled in by the respondents with varying backgrounds were selected based on the important aspects of their sex, age, educational qualification, occupation, monthly income, marital status, family size, and awareness, hospital information, reasons expectation, level of satisfaction. A noteworthy feature was that the entire 720 interview schedules filled by the respondents were taken for the study. This was due to the significant level of literacy among the
respondents and the researcher’s rapport established with them. The specimen of the interview schedule issued to the selected sample respondents is shown in the Appendix section of this thesis.

**Secondary Data**

The secondary data pertaining to the study was gathered from well equipped libraries in Chennai and Coimbatore and from Internet web resources. Further, the secondary data were also collected from various leading journals inclusive and exclusive of hospital services. A number of standard text books relevant to the topic were studied to obtain pertinent literature on patients’ satisfaction.

**Pre Test and Pilot Study**

The pilot study has been conducted in some of the selected hospitals and fifty patients have been subjected to pre-testing and necessary modifications have been carried out in the interview schedules before administrating for the final study.

**Discussions and Informal Interviews**

In order to know the patients’ behaviour, several rounds of discussions were held with knowledgeable persons in the field of hospital services and also the Research Supervisor for clarifications.

**Construction of Questionnaire**

The key aspect of the present research was identified through the preliminary interviews (Pilot study) with some selected patients. The
schedule so drafted was circulated among some research experts, patients, hospital supervisors, hospital nurses and Research Scholars for a critical view with regard to wording, format, sequence and the like. The schedule was re-drafted in the light of their comments.

Frame Work of Analysis

The core of the study being ‘Patients Satisfaction,’ the study centres around the dependent variable viz., the level of satisfaction perceived by the patients and its relationship with the related independent variables.

Tools

The difference in the extent of using the hospital services between the different types of respondents based on their Age, Gender, Educational Qualification, Occupational Status, Monthly Family Income, Marital Status, Residential Area, Awareness, Hospital information, Reasons, expectations, level of satisfactions were studied by means of Percentages, Averages, Ranges, Standard Deviation, Chi-squared test, ANOVA, Multiple correlation, Multiple Regression Analysis and SERVQUAL model.

Chi-Square Test

The degree of influence of the following independent variables are pertaining to respondents on their opinion towards services offered by the multi-speciality hospitals were also studied.

(i) Respondents’ Age
(ii) Respondents’ Gender
(iii) Respondents’ Educational Qualification
(iv) Respondents’ Occupation  
(v) Respondents’ Monthly Family Income  
(vi) Respondents’ Marital Status  
(vii) Respondents’ Residential Area  
(viii) Respondents’ Awareness  
(ix) Respondents’ Nature of treatment

In order to identify the factors influencing the level of satisfaction in utilizing the services offered by the multi-speciality hospitals by the selected respondents from different divisions of the study area, a Chi-square ($\chi^2$) test was used and the formula is given below:

$$\chi^2 = \sum \frac{(O-E)^2}{E}$$

Degree of Freedom (D.F.) = (c-1) (r-1) where,

- $O$ = Observed frequency,  
- $E$ = Expected frequency,  
- $c$ = Number of Columns,  
- $r$ = Number of Rows.

**Analysis of Variance (ANOVA)**

Analysis of Variance (ANOVA) is a statistical method for partitioning the total variation of a set of data into components associated with recognized sources of variation. Usually, the variance is classified into two parts:

1. Variance between the samples (or groups).  
2. Variance within the samples (or groups).
ANALYSIS OF VARIANCE (OR) ANOVA TABLE

<table>
<thead>
<tr>
<th>Sources of Variation</th>
<th>Sum of Squares (SS)</th>
<th>Degree of freedom (DF)</th>
<th>Mean Square (MS)</th>
<th>F-Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Samples</td>
<td>SSB</td>
<td>K-1</td>
<td>MSB = \frac{SSB}{K-1}</td>
<td>\text{F} = \frac{MSB}{MSW}</td>
</tr>
<tr>
<td>Within Samples</td>
<td>SSW</td>
<td>N-K</td>
<td>MSB = \frac{SSW}{N-K}</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>SST</td>
<td>N-1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Where,

- \( SST \) = Total sum of square of variance = \( SSB + SSW \)
- \( SSB \) = Sum of square of between samples
- \( SSW \) = Sum of square of within samples
- \( MSB \) = Mean square of between samples
- \( MSW \) = Mean square of within samples
- \( N \) = Number of samples
- \( K \) = Constant

**Henry Garrett Ranking Technique**

Henry Garrett Ranking technique was used to rank the problems faced by the patients in the study area. In this method the respondents were asked to rank the given problem according to the magnitude of the problem. The orders of merit given by the respondents were converted into ranks by using the following formula.

\[
\text{Percentage Position} = \frac{100(R_{ij} - 0.5)}{N_j}
\]
Where,

\[
\begin{align*}
Rij & \quad \text{Ranking Position} \\
Nj & \quad \text{Total No. of Ranks}
\end{align*}
\]

The percentage position of each rank thus obtained is converted into scores by referring to the table given by Henry Garrett. Then for each factor the scores of individual respondents were added and divided by the total number of respondents for whom the scores were added. These mean scores for all the factors were arranged in order of ranks and from this inference were drawn.

1.7 PERIOD COVERED BY THE STUDY

The primary data were collected for a period of one year ie. from March 2011 to February 2012 from the respondents covering Salem district. Web Resources were also referred to collect the latest information about the performance of Healthcare Industry. The review of literature took six months period. The analysis and interpretation of the data were taken another six months. The last six months period was used for rough drafting and final form of the thesis.

1.8 OPERATIONAL DEFINITIONS

Patients / service users

Patients are those who come to the hospital for treatment and to avail the facilities rendered by the hospital and it includes both inpatient and outpatient.
Health care providers/hospital authorises

Health care providers are the doctors, nurses, technicians, paramedical personnel, dean in a trust hospital, managing director in corporate hospital, and chairman in private hospital.

Patients’ expectations

Patients’ expectations are attitudes of patients towards the hospital. They relate to the service given, and to the professionalism of patient contact. It is an integral part of measuring overall satisfaction.

Patients’ satisfaction

Patients’ satisfaction is a patients’ feelings of pleasure or disappointment resulting from comparing a service’s perceived performance or outcome in relation to his or her expectations i.e. satisfaction may be perceived as a state of fulfillment which is connected to reinforcement. The level of patients’ satisfaction is reflected in her/his opinion on valorous aspects of hospital services. A dissatisfied patient is not likely to become a loyal patient. Patient loyalty is based on patient satisfaction.

1.9 LIMITATIONS OF THE STUDY

The study suffers from the following limitations:

- The survey was conducted only in Salem district. Hence, the results arrived from the study may or may not be applied to other districts in Tamil Nadu. Further, the survey method which was adopted for collecting the data in this study has got its own limitations.
• Out of total population in the study area, only 720 patients were selected for eliciting first-hand information. In view of the time and monetary constraints, it was not possible to contact more than the selected number of respondents.

• Since, this study is confined to quality of services provided to patient by relationship, management in private hospitals, the results and final implications of this study have to be generalised with caution.

• Certain respondents had given information about their economic backgrounds like annual income, from their memory as they had no account of them or out of fear of income tax stipulations.

• Some of the respondents had given the information about the treatment with oral statement.

• Some of the patients were illiterates.

Hence, the generalization of the findings of the study is subject to these limitations.

1.10 SCHEME OF CHAPTERISATION

The present empirical study has been divided into five chapters.

• The **First Chapter** deals with introduction, Statement of the Problem, Objectives of the Study, Scope of the Study, Hypotheses of the Study, Research Methodology, Period of Study, Operational Definitions, Limitations of the study and Chapter Scheme.

• The **Second Chapter** presents the review of literature.
• The **Third Chapter** describes an overview of health care industry and profile of the study area.

• The **Fourth Chapter** explains with the Data Analysis and Interpretation of the study I.

• The **Fifth Chapter** deals with the Data Analysis and Interpretation of the study II.

• The **Sixth Chapter** presents the summary of findings, suggestions and conclusion of the study.