Chapter-II

OBJECTIVES AND METHODOLOGY

The aim of this chapter is to define the objectives of the study, outline the methodology employed for carrying out the research study and elucidate various concepts related to this problem and to review the existing literature on management of hospitals in India.

NEED FOR THE STUDY

Healthcare plays an important role in human lives. It affects the way they live and the expectations they have for their standard of living. Health is a matter of concern to the humanity and the ultimate performance and progress of any civilized society depends upon the state of health of its citizens.

During the last two decades of 20th century, medical science has made unprecedented progress that surpasses the achievements of the past centuries. The 21st century is the century of knowledge and development. Multiple, but very powerful forces are imminently accelerating the need for transformation of healthcare delivery. The future will undoubtedly witness revolutionary changes, new horizons opened up by cutting-edge science. It is needed to coalesce the efforts of the entire scientific community to commit ourselves to fulfilling the vision in a socially relevant and participatory mode. Synergy between science, technology, organization and public policy - a scientific mindset is the need of the hour to bring a sea-change in the planning, organization, design, construction, commission and management of health facility. One must value one's life and expand enormous resources to maintain it. Investing in health should be considered as an investment in HRD to enhance the productivity of a nation.

The new paradigm of health care management requires planning of healthcare delivery which takes account the needs of the patients in terms of quality care by doctors, nurses and paramedical staff. Effective healthcare delivery becomes possible only through effective management of healthcare organizations. But, unfortunately, the issues in management aspects have not received adequate attention. Though the government and management scientists are putting efforts for the improvement of hospitals'
management, the results are not satisfactory. Most of the hospitals in India follow the western system of medicine and public hospitals today are exclusively run in administrative framework designed by Britishers in 19th century. Even after sixty years after independence, the average Indian hospital continues to be more or less primitive and underdeveloped. Hospital management as an independent specialty is yet to be recognized by the policymakers. The government hospitals in particular, are the neglected lot. There is no hospital policy for the management of government hospitals. In fact, management is the weakest link in these hospitals, giving rise to an unending array of problems in the day-to-day working of hospitals. This not only affects the patient care adversely, but also leads to a situation of crisis every now and then. The hospital authorities are not geared to deal with such situations immediately. In other words, their approach remains what is called ‘management by crises’.

The Central and State Governments are increasing their investment on Health Sector in Five Year Plans and spending crores of rupees on health of the citizens, patient satisfaction levels are very low and the hospitals condition continue to deteriorate. Cases of medical negligence, corrupt and unethical practices and deficient services are on the increase. The hospitals that run on traditional and rigid practices have failed to respond effectively to the growing needs of the society. At present most of the hospitals are run by the Superintendents who are the senior most doctors with a smaller number of administrative staff. The administrative body tends to rely on rules, procedures and techniques which have not been changed over the years. The physician who commands the reins of administration may not be well versed with good management practices and it becomes difficult for him to attend to both kinds of duties effectively. But time has changed. Today is the era of specialization. In view of the tremendous expansion of health services, it has become essential to have specialists or experts not only in their fields, but also in other fields of hospital administration so that maximum efficiency can be achieved with minimum possible cost. The rapidly increasing number of patients and the inadequate expansion of hospitals and medical services have thrown the administrative machinery completely out of gear. It is therefore, imperative to have separate specialist for general administrative and personnel functions in the hospitals. This is era of quality service. Presently, patients prefer those hospitals where efficient
physicians along with good services are available. In the light of these circumstances, it is necessary to have a separate cadre of administrators who combine some knowledge or medical system with sound management principles.

Prior to the 1970s, the government provided most of the healthcare services almost free for everyone in India. However, keeping in view, the large population to be served and the deficient infrastructure facilities, an optimum quality health care could not be delivered by these institutions. At the same time, a huge middle class with paying capacity, and the demand for better health care was emerging quite rapidly. This led to the emergence of new category of hospitals in the private and corporate sector resulting in commercialisation of health. These are generally large sized multi-disciplinary super-specialty health enterprises concentrated mainly in urban areas, attracting mostly the rich and middle class urban and rural population, blending excellent patient care and service with state-of-the-art medical technology. Specialisation has been the key to their success and the factors responsible for their services being considered as benchmarks in the industry. In practice, corporate hospitals have some drawbacks. An average Indian citizen is not in a position to go to corporate hospital on account of affordability. Only higher income group and patients with company’s medical reimbursement facility can only afford a corporate hospital treatment, but the same is out of reach to other income group people.

The revolutionary developments in corporate health sector have led to commercialisation of health in India which is unethical to the medical profession. The words “Commercialisation of health care” implies running of health care as a business. From the meaning itself, it can be known whether it is good or bad. Healthcare is a fast-growing sector which is developing at a very fast pace. People are becoming health conscious and are demanding better quality healthcare measures. Many hospitals have been formed for the purpose of providing quality healthcare to the people. Huge investments are being made in R & D which has led to development of new and better life saving drugs and equipment. This attitude of people provides the platform for the commercialization of health care. The Major Players in India are Wockhard Ltd., Apollo Hospitals Enterprise Limited, Max India Ltd., and Fortis Healthcare Ltd., etc. The commercialisation of healthcare definitely leads to the technological advancement in the
field of medicine. The medicinal field is as diverse as human ailments can be. Hospitals, Pharmacy, Nursing, Treatment, Medicine, etc., are the different areas of healthcare where commercialization can take place rather one can say has already taken place. The innovations and technology really helps the patient a lot. For e.g., patients may be able to monitor chronic conditions such as diabetes and asthma in their own homes using modified mobile phones to access and process their data, which may give better convenience and better management of their conditions and reduce the need to visit their local health care centre.

The government of India is also of the opinion that by marketing India as a global medical tourism destination, it could capitalize on the low-cost, high-quality medical care available in the country and thus help in raising the revenue for the country. The Indian Government is at the bottom of the league with respect to economic allocations to health. In this situation, it seems unlikely that palliative care will be covered. Privatisation and commercialisation of medicine seem to take over where the public services are fading out. In this situation, several commercial healthcare centres also offer a healthy alternative in terminal care.

While the government is unable to provide quality health care to the vast majority of the population and cost of medical treatment provided by the corporate hospitals has become beyond the reach of common man, trust-based hospitals are being established in order to cater to the medical needs of the low/no income group people in the society. These are non-profit organizations promoted with the philanthropic motive of providing medicare to mostly urban slum and rural population. They collect subsidized fee from the affordable and also provide free medical care to the patients who are below the poverty line. But now these hospitals are also facing a lot of problems such as dearth of funds, non-availability of competent personnel, political interference etc.

Here the question as to how to manage an organization like hospital and provide better services to reach the common man is to be answered. It is possible only through application of management principles which is grossly ignored in the hospital. To excel in hospital industry, one has to incorporate new and innovative ideas to decrease the costs and to increase the high quality of care and a strong patient-orientation. There is a need
of shifting the focus for decision making from provide-focused care to patient-focused care.

In the light of this, the researcher felt that management on a planned and scientific basis is necessary for the smooth functioning of every organization. A hospital is no exception to this fundamental rule. Effective management in hospitals is crying need of the hour because the number of people who use hospital services has increased manifold, where as financial and other resources available to hospitals in India have not kept pace with the growth of the number of users. Hence the researcher's effort is to explore the necessity of establishing scientific management in to administration of hospitals for more efficient and cost-effective run. The study is limited to some super specialty hospitals. Emphasis has been laid on application of management functions i.e., need for better planning, organizing, staffing, coordinating and controlling which make a hospital an affordable and comfortable centre of relief and healing rather than nightmarish experience and a mirage for the common man. The findings of the study would throw light upon the functioning of hospitals with respect to the core managerial aspects viz., planning, organizing, staffing, directing and controlling and finally also offers suggestions towards effective management of hospitals and there by enable them to deliver quality patient care.

OBJECTIVES OF THE STUDY

The broad objectives of this research study is to investigate into the management process in the selected super specialty hospitals and to attempt an overall assessment of the functioning of the selected hospitals in catering health care needs of patients. The specific objectives of the study are:

1. To review the growth and performance of health sector in India
2. To analyse the present state of hospital in India
3. To investigate the planning, organising and staffing patterns in the selected hospitals in Visakhapatnam.
4. To probe into direction and controlling process in the selected hospital in Visakhapatnam.
5. To conduct a survey on patient satisfaction in the selected hospitals in Visakhapatnam.

6. To offer suitable suggestions to the policy makers for strengthening the process of management of health care system in hospitals in general and with particular reference to the selected hospitals in Visakhapatnam.

HYPOTHESES

The present study is based on the presupposition that super speciality hospitals run under different ownerships cannot be differentiated with respect to management functions. The hypotheses framed for the purpose are:

1. The perceptions of Departmental Heads, Doctors, and Nursing Staff in the three selected hospitals vary with respect to management functions.

2. The perceptions of the Out-patients and In-patients of the three selected hospitals are not synonymous with respect to registration procedure, consultation and treatment facilities; diagnose procedure, physician and nursing services etc.

3. The hospitals that follow management principles function satisfactorily and are able to perform well to the satisfaction of the patients.

SCOPE OF THE STUDY

The present study attempts to analyse how far the management functions such as planning, organizing, staffing, directing and controlling are carried out effectively in the sample hospitals. For this purpose, the assumption is that the hospitals run on sound management principles do excel and the patients patient satisfaction would be high i.e., where the principles of management which are universal in nature are practiced scrupulously in an organization, there problems do not occur, even if they occur, they can be resolved successfully. For this purpose, it is proposed to elicit the perceptions from the departmental heads, doctors and nursing staff. The study however excludes the paramedical staff due to time constraints and poor capabilities in quantifying their qualitative attitudes. Problems like workers' participation in management, political
interference and finance related aspects are also excluded. Bed capacity, size, super specialities offered are taken as basis for sample selection.

In the next step, an attempt has been made to elicit the opinions from patients, because every human being carries a particular set of thoughts, feelings and needs. The wishing list might be of value for those who want to know the real person within the patient. It gives new ideas and suggestions. One must admit that there are lots of things which could be altered. Moreover, the concept, scope and philosophy of the hospital of today are far different from those of the past. Once upon a time, the hospitals were regarded as curative institutions and today these hospitals are being recognized more and more as social institutions and the focal point is patient’s satisfaction. In order to find out an answer to the question on how far the high-tech super-specialty hospitals have attained their organizational goals, one has to take the institution into account. Patients’ perceptions about medical care are increasingly important because the success of a hospital depends on the satisfaction of the users. Moreover, an organization exists to achieve its goal; and the goal of a hospital, whatever one may say, is always primarily to provide highest quality of patient care. For this one has to determine what questions could be put to the patient and which needs are important to satisfy the patient. There are various factors which influence a patient’s expectations. Some of the expectations include efficiency, confidence, helpfulness, personal interest and reliability. These are intrinsic factors. External factors like media influence and experience of others also influence a patient’s response. Hence, a study is undertaken to identify the various factors influencing patients’ satisfaction in the three sample hospitals that are having similar and identical facilities.

LIMITATIONS OF THE STUDY

The present study is limited only to three selected super speciality hospitals in Visakhapatnam and the scope of the study is confined only to the management process and patients satisfaction. The other issues like materials management, financial management, industrial relations in hospitals, hospital waste management, disaster management, legal aspects of medical practice and other related problems are not
discussed. However care was taken for arriving at the representative sample of the doctors, nursing staff and the patients along with the hospitals.

Majority of administrators are under the impression that research on management means probing into their internal affairs especially in healthcare sector. With this opinion they hesitated in providing required data. However, administrators of different hospitals did co-operate. This research project would not have been possible without the help extended by them.

RESEARCH DESIGN

This study is mostly exploratory in nature and it aims at discovering general problems with regard to functions of management and related variables. In this part, an attempt has been made to explain the research design, the procedure for selection of sample, methodology used in data collection, its analysis and presentation.

The present study is an attempt to probe into public, private and voluntary health sectors in Visakhapatnam and examine the performance of each sector. Public in this study refers to the government/public sector, private refers to corporate sector and voluntary refers to not-for-profit or charitable sector. Since the scope of these sectors is very vast, the effort in this study is limited to public, private and trust-based hospitals.

SELECTION OF SAMPLE HOSPITALS

The researcher has selected three different hospitals in Visakhapatnam city viz., King George hospital (KGH). This hospital is selected to observe the management functions provided in government general hospitals. Secondly, Queen’s NRI hospital (NRI). This hospital runs on modern scientific and high tech lines, under the control of a private management and it is selected to study management functions of private/corporate hospitals and thirdly Krishi Trust Hospital (KTH) which is a non-profit voluntary organization administered by the Milk Producer's & Employees Educational, Health & Medical Welfare Trust; more often referred to as the M.P & E.E.H & M.W Trust.
PROFILE OF SAMPLE HOSPITALS

King George Hospital (KGH): It is one of the oldest Government General Hospitals in India and proudly caters to the medical needs of North Coastal Andhra, Godavari Districts, and the neighbouring states of Orissa, Chhattisgarh for more than 150 years. It is started with the mission of providing better patient care to the needy and the poor people at free of cost. The hospital has a bed capacity of 1037 which include superspeciality beds, emergency beds and general beds. More than 150 doctors and 322 nursing staff are rendering medical services under 40 departments (Complete information is given in the appendix-I).

Queens NRI Hospital (NRI): Queen’s NRI hospital has been built in the honour of Mrs. Sitamma mother of the chairman Dr. Ranga Rao Chalasani. This hospital was conceptualised by his wife Dr.(Mrs).Vijayalakshmi Chalasani and their two illustrious children, Dr. G. Hima Bindu and Dr. Sailesh Chalasani and son-in-law Dr.G. Kishore. This marks Queen’s NRI group entry into health care. The foundation stone was laid down in 1994. Queen’s NRI Hospital was commissioned on 18-02-1995. Presently the hospital has production capacity of 200 beds out of which only 150 beds are being installed and only 130 beds are actually unitised. It has bed occupancy rate of 95%. Queen’s NRI Hospital is recognised by Medical Council of India as Teaching and Clinical Training hospital for Manisha College of Nursing and 660 Nursing students undergoing training in the hospital. The hospital is started with the mission of “To be preferred choice for healing and good health” and its focus is “To be Your Family Hospital. It provides quality healthcare to the people of in and around of Vizag, round the clock supported by professional and committed cadre. The hospital is functioning with more than 25 super speciality departments. It has 7 wards and 110 eminent doctors and more than 80 nursing staff (Complete information is given in the appendix).

Krishi Trust Hospital (KTH): The Milk Producer's & Employees Educational, Health & Medical Welfare Trust; more often referred to as the M.P. & E.E.H. & M.W. Trust. Known to many as the Visakha Dairy Trust, the silent revolution that is transforming the social and cultural landscape, helping the lives of several villagers through dedicated
service under the guidance of the visionary humanitarian Mr. Adari Tulasi Rao. The
Trust has opened KTH initially with 50 beds on 18th September 1998. Since its inception,
it has been working with the noble mission of providing quality superspeciality medicare
to the one lakh milk producers, farmers, employees and their families of Visakha Trust
and the poor villagers in and around Visakhapatnam at the nominal and cheaper costs.
Presently the hospital has 200 bed capacity with 100 per cent occupancy, 52 specialist
doctors and more than 85 nursing staff with 6 wards and 24 departments. (Complete
information is given in the appendix).

The table No II.1 depicts the present profile of the selected hospitals

<table>
<thead>
<tr>
<th>Table II.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present Profile of the Selected Hospital</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>KGH</th>
<th>NRI</th>
<th>KTH</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Particulars</strong></td>
<td><strong>KGH</strong></td>
<td><strong>NRI</strong></td>
<td><strong>KTH</strong></td>
</tr>
<tr>
<td>Year of Establishment</td>
<td>1923</td>
<td>1994</td>
<td>1998</td>
</tr>
<tr>
<td>Doctors</td>
<td>150</td>
<td>110</td>
<td>52</td>
</tr>
<tr>
<td>Nursing Staff</td>
<td>322</td>
<td>80</td>
<td>85</td>
</tr>
<tr>
<td>Paramedical Staff</td>
<td>330</td>
<td>35</td>
<td>30</td>
</tr>
<tr>
<td>Ministerial Staff</td>
<td>44</td>
<td>35</td>
<td>14</td>
</tr>
<tr>
<td>Class-IV Employees</td>
<td>150</td>
<td>130</td>
<td>80</td>
</tr>
<tr>
<td>No. of Departments</td>
<td>40</td>
<td>30</td>
<td>24</td>
</tr>
<tr>
<td>No. of Operation Theatres</td>
<td>11</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>No. of Beds</td>
<td>1037</td>
<td>150</td>
<td>200</td>
</tr>
<tr>
<td>Outpatients treated (per day)</td>
<td>1300 (app)</td>
<td>500-600 (app)</td>
<td>400-500 (app)</td>
</tr>
<tr>
<td>Bed Occupancy Rate</td>
<td>100%</td>
<td>90%</td>
<td>95%</td>
</tr>
</tbody>
</table>

**COLLECTION OF DATA**

The data was collected from both sources i.e. primary and secondary. For
collection of data from primary sources, efforts were made to elicit the opinions of almost
all key personnel in the organizations through observation, personal interviews,
questionnaires and schedules. The researcher spent months together in sample hospital
offices observing the management process in the selected hospitals. In depth interview
technique was used here for collecting primary data. This was collected through personal
observation and also from the hospital documents, Annual Reports & Budgets, Standing Orders for General Hospitals and Statues. The necessary information was also collected from the reports of central and state governments. The researcher visited and collected information from various institutes including National Institute of Health and Family Welfare, All India Institute of Medical Sciences, National Medical Library, St. John’s Medical College, MGR Medical University, and Apollo Hospital.

The data for the study was collected by administering the questionnaire schedules and through observation method. Observation method is one of the most important and extensively used methods in social sciences research. It is one of the primary research methods. All the time it is not possible to use quantitative techniques, in such circumstances, observation method bridges the gap. On the other hand Questionnaires are widely used for data collection in social sciences research particularly in surveys. It is a fairly reliable tool for gathering data from large, diverse, varied and scattered social groups. It is used in obtaining objective and qualitative data as well as in gathering information of qualitative nature. It is treated as the heart of the survey operation. In this context it is proposed to distribute questionnaires to the Chief Executives posing questions relating to overall organization and management of the hospitals. The data for the study was collected by administering a two part questionnaire to administrative staff, doctors, and nursing staff and to both inpatients and outpatients. Part I of the questionnaire consisted of socio-economic information. Part II of the questionnaire which was distributed to administrative staff contained the data regarding working and performance of office, different functions of management and different organizational patterns and structures. The instrument was tested for its reliability and validity. A Three point scale was used. It contained the columns of Agree, Not Sure and Disagree. In this aspect researcher took help from the questionnaire prepared by Voluntary Health Association of India Part II of the questionnaire that was distributed to doctors was prepared by World Health Organization with modifications. Instrument was tested for its reliability and validity. Three-point scale was used. It contains Agree, Not Sure and Disagree. Part II of the Nursing staff questionnaire includes the questions relating to application of management aspects in hospitals. Instrument was tested for its reliability and validity. Three-point scale was used which contains columns of Agree, Not Sure and
Disagree. Part II of both Inpatient and outpatient questionnaire included questions relating to their satisfaction on services offered by the selected hospitals. The instrument was tested for reliability and validity. Three point scale was used which contained Yes, In-part and No.

**Procedure Followed in the Collection of Data**

To begin with, permission was sought from the three selected hospitals. Then the researcher went to them as and when time was given. Questionnaires were distributed to the personnel who were selected as sample and in some cases the researcher explained the implications of the questions. Respondents were asked to fill up the set of questions as per instructions mentioned on them. They were specifically requested not to read all the items at once but to go through each individual statement and answer it and then only move on to the next. Respondents were assured of the confidentiality of their responses. All respondents were encouraged to express their opinions freely and fairly. Precautions were also taken to obtain unbiased results. On an average it took more than one hour to answer one questionnaire. Schedules are explained by the researcher personally and questionnaires were in the vernacular language and were filled by Respondents / patient attendants for themselves.

The completed questionnaires were collected by researcher personally. The interview schedule was distributed when the patients were in private rooms/ward before their discharge from the hospital. Each patient was given a brief explanation about the purpose of the enquiry and their co-operation was sought and they were assured that strict confidentiality would be maintained. During interview, the researcher attempted to establish a neutral and independent position for patients. The questionnaire was collected back after two hours.

**Methodology for Data Analysis**

The questionnaire, which was intended to diagnose the management problems, contained nine statements in total. The counts of responses are considered. Because, the objective of the study was to observe which hospital was more effective. Here an attempt has been made to diagnose the management problems (function-wise) in three sample hospitals based on calculated percentages. The procedure is explained in the Appendix-II
Statistical Methodology

The objective of this study was to examine whether the three selected hospitals (King George, Queens NRI and Krishi Trust Hospital) could be distinguished with respect to functioning. For this purpose, the researcher selected two types of statistical tools viz., “ANOVA Test” and “Scheffes’ Post Hock Test”.

The data were fed to the computer. The tabulations and the results for analysis were done with the help of SPSS (Statistical Package for Social Sciences) version 14, Minitab Version-14 and Microsoft Excel for Statistical measurements such as simple percentages, mean values etc.

ANOVA Test: To know the significant mean difference in the opinion score of the respondents with regard to each and every factor of management functions ANOVA Test is conducted.

Scheffes’ Post Hock Test: To know the significant mean difference in the opinion score of the respondents of each and every pair of three hospitals (Multiple Comparison) Scheffes’ Post Hock Test is being administered.

The researcher made an attempt to rate the performance and functioning on the basis of count of the response for ‘Agree’, ‘Disagree’ and ‘Not Sure’ for the category of Departmental Heads, Doctors and Nursing Staff and ‘Yes’, ‘No and ‘In-part’, type for the category of out-patients and in-patients. Here the nature of questions in the questionnaire is such that an’, Agree / ‘Yes’ response is a criterion of preferability in some situations (given score is 1), a ‘Disagree’/ ‘No’ response is a criterion of preferability in some other situations (given score is-1). Similarly, a ‘Not Sure’/ ‘In part’ response is a criterion of neutral performance (given score is 0). As important inputs for a hospital are Doctors and Nursing Staff and important output are patients, the researcher collected data from all the three categories of sample respondents by giving weightage to the strength in all the three hospitals under study.

To fulfil mathematical requirement for applying this statistical test, the collected count data had been expressed in percentage to the total respondents. The hypothesis used for analysis of variance is the categories between which rating is required do not differ significantly with respect to that type of response.
In the ANOVA Test Table, decision "S" refers to the existence of "Significant difference in respect of that particular dimension among the three selected hospitals means that these hospitals are not identical for a specified group of questions. On the other hand "NS" indicates that there is "No Significant" difference in respect of the particular dimension among the three selected hospitals means these hospitals are more less identical for a specified group of questions.

Selection of Sample

There are more than 200 hospitals in Visakhapatnam. It is difficult on part of the researcher to take up all the hospitals and thereby study the existing management pattern in these hospitals. Hence, detailed studies of three super-specialty hospitals that run different lines were taken up for study. A study of management practices in the selected hospitals led the researcher to propose suggestions with respect to suitable management structures. In each hospital, the sample is taken from five categories after giving adequate representation to all classes. These five classes include (1) Chief Executives (2) Departmental Heads (3) Doctors (4) Nursing Staff (5) Patients- both inpatients and outpatients. The analysis relating to patients is dealt with in Chapter-VI.

The Table II.1: presents the information pertaining to three selected super-specialty hospitals.

Table II.2

<table>
<thead>
<tr>
<th>S.No</th>
<th>Particulars</th>
<th>King George Hospital</th>
<th>Queen’s NRI Hospital</th>
<th>Krishi Trust Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Chief executive</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Departmental Heads</td>
<td>40</td>
<td>30</td>
<td>24</td>
</tr>
<tr>
<td>3</td>
<td>Doctors</td>
<td>150</td>
<td>110</td>
<td>52</td>
</tr>
<tr>
<td>4</td>
<td>Nursing staff</td>
<td>322</td>
<td>80</td>
<td>85</td>
</tr>
<tr>
<td>5</td>
<td>Out patients</td>
<td>1300(app)</td>
<td>500-600(app)</td>
<td>400-500(app)</td>
</tr>
<tr>
<td>6</td>
<td>In patients</td>
<td>1400</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table No. II.2 depicts the information regarding the sample size after giving adequate representation to all classes.
### Table II.3
Sample Size of Selected Hospitals

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Particulars</th>
<th>King George Hospital</th>
<th>Queen's NRI Hospital</th>
<th>Krishi Trust Hospital</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Chief Executives</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>HODs</td>
<td>25</td>
<td>20</td>
<td>10</td>
<td>55</td>
</tr>
<tr>
<td>3</td>
<td>Doctors</td>
<td>60</td>
<td>30</td>
<td>20</td>
<td>110</td>
</tr>
<tr>
<td>4</td>
<td>Nursing staff</td>
<td>120</td>
<td>60</td>
<td>30</td>
<td>210</td>
</tr>
<tr>
<td>5</td>
<td>Outpatients</td>
<td>220</td>
<td>180</td>
<td>120</td>
<td>520</td>
</tr>
<tr>
<td>6</td>
<td>Inpatients</td>
<td>200</td>
<td>180</td>
<td>150</td>
<td>530</td>
</tr>
</tbody>
</table>

In order to elicit the required information, the Questionnaire for Chief Executives' was distributed to all the Chief Executives in the sample hospitals under study. The Questionnaire for Departmental Heads was distributed to all 40 departmental heads in KGH, 30 in NRI and 24 in KTH. The information was given by 25 respondents in KGH, 20 respondents in NRI and 10 respondents in KTH was found to be fit in all aspects and taken for final analysis. In the case of questionnaire developed for doctors, out of 150 doctors in KGH the questionnaires developed for doctors were distributed; Out of 150 doctors that are in KGH, 65 respondents were selected as sample by using stratified random sampling method. But 5 response sheets were found faulty and deleted and only 60 respondents were taken for final analysis. Out of 110 doctors in NRI, 50 doctors were selected for sample survey and finally 30 were taken for analysis. Among 52 doctors in KTH, 20 doctors were taken as sample and all the response sheets were taken for final analysis. In the case of questionnaire developed for Nursing Staff, out of 322 nurses who are on roll in KGH, 130 nurses were taken as a sample by using stratified random sampling, and 120 respondents were taken for final analysis. Of 80 nurses in NRI Hospital, 60 were selected as a sample. In the case of KTH among 85 Nursing Staff, 45 were taken for sample survey and finally 30 were taken as a sample for study after careful scrutiny. The sample was finalized accordingly.

The table No.II.3 presents the information pertaining to the qualifications, experience of the Departmental Heads.
Table II.4
Experience and Qualifications of the Departmental Heads in the Selected Hospitals

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Particulars</th>
<th>KGH</th>
<th>NRI</th>
<th>KTH</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Below 10 yrs</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>10 yrs-20 yrs</td>
<td>10</td>
<td>7</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Above 20 yrs</td>
<td>14</td>
<td>11</td>
<td>6</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>25</td>
<td>20</td>
<td>10</td>
<td>55</td>
</tr>
<tr>
<td>2.</td>
<td>Qualification</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Graduation</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Post Graduation</td>
<td>7</td>
<td>4</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Superspeciality</td>
<td>15</td>
<td>14</td>
<td>6</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>25</td>
<td>20</td>
<td>10</td>
<td>55</td>
</tr>
</tbody>
</table>

The sample respondents were further classified into different categories based on their experience and qualifications. The socio-economic background of the Departmental Heads have been delineated because it helps in identifying meaningful relationships between socio-economic position of the individuals and their attitudes, views and expectations towards work. Factors such as experience and qualifications of departmental heads have been considered to derive demographic and social background of the patients.

**Experience:** The above table reveals that out of 25 sample respondents in KGH only one respondent is put in below 10 years of experience and 10 respondents have more than 10 years but less than 20 years experience and 14 are have more than 20 years of experience. In case of NRI hospital, only 2 respondents are have below 10 years of experience, 7 respondents fall in between 10-20 years of experience and 11 respondents have more than 20 years of experience. Similarly in KTH also only one respondent is has below 10 years of experience, 3 respondents fall in between 10-20 years of experience and 6 respondents have more than 20 years of experience. From the analysis, it can be concluded that majority of the respondents in all the sample hospitals under the study have more than 20 years of experience followed by respondents with an experience between 10-20 years. In case of KGH, more number of respondents have more 20 years of experience.

**Qualifications:** Qualification of the respondents in the selected hospitals show that among 55 total respondents 35 respondents possess Superspeciality degree in addition to basic requisite qualification and 13 are Post Graduates and the rest of the respondents (7) are Graduates. Cross sectional analysis reveals that out of 25 respondents in KGH 15 have Superspeciality degree along with basic qualifications; while 7 are Post Graduates.
and the rest 3 are Graduates. In case of NRI hospital, out of 20 sample respondents, 14 have Superspeciality degree along with basic qualifications, 4 are Post Graduates and the rest 2 only are Graduates. While in case of KTH, out of total 10 respondents, 6 have Superspeciality degree and surprisingly the rest of the respondents are Post Graduates and Graduates in equal number. From the analysis, it can be concluded that majority of the respondents in all the sample hospitals have Superspeciality degree along with Post Graduation and considerably low number of respondents are graduates.

The table No.II.4 presents information pertains to Department, Designation, Age, Qualifications and Experience of the sample Doctors in Selected Hospitals.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Particulars</th>
<th>KGH</th>
<th>NRI</th>
<th>KTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Department</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Medicine</td>
<td>20</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>General Surgery</td>
<td>22</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Specialties</td>
<td>18</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>60</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>2</td>
<td>Designation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>HOD</td>
<td>21</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Associate Professor</td>
<td>24</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Asst. Professor</td>
<td>15</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Senior Resident</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>60</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>26 to 35</td>
<td>22</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>36 to 45</td>
<td>18</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>46 Above</td>
<td>20</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>60</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>4</td>
<td>Qualification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Graduation</td>
<td>18</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Post Graduation</td>
<td>14</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Super Specialization</td>
<td>28</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>60</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>5</td>
<td>Experience in Years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 to 5</td>
<td>12</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>6 to 10</td>
<td>24</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>11 years and above</td>
<td>24</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>60</td>
<td>30</td>
<td>20</td>
</tr>
</tbody>
</table>
1. Department: Through the table—II.3, the researcher tried to elicit the information regarding the department to which the respondents belonged. Among the total respondents in KGH, 20 belonged to surgical department, 22 to medical department and 18 to other special departments. In NRI Hospital out of total respondents, 10 are in medical department, 10 in surgical department and 10 in other specialty departments. Among total respondents from KTH 10 belonged to medical department, 5 to surgical department and 5 to other special departments. From the above analysis, a conclusion may be drawn that in all the three hospitals, the respondents are almost equally distributed among medical, surgical and other special departments with very little variations.

2. Designation: According to the distribution of respondents based on their designation, of the total respondents in KGH 21 were HODs, 24 were Associate Professors and 15 were Assistant Professors. In NRI Hospital out of total respondents, 10 were HODs, 8 were Associate Professors, 11 were Asst. Professors and 1 was Senior Resident. In KTH, out of total respondents, 5 were HODs, 10 were Associate Professors, 5 were Asst. Professors. From the above discussion it may be concluded that medical faculty was appointed as per the requirement of each hospital.

3. Age: Of the total respondents in KGH 22 belonged to the age group of 26-35 years, 18 were in the age group of 36-45 years, while 20 were in the age group of 46 and above. In case of NRI Hospital, 12 were in the age group of 26-35 years, 10 in the age group of 36-45 years and the remaining 8 were in the age group of 46 years and above. In KTH, 8 were in the age group of 26-35 years, 5 in the age group of 36-45 years and the remaining 7 were in the age group of 46 years and above. From the above discussion it may be stated that out of total respondents majority belonged to the age group of below 35 years and above 45 years.

4. Qualification: Of the total respondents in KGH, 18 had Super Specialization, 14 had Post-Graduation degrees and 28 had Graduation degrees. In case of NRI Hospital, 9 had Super Specialization, 11 Post Graduates and only 10 had Graduates. In KTH 6 had Super Specialization, 11 had Post Graduation while only very limited number of the sample 3
were Graduates. From the above discussion, it may be observed that a significant percentage of doctors had Super Specialisation as their qualification.

5. Experience: Out of total respondents from KGH, 12 had 1-5 years of experience, 24 had 6-10 years and the remaining 24 had 11 and above years of experience. Out of total respondents in NRI Hospital, 10 had 1-5 years, 8 had 6-10 years and 12 had 11 years and above. In KTH, out of total respondents 8 had 1-5 years of experience, 10 had 6-10 years of experience and 2, had 11 years and above experience. From the above analysis, it can be said that most of the respondents in NRI & KTH had 6-10 years of experience, while in KGH considerable number of respondents had less than 5 years of experience.

Selection of the Sample of Nursing Staff

The table II.6 presents the information pertaining to the Department, Designation, Age, Qualifications and Experience of the Sample of Nursing Staff in selected hospitals.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Particulars</th>
<th>KGH</th>
<th>NRI</th>
<th>KTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Department</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Medicine</td>
<td>32</td>
<td>20</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>General Surgery</td>
<td>32</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Specialties</td>
<td>56</td>
<td>25</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>120</td>
<td>60</td>
<td>30</td>
</tr>
<tr>
<td>2</td>
<td>Designation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Head Nurse</td>
<td>6</td>
<td>18</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Staff Nurse</td>
<td>114</td>
<td>26</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Multi-Purpose Health Workers (MPHW (F))</td>
<td>0</td>
<td>16</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>120</td>
<td>60</td>
<td>30</td>
</tr>
<tr>
<td>3</td>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>21 to 25</td>
<td>60</td>
<td>20</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>26 to 30</td>
<td>40</td>
<td>36</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>31 to 35</td>
<td>20</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>120</td>
<td>60</td>
<td>30</td>
</tr>
<tr>
<td>4</td>
<td>Qualification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Diploma</td>
<td>108</td>
<td>40</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Degree</td>
<td>12</td>
<td>20</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>120</td>
<td>60</td>
<td>30</td>
</tr>
</tbody>
</table>
Table II.6 describes the Department, Designation, Age, Qualification and Experience of the sample of nursing staff in the three selected Hospitals.

1. **Department:** Nursing staff are distributed as per the department, they were working. The cross sectional analysis of the sample reveals that out of total respondents in KGH, 32 respondents belong to medical departments, 32 respondents belong to surgical departments and 56 respondents belong to other specialty departments. Out of total respondents in NRI Hospital, 20 are from medical department, 15 from surgical department and 25 from other specialty departments. In KTH out of total sample respondents, 18 are from medical department, 10 from surgical department and 2 from other specialty departments. It may be concluded that Nursing staff were almost equally distributed among the departments in the three selected hospitals.

2. **Designation:** The distribution of respondents is made basing on their designation. In case of KGH, 6 are staff nurses while only a very small number that is 114 are Head Nurses. In NRI Hospital, 18 are staff nurses, 26 are MPHW (F) and 16 are Head Nurses. Out of total respondents in KTH, 15 are staff nurses, 15 are Head Nurses. From the analysis, it can be stated that majority of the nursing staff are staff nurses in all the three hospitals.

3. **Age:** Of the total respondents in the KGH 60 are in the age group of 21-25 years, 40 are in the age group of 26-30 years and 20 are in the age group of 31-35 years. In NRI Hospital, 20 are in the age group of 21-25 years, 36 are in to the age group of 26-30 years and only 4 are in the age group of 31-35 years. In KTH 12 are in the age group of 21-25 years, 16 in the age group of 26-30 years and 2 in the age group of 31-35 years. From the above discussion, it may be concluded that majority of the Nursing staff were young in the age group of 21-25 years.
4. **Qualification:** All the respondents are classified into two categories, namely, diploma holders and degree holders. Out of total respondents in sample hospitals. In KGH, 108 are diploma holders and 108 are degree holders. In NRI Hospital, 40 are diploma holders and 20 are degree holders. In KTH, 15 are diploma holders and 15 were degree holders. From the analysis, it may be stated that majority of the nurses are diploma holders, and a considerable number of nurses are degree holders.

5. **Experience:** In KTH, 38 had 5-10 years of experience, 60 had 1-5 years and 22 of them had an experience of 11 years and above. In NRI Hospital, 30 had 1-5 years of experience and 16 had 6-10 years and only 14 of them had an experience of 11 years and above. In KTH, 10 had 1-5 years of experience, 10 had 11 years and above experience. From the above analysis, it may be concluded that considerable number of nursing staff in KTH and NRI Hospital had less than 5 years of experience.

**Basis for Selection of Patients:** In order to know the socio economic background and other particulars relating to patients who help in identifying meaningful relations an attempt has been made to elicit the information from both outpatients and inpatients. This was separately discussed in Chapter-VI.

**SURVEY OF LITERATURE**

The survey of literature is an important step in any research process. Review of earlier studies, the works and studies done by individual researchers and institutions help to establish further need of the study.

In a competitive health care environment hospitals are being recognised as health care industry (Business) apart from being curative ones. Now these are considered patient focused centres instead of provider focused centres. Under these circumstances, hospitals must strive for maximum patient satisfaction. Patient satisfaction is the real testimony to the efficiency of the hospitals, which becomes possible only through effective management of hospitals. An attempt has been made in the present study to find out to what extent the functions of management are carried out to reach the desired goals of the selected units.
For the purpose of the research study, a thorough study of all possible academic and non-academic work in the field was done and this can be classified as – (a) Doctoral Theses (b) Text and reference books (c) Dissertations and Reports (d) Articles published in Academic Journals (e) Articles published in non-academic journals (f) Articles rendered to newspapers, and (i) Internet Browsing.

In search of doctoral theses submitted on the subject, the publications of Association of Indian Universities (AIU) were checked (in the Library of Indian Council for Social Science Research (ICSSR) which publishes the details of doctoral theses submitted with various Universities in Social Sciences. For the purpose of textbooks and reference books the catalogues of various libraries situated in Bangalore, Chennai, Delhi, Guntur, Hyderabad, were visited and a list of books considered to be useful for the research was prepared and books were obtained accordingly. A list of these books is given at the end as bibliography. For the consultation of dissertations, India Dissertation Abstracts were scanned.

For studying the articles published in academic and non-academic journals, documentation centres of various Libraries such as Library of Planning Commission, New Delhi, Library of All India Institute of Medical Sciences, New Delhi, Library of World Health Organisation, New Delhi, Library of National Institute of Health and Family Welfare, New Delhi. Library of Voluntary Health Association of India, New Delhi, National Medical Library, New Delhi, Library of Indian Institute of Management, Bangalore, Library of St. John’s Medical College, Bangalore, Library of Indian Institute of Sciences, Bangalore, Library of Indian Institute of Technology, Chennai, Library of MGR University, Chennai, the Library of Acharya Nagarjuna University, Guntur; Andhra University Visakhapatnam, the library of Guntur Medical College, the library of St. Joseph’s College of Nursing at Guntur, Andhra Medical College, Waltair, Katuri Medical College, Guntur, GSL Medical College, Rajmundry and the library of Dr. N.T.R. University of Health Sciences, Vijayawada, Administrative Staff College of Hyderabad, Apollo Administration and Management, Hyderabad, Hinduja Institute of Hospital Administration, Hyderabad were visited and notes were taken.

In the process of surveying literature, it has been observed that no doctoral theses have been submitted on Health care Management, the same is the case with dissertations.
Taking related aspects into consideration no academic work has so far been done in sample hospitals and in the area of healthcare. Coming to the articles published in non-academic journals, one can observe that most of the articles concentrate on slow growth of healthcare issues in India and hardly anyone touched upon the lack of better management practices in the hospital industry. Articles published in academic journals of National and International repute also emphasise on cost benefit analysis, development of hospitals in corporate sector and on pattern of growth of healthcare industry etc. Articles and notes appearing in newspapers also do not highlight any aspect of the management being practised in the organisations. These articles are mostly informative and statistical in nature and give an account of the health sector trends, projections for the future, healthcare scenario, number of patients, beds ratio, patient centred care, healing environment, Total Quality Management and patient satisfaction etc.

The reviewed literature for the present study has been organised under the following headings:

A. Literature related to Hospital Administration and Management.

B. Literature related to Patient Satisfaction.

Surveyed literature from the various sources include –

A. Literature related to Hospital Administration and Management

The thesis on hospital administration with reference to Bombay's Municipal Hospitals, written by Aloo Noshir Dalal.\(^1\) The Functioning and Prevailing Organisational Stress of Three Major Municipal Teaching Hospitals. In interviewing the informants, a stratified random sample was used. The findings of the study on training is noticeably absent where mostly needed. It is found that there is no proper communication between patients and different categories of staff which leads to insufferable problems in management of hospitals. It is found that unionisation has been regarded as major obstacle in effective administration. Public relations in hospitals are completely neglected. In spite of their limitations and shortcomings, these hospitals are making genuine attempt to serve the public with a wide range of medical services.

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\(^1\) Aloo Noshir Dalal, (1982), Hospital Administration with reference to Bombay's Municipal Hospitals, an unpublished research work submitted to University of Bombay.
The thesis, Hospital Management written by Nalini V. Dave, a published work, concentrated on the need for professionalisation in Management of Hospitals and also dealt with behavioural problems. The work emphasises the need for an administrator in hospitals. From the study it has been observed that the professionalised medical services are available in big cities but not in remote areas. It is noticed that there is no professionalisation in Government hospitals. It is also found that there are some problems between nursing staff and doctors. The author suggests that the hospitals should have professionalised management, so that one could overcome most of the behavioural problems.

Hospital Organisation and Administration written by M. Shankara Rao, presents the current issues involved in hospital administration. The book concentrates on healthcare and administrative infrastructure at various levels, development of hospitals from time to time, quantum of services, problems with human resources, patient satisfaction and opinions on various hospital services. The researcher selected King George Hospital, Visakhapatnam, Andhra Pradesh as sample. It is found that the age old rules and bureaucratic practices cripple the working of hospitals. The effects of these can be minimised through recasting the rules and regulations and by providing training and orientation programmes. This study made an attempt to find out the gaps in the present system, linkages with government and suggested ways and means to fill the gaps so as to improve its administrative potential.

Private Healthcare in India written by Rama V. Bara examines the trends in privatisation of healthcare and its social basis. The book also deals with future of public health services in India. It is based on empirical study of private hospitals in Hyderabad, Andhra Pradesh. It delineates the emerging patterns of medical care in the private sector with a historical and global perspective. It traces the growth of the private sector in India and examines the role of professionals, certain classes and international capital which have shaped the content of privatisation. The author demonstrates, through an indepth study of the background of medical entrepreneurs, that there has been a movement of

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capital away from agriculture and business into the medical sector. Dr. Baru shows how the growth of the private sector has had a negative impact on the public sector.

Urban Healthcare, A Study of Public and Corporate Hospitals by Sheela Prasad reveals the functioning of both private and public healthcare system in Hyderabad, Andhra Pradesh. It examines the performance of each sector through perceptions of the users. The basic objective of the study was to test the hypothesis, that growth of corporate sector in urban healthcare widens inequalities in the quality of healthcare. The study preliminarily investigated the dynamics of urban healthcare. The study observed that healthcare was becoming capital-intensive and this was truer of corporate healthcare. The study stated that the public hospitals are now identified as largely for the poor while the corporate hospitals are for the rich.

Hospital Management, written by Mohammed Akbar Alikhan deals with the financing pattern of healthcare and hospitals and cost efficiency of public hospitals in Gujarat. The study empirically examines the allocation of expenditure for healthcare and hospitals and evaluates the cost efficiency on the basis of cross sectional analysis. It helps in developing a mechanism for suitable criteria for allocating resources. It evaluates the efficiency of their operations and recovery of costs. Here an attempt has been made to observe the relationship of cost and hospital service indicators by using statistical tools.

Management Control System in Non-profit Organisations with special reference to Hospitals by Rozmin A Jani reveals the role of Management Control System in achieving the objectives of a hospital. This study made an effort to review, all aspects of governing management control in Non-profit organisations, with special reference to hospitals. Here the author tried to develop a working model of management control system in medium size hospitals. The author intended to study the different control systems in the two hospitals, one Government and the other Private hospital.
Venkatadri A. critically examines policies and practices of modern health system in Municipal Corporation of Hyderabad. An attempt has been made to understand the role of various officials in promoting health of citizens in the corporation. Discussion is initiated on the nature of preventive measures to be adopted against spread of diseases. In this study, it is found that health workers are hardly working for three hours a day and skip the remaining duty hours. The higher levels of people also are not showing any interest in these matters.

The other theses include Mehta, S.R., Desouza, M.C., Madhusudan, K.S., and Usha Banerjee. In India many books were published on management. Some of them include Drucker Peter F., Davar Rustom S., George Jr., Claude S., Koontz H. and Weihrich H., Massie Joseph, Newman William, H and E. Kirby Warren, Pugh D.S., D.J. Hickson and C.R. Hining, Yolder Dale, Dayal Iswar, Agarwal R.D., Merginson L.C. et al. There are also few books on Hospital management in India, including, Leavy, Loomba N.P., Schulz R. and Johnson A.C., Simyar F. and Lloyd.

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30 William James A., Hospital Management in Tropics and Subtropics, USA, Mac Millian.
32 Oommen Philip, Management of Hospitals Text and Cases, Trivendrum, Institute of Management.
Various Committees were appointed by the Union Government from time to time for development of healthcare facilities. The reports of these committees (are presented in the foregoing pages) include Bhore Committee Report, Modiliar Committee Report, Chaddah Committee Report, Mukharjee Committee Report, Jungalwalla Committee Report, Karthar Singh Committee Report, Srivastav Committee Report.

**World Health Organisation:** It is an independent body that concentrates on healthcare of the society. It has branches all over the world. It concentrates on the basic infrastructure of health related activities. This organisation published many worthy books on management of healthcare settings. Some of the books produced by World Health Organisation includes WHO – Technical report series, Modern Management Methods and the organisation of health services WHO Chronicle, Regional

50 Church, J. Mc. Donagh, *Patient Centred Hospitals Care, Reforms from within*, Management Series, American College of Healthcare Executives, 1997
60 WHO Modern Management Methods and the Organisation of Health services, Geneva.
Committee Series, Hospital Planning and Administration\textsuperscript{62}, Application of Modern Management Methods and Techniques for Improved Delivery of Health Services\textsuperscript{63}, Role of Hospitals in Programmes of Community Health Protection\textsuperscript{64}

Some of the reports in the area of Healthcare and Hospital Management include Healthcare in India\textsuperscript{65}, World Development Report\textsuperscript{66}, National Health Policy\textsuperscript{67}, Health Information of India\textsuperscript{68}, The Private Medical Sector in India\textsuperscript{69}, A Fine Balance\textsuperscript{70}, Report of the Independent Commission on Health in India\textsuperscript{71}, Healthcare System in India\textsuperscript{72}.

Apart from books and studies, there are few research articles that have appeared in different journals include -- the article “Organisation and Working of Government General Hospital” by A.V. Satyanarayana\textsuperscript{73}, which emphasises the Organisation and Administration of hospitals with particular reference to GGH, Guntur. The study concentrates on the facilities and problems faced by the various patients. The researcher discussed the internal administrative set up and duties, responsibilities, recruitment process and training facilities. The researcher feels that, proper management is the only solution for effective functioning of hospitals. The article “Principles of

\begin{itemize}
  \item \textsuperscript{62} WHO Hospital Planning and Administration, Geneva, 1966.
  \item \textsuperscript{63} WHO Application of Modern Management Methods and Techniques for the Improved Delivery of Health Services, New Delhi.
  \item \textsuperscript{64} Role of Hospitals in Programmes of Community Health Protection. Geneva, 1954.
  \item \textsuperscript{67} Government of India, The National Health Policy, New Delhi, Ministry of Health and Family Welfare, 1984.
  \item \textsuperscript{68} Government of India, Health Information of India, Ministry of Health and Family Welfare, New Delhi, 1993.
  \item \textsuperscript{69} Padke Ananth, The Private Medical Sector in India, Pune, The Foundation for Research in Community Health, 1994.
  \item \textsuperscript{71} Mukhopadyay, A, Report of the Independent Commission on Health in India, New Delhi, Voluntary Health Association of India, 1997.
  \item \textsuperscript{72} Healthcare System in India-study material, New Delhi, National Institute of Health and Family Welfare.
  \item \textsuperscript{73} Satyanarayana Rao, A.V., The Organisation and Working of Osmania General Hospital, Public Policy and Administration, Sterling Publishers Pvt.Limited, 1986, pp118-139.
\end{itemize}
Management as Applicable to Hospitals” by V.B. Desai, briefly explains the functions, principles and complexity of the hospitals. It says that management with a human touch is a must in the management of a modern hospital.

The article “Hospital Management Training” by Miles Hardie discusses the issues and approaches to health services management training. Opinions were collected from 500 senior doctors, nurses and administrations from 80 countries, who have attended a 10-week annual course. It emphasised on the managers’ role in preparation of profiles, policies, programmes and their implementation. The need for developing appropriate management training facilities was explained. The article “Some Aspects of Hospital Management Requiring Personal Attention of a Hospital Administrator” by Bhola and Anand, highlights the areas needed personal attention of the hospital administrator. This article concentrates on the aspects like application of management principles to meet existing conditions, doctor-patient and staff-patient relationships, patient care and community satisfaction and optimising the utilisation of supportive hospital services.

The article “Hospital Management – Past, Present and Future” by R.F. Bridgeman, discusses the role of hospitals in the past, present and predicted into the future. He develops different model systems for a hospital with particular reference to developing countries where financial and manpower resources are restricted. He suggests that hospitals have to widen the scope of their activities in becoming an essential tool in delivering total healthcare to the community. Beaufort B Longest in his article, “Inter Organisational Linkages in Health Sector” emphasises that the key element in success of organisation depends on maintenance of effective inter organisation linkages. This article presents the conceptual frame-work of three classes of mechanisms with which healthcare organisations can manage their interdependencies with other organisations.

74 Desai V.B., Principles of Management as applicable to Hospitals, Hospital Administration, Vol.21 (1 & 2) March-June 1984 pp10-18.
77 Bridgeman R.F., Hospital Management – past, present and future. Hospital Administration, Vol.11 (3 & 4),
The article "Effective Communication in Hospitals" by Gouri S. Gupta discusses the importance of communication in maintaining sufficient levels of morale and efficiency in hospitals. The writer suggests that the success of effective communication lies in managing some important barriers like limited capacity, personality perception. She suggests that management should allow enough time for employees to report back. Bandari, in his article, "Effective Leadership with Reference to Hospitals", feels that an effective manager must be an adaptive individual. Further he mentions that the leader must evaluate each situation based on its merits and demerits. The major problem lies in sizing the situation, since effective behaviour in one may be ineffective in another.


98 Umbden Stock R.J., Hageman W.M., Amudson B, The Five Critical areas for Effective Governance of Not-for- profit Hospitals, Hospital and Health Services Administration, Winter 1990.
99 Griffith John R, Principles of the well Management Community Hospital, Hospital Health Services Administration, Winter 1989.
100 Zuckerman H.S., Redefining the role of the CEO: Challenges and conflicts, Hospital and Health Services Administration, Spring 1989.
101 Kovner A.R. Chin M.J. Physician Leadership in Hospital Strategic Decision Making, Hospital and Health Service Administration, Nov 1985.
102 Kalvzmy, A.D., Revitalizing Decision making at the middle Management Level, Hospital and Health Services Administration Spring 1989.
103 Cleverly W.O., Harvey R.K., competitive strategy for successful Hospital Management, Hospital and Health Services Administration, Spring 1992.
B. Literature related to Patient Satisfaction

There are some theses dealing with patient satisfaction. A Study of Socio Economic Conditions and Satisfaction Levels of Patients visiting a Corporate Hospital concentrates on studying relationship between socio economic factors and the behaviour

119 Gupte P.D., Recent Challenges before the Hospital Management, Hospital Administration, Vol.32(3&4), Sep-Dec 1995, pp.175-77.
123 Benedict Lucy, Discipline and Interpersonal Relationship in the Operation Theatre, Hospital Administration, Vol.32(3&4), Sep-Dec 1995.
127 Satyanarayana P, Hospital Administration through computers, Hospital Administration, Vol.31 (1&2), Mar-June 1994, pp.85-88.
132 Singh Sapra, Consumerism, Hospital Administration, Vol.35 (1&2), Mar-June 1998, pp.50-55.
133 Ratnam A.V. A Study of Socio Economic conditions and satisfaction levels of patients visiting a corporate Hospital, Hospital Administration, Vol.32(3&4), Sep-Dec 1995, pp.129-154.
of patients. Veera Prasad\textsuperscript{134} examines why the hospital administrator should take the patient-satisfaction seriously as a measurement. In another step he explains the procedures to evaluate the patient satisfaction, Chaskar R.P\textsuperscript{135}, tried to examine the satisfaction levels of the patients and to study the complaints with regard to various services and to assess whether such complaints affect the overall image of the hospitals. He gives some suggestions for improving the quality of patient care. Prasad \textit{et al.}\textsuperscript{136} concluded that appropriate awareness should be created amongst recipients of healthcare and to ensure that they demand, utilise and appreciate healthcare of a qualitatively high level.

Thimmappayya. A\textsuperscript{137} established a relationship between hospital status, employee satisfaction and service leading to patient satisfaction. Maslow\textsuperscript{138} stated that appearance of a desire, the action it arouses and the satisfaction that comes from attaining the goal depends on the state of satisfaction or dissatisfaction of all other motivation that the total organism may have. He emphasised that wanting anything by itself implies already existing satisfaction. According to him the need-hierarchy levels are basic physical needs, safety and security, belonging and social needs, esteem and status needs, self-actualisation and fulfillment needs. First and second are called lower order needs and the rest are called higher order needs. He mentioned that the lower order needs are satisfied through economic behaviour while remaining are primarily satisfied through symbolic behaviour of psychic and social content. In Lebow's\textsuperscript{139} review of literature on patient satisfaction in United States, it was suggested that in addition to measuring the patient's subjective perceptions of care, the process, structure, outcome and impact of care on the patient should also be assessed in order to evaluate the quality of the interaction between

\textsuperscript{135} Chaskar R.P. A Study of Satisfaction levels of Patients visiting Charak Hospital, Indore, \textit{Hospital Administration}, Sep- Oct 1997, pp.198-205.
\textsuperscript{137} Timmappaya, A, Patient satisfaction and ward social system, NIHAE, Research Monograph, New Delhi, 1971.
\textsuperscript{139} Lebow, D.E., Consumer assessment of the quality of medical care, \textit{Medical care}, Vol.12, pp328-37, 1974
doctor and patient. Friedman\textsuperscript{140} went on to investigate the relationships between patient satisfaction and doctor’s expressive ability.

The environment plays an important role in determining some of the relevant psychological characteristics of the patient. But Argyle\textsuperscript{141} points out that this relationship of person to the situation is reciprocal. Not only do situations or circumstances influence the people in them, but also the people choose and influence their circumstances. Ooman\textsuperscript{142} studied role commitment, role perception, role conflicts and role behaviour of doctors and nurses in Delhi hospitals and concluded that socio economic status of patients is a critical variable in shaping the role behaviour of doctors and nurses towards them. Breslav\textsuperscript{143} in his article established relationships between patient ratings and actual characteristics of medical care, and concluded that a high level of patient satisfaction is not a valid indication of high quality of medical care. Knapp and Peppers\textsuperscript{144} report that many physicians are unable to meet patient needs at personal level because their training militates against their accepting a shift in responsibility from ‘healer’ to ‘consoler’ role.

Ooman\textsuperscript{145} studied nursing behaviour in ward-setting and observed that they almost totally neglected the emotional needs of patients. This impersonal behaviour of nurses affected the patients who had no attendants. Nurses are doing jobs mechanically and in a routine manner without even speaking a word to the patient. Ray\textsuperscript{146} attributes the nurses’ failure to recognise the psychological needs of patients to lack of adequate time, inadequate knowledge and sensitiveness on the part of the nurses regarding patient care, inadequate clarity in duties and responsibilities, which harden them into becoming

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\item Oomen T.K., \textit{Doctors and Nurses: A Study in Occupational Role Structures}, New Delhi, Mac Millian Co.Ltd.,1978
\item Breslav C., What do patient statements regarding doctors and medical care signify, \textit{Medical Care}, 1981.
\item Knapp R.J., Peppers L.G., Doctor-patient relationship in Fetal/Infant death encounters, \textit{Journal of Medical Education}, 1979
\end{enumerate}
\end{footnotesize}
professionals. Further, he suggested that communication be included in nurse training programme.

Indu Mathur\textsuperscript{147} observed that contacts of patients with other categories of employees are next to patient-nurse interaction. They exercise influence over patients but many times their method is harmful for patients and the peace of the ward. Although they are socially and culturally more close to rural, illiterate and low class patients they interact more freely with the patients who tip them.

The hospital continues to be one of the most complex organisations in existence. Rakich, Darr\textsuperscript{148} ascribes the complexity of modern hospital to a number of attributes, (a) wide diversity of objectives and goals for different personnel and subsystems; (b) the diversity of personnel ranging from the most highly skilled and educated to unskilled and uneducated employees; (c) dual lines of authority in many areas of hospital operations; (d) Special psychological and physical stress on personnel at all levels as they deal with problems of life and death; (e) problems in measuring the major product of the hospital.

Eisendrath\textsuperscript{149} noted that an intensive care unit has been considered a psychologically stressful environment, prolonged care of patients with much system failure and a poor prognosis was the most frequently described source of stress for nurses and physicians. Trakroo\textsuperscript{150} listed some of the factors, which effect the satisfaction level of patients utilising outpatient services. They include unusually long time at registration, irritable behaviour of registration clerk, lack of facilities for toilet, drinking water, lack of proper space for waiting, too long waiting for doctors’ consultation, undesirable behaviour of doctors and communication gap between doctor and patient.

Others include Balaraman C.S.\textsuperscript{151}, Bordy\textsuperscript{152}, Bhasin\textsuperscript{153}, Davis\textsuperscript{154}, Ray\textsuperscript{155}, Ware\textsuperscript{156}, Parker\textsuperscript{157}, King\textsuperscript{158}, Woolley \textit{et al}\textsuperscript{159}, Zyzanski\textsuperscript{160}, Sara\textsuperscript{161}, Jagannadh T\textsuperscript{162},

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\textsuperscript{151} Balaraman C.S., Patients and hospital relationships, \textit{Hospital Administration}, Vol.3,pp215-221.
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A descriptive study was conducted to assess parent satisfaction with care as a management tool to promote the quality of care by Mountzoglou A, Dafogianni C et al in 2000 at Kyriakou' Children's Hospital. A sample of 240 parents was selected by purposive sampling technique. Data was collected through questionnaire. Results showed that satisfaction appears to be very low (14/100) for the procedures of the hospital, low for the outpatient dimension (42/100) and rather satisfactory for the inpatient dimension (61/100). It was concluded that a study has to be planned to investigate the effects of implementing changes based on parents' ratings of staff performance.

A cross sectional study was conducted to assess patient satisfaction and quality achievement in hospital care by Matis G.K. et al. in 2009 at Greece Public Hospital. A sample of 200 patients was selected by random sampling technique. Data was collected...
through Questionnaire. The results revealed a relatively high degree of global satisfaction (75.125%), yet satisfaction is higher for the medical (89.721%) and nursing (86.432%) services. It was concluded that satisfaction derived from the hotel facilities and the general organisation was found to be more limited.171

A descriptive study was conducted to measure hospitalised patients' satisfaction based on the patient's point of view. A sample of 187 patients was selected from 11 hospitals of 3 regions of France by Cluster sampling technique. Data was collected through a 69 item questionnaire. The final version of QSH contained 45 items describing 9 dimensions, leading to 2 composite scores (staff and structure index). The factor structure accounted for 71 per cent of the total variance. Internal consistency was satisfactory (item-internal consistency over 0.40; Cronbach's alpha coefficients ranged from 0.76 to 0.96). It was concluded that questionnaire enabled patient feedback to be incorporated in a continuous quality health-care improvement strategy.172

A survey was done to validate the satisfaction of rural and urban outpatient dietetic services, by Vivanti A et al in 2007. A sample of 154 patients was selected by random sampling technique. Data was collected through structured interview schedule. Results show that the age, gender and proportion of missing data was similar between metropolitan and rural respondents (n=154). No metropolitan or rural differences were evident with regard to factor analysis or internal consistency. Four factors accounted for 81.3% of the variance, which compared well with the 83.3 per cent achieved with the original tool designed for the inpatient setting. It was concluded that in increasingly competitive environments the use of validated satisfaction survey results will contribute to measurement of the benefit of dietetic services.173

A study was conducted to assess the psychometric analysis of the patient satisfaction with nursing care by Laschinger H S et al in 2005. A random sample of 14

hospitals in Ontario, Canada was selected. Data was collected through questionnaire. Results of this study revealed that the newly developed instrument had excellent psychometric properties. Total scores on satisfaction with nursing care were strongly related to overall satisfaction with the quality of care received during hospitalisation. The results of this study yielded actionable, patient-focused results that can be used by managers to address areas requiring improvement.\textsuperscript{174}

A study conducted by Magaret N.D. and others on patient satisfaction revealed that parent satisfaction was associated with the quality of provider-patient interactions ($R = 0.54$, $p = 0.0001$), the adequacy of information provided ($R = 0.47$, $p = 0.0001$), and shorter waiting room times ($R = -0.24$, $p = 0.01$). Child satisfaction was associated with the quality of provider-patient interactions ($R = 0.24$, $p = 0.04$), adequacy of information provided ($R = 0.51$, $p = 0.003$), and resolution of pain ($R = 0.25$, $p = 0.03$). Parent estimates were similar to children's initial pain scores; however, children reported greater resolution of pain than appreciated by their parents ($p = 0.006$). It was concluded that satisfaction can be validly and reliably measured in pediatric patients using a visual scale instrument. Factors that influence patient satisfaction were similar among both children and their parents.\textsuperscript{175}

A study conducted by Hendriks A.A. and others on Reliability and Validity of the Satisfaction with Hospital Care revealed that GCs indicating differentiation among patients with different overall levels of satisfaction (SHCQ mean scores) were high ($> 0.90$). GCs indicating differentiation among patients as to satisfaction with aspects of care (SHCQ scale scores) were generally satisfactory ($> 0.75$) to high. Patients agreed well on overall level of hospital care quality (GCs $> 0.90$) and differentiated reliably (GCs $> 0.80$) among aspects of care. No differentiation among wards was found with respect to quality of care. Patients and staff agreed to a considerable extent (0.78) on ranking the SHCQ items on care quality, but staff ratings were lower. Reliability and validity of patients' evaluations of quality of hospital care varied according to aspect of care. It was


\textsuperscript{175} Magaret ND, \textit{et al.}, Patient Satisfaction in the emergency department – a survey of paediatric patients and their parents, \textit{Acad Emerg Med.} 2002 Dec;9(12):1379-1388.
concluded that the SHCQ reliably establishes both patient satisfaction and overall quality of hospital care. Whereas patients’ ratings may be too lenient, their ranking of the items on care quality appears to be valid, and is therefore suitable for monitoring and improving hospital care. Within scales, however, results should be interpreted more cautiously: for some items, patients cannot really tell the difference in quality of care.\textsuperscript{176}

A patient satisfaction survey was conducted by Prasanta Mahapatra, Srilatha.S, Sridhar.P. in 25 District of Area Hospitals managed by the Andhra Pradesh Vaidya Vidhana Parishad (APVVP). The study obtained feedback from patients and, in case the patient could not be interviewed, the attendant, using a modified version of the Patient Satisfaction Questionnaire—III originally developed by Ware and others (Hays, Davies and Ware; 1987). The study refers to the period from May to July, 1999. Altogether 1179 persons were interviewed, including 237 attendants, at the rate of about 40-50 patients per hospital. In each hospital, patients were identified by stratified random sampling. Stratification was on the basis of sex and wards. Most patients had already stayed for more than three days in the hospital and were drawn from all areas of hospital service including surgical, medical and maternity wards. Female and male patients of different ages are equitably represented in the sample. Majority of patients were poor and illiterate.

Overall, the level of patient satisfaction in APVVP (Andhra Pradesh Vaidya Vidhana Parishad) was about 65% of what could be achieved. Corruption appears to be very highly prevalent and was the top cause of dissatisfaction among patients. Other important areas of hospital services contributing to patient dissatisfaction were poor utilities like water supply, fans, lights, etc., poor maintenance of toilets and lack of cleanliness, and poor interpersonal or communication skills.\textsuperscript{177}

The study conducted by Oxler and Karen F. on achieving patient satisfaction and resolving patient complaints revealed that hospital patients are under great stress. They may be afraid of losing control as well as of the consequences of their illness. Patients also expect to participate in their care and the decision-making. For nurses to achieve


\textsuperscript{177}
patient satisfaction, they must put themselves in the patient's place. Factors involved in patient satisfaction include communication, quality management, an emphasis on the patient rather than the institution, clear methods of dealing with complaints quickly, so as to restore quality.178