CHAPTER - I

INTRODUCTION

INTRODUCTION

1.1 Overview of Administration and Management of Human Resource in Hospitals

Hospitals are institutions which are considered the key component in any Health Care System. In today's world of health care, Hospital Administration is of importance not only for the medical professionals but also to the academic community especially those who desire to contribute to this area by taking up research in the field. Administration of Hospitals depend upon the type of organization; persons who lead it and the personnel engaged therein for rendering different services to those who need treatment.

The beginning of Hospital Administration can be attributed to noble works done by Florence Nightingale (1820-1910) in the field of Nursing. In 1851, Florence Nightingale, better known as "Lady with the Lamp", went to Kaiser Worth in Germany for 3 months nursing training which enabled her to become Superintendent of a Hospital for Gentlewoman in Herby Street in 1853. She tirelessly supervised a team of Nurses in the Military Hospitals where wounded British Soldiers were treated. With her team of Nurse, She could substantially reduce their mortality rate. After returning to England in 1860, Florence Nightingale established the Nightingale Training School for Nurses at St Thomas Hospital in London. Once the Nurses were trained, they were sent to Hospitals all over Britain, where they introduced the ideas they had learnt and established nursing training on the Nightingale model. This is how the seeds of nursing administration were sown. Florence Nightingale who was awarded the Royal Red cross by Queen Victoria is rightly called the father of Hospital Administration. Today, nursing staff is engaged not only for works like admission and discharge of patients, care of patient during the stay in the Hospital, but also for discharging important functions of Hospital administration. Nursing Superintendents and chief Matrons are assigned the task of supervising and mentoring the entire nursing Staff of Hospital and acting as key functionaries for ensuring patient care and

comfort for patients in Hospitals. In that sense, the roles of Nurses have increased by manifold during the recent time in so far as Hospital Administration is concerned.

The Hospital organizations are complex organizations due to several reasons. The Hospital is responsible for patient care, Medical education of paramedics, training of variety of officials and taking up on daily basis intricate medical & surgical procedures. The personnel engaged in Hospitals ranges from highly educated, technical skilled to literate or just literate security persons. The Hospitals deal with life and death situations and they operate continuously day & night without a break for a second. The output of the Hospital is service rendered to the patients, which is difficult to measure. Increasing role of Information Technology and increased awareness among the people for their rights make them more conscious and it tends to raise the expectations of the beneficiaries. Despite having own constrains, the Hospitals have to provide the best possible services within the limited resources. Today is an era of quality service. The expectations of people are much and they are armed with the legal protection like the Consumer Protection Act (COPRA) and Right to Information (RTI) Act. This makes the providers very vulnerable to litigation. These problems are inherent in Hospital organization. Technology, economic and political pressures, Consumer demands and problems in management make the task of Hospital Administration challenging.

In recent times there have been a great upheaval in the field of Hospital Management in India and it is widely felt that introduction of professional management in Hospitals has its own utility as well as reward. The concept of professionalization in Hospital Administration has gone through a vast change of late and Hospitals all over the globe have also been influenced by the need for adopting professional management as a key to development. In India, a large number of Hospitals are State owned. As such it becomes bounden duty on the part of the State to invest necessary funds for long term benefits. It is felt that no other investment in Health care facilities by the State can be more cost effective than investment in development of professional Hospital Administrators. Apart from Government, it

becomes the responsibility of various agencies such as Philanthropists, Entrepreneurs and Promoters in Corporate Sector & Universities to work hard and make sacrifices for the growth of professional management in Hospitals. In the early 1960, the Govt. of India made an attempt to develop Hospital Administration as a specialty by inviting Dr. J.R. MC. Gibony as a Hospital consultant from the USA. Dr. MC Gibony recommended development of a degree programme leading to Masters in Hospital Administration. The first such programme was started at the AIIMS, New Delhi in 1963-64. This was followed by the National Institute of Health & Family welfare which started a two year degree course (MD) in Community Health Administration. In the early 1980's the Armed Forces Medical College, Pune; Delhi University; Tata Institute of Social Sciences (TISS), Mumbai also started course in Hospital Administration . In the late eighties Nizam's institute of Medical Sciences, Hyderabad & Kasturba Medical college, Manipal started M.D. Hospital Administration programme. The National Board of Examination (NBE) also conducts examination in this specially for the award of degree DNB (Diplomat National Board).

Some institutions in various states of India started different Diploma and Degree programmes in Hospital Management which are yet in infancy. Master Degree course, Diploma course & certificate course in Health Administration and Hospital Administration by distance learning mode started by Indira Gandhi National Open University (IGNOU) is indeed a good step in the direction of establishing Hospital Administration as a separate specialty, a new concept which is very essential in the modern era. The Academy of Hospital Administration & Indian Hospital Association has played an appreciable role in making the health care providers aware of this specialty by starting distance learning courses. Although the Medical Council of India (MCI) has recognized the subject of Hospital Administration and consequently NBE has recognized those specializing in this as DNB (Health Administration including Hospital Administration), yet not all Government Hospitals of the country and also private health providers taken advantage of the situation. The Hospital Review Committee for Delhi Hospitals (Siddhu Committee), 1978-79 recommended that Hospital Administration be recognized by the Government as a Distinct Medical

specialty at par with other specialties of Medicine. It also recommended that a person who has no formal training in this discipline should not be posted in a management position in a Hospital. Haldipur Committee also incorporated qualification in Hospital Administration as a preferred choice for staffing the management position in Hospitals.

According to Directory of Hospitals in India (1988), India has 150 Teaching Hospitals, 12000 other Hospitals, 500 District Hospitals, 3000 Community Health Centres and 21,500 Primary Health Centres. Only a few of these Hospitals are administered effectively & efficiently through optimal utilization of resources by qualified, full time Hospital Administrators. The rests are run by specialist clinicians by virtue of their seniority, even though they have no formal training in Hospital Administration. The primary concern of these physicians being their profession, their attention towards Hospital Management is lukewarm. Besides, utilization of these specialists for the purpose of administration is a waste of technical man power. Management of our Hospitals by these part time administrators has resulted in avoidable deficiencies. Looking at the private sector health providers, it is seen that most of the corporate/private Hospitals have professional Hospital Administrators and as such the patient care services are much better. On the contrary, since majority of Hospitals owned by the Government are run by Specialist Clinicians by virtue of their seniority, both the quality and quantity of services are not up to mark. There is an urgent need to introduce professionalization in Hospital Management. Hospitals with bed strength of 51-100 need to have an administrator who has obtained a short term training course in the specialty. Hospitals within the bed strength of 101-300 need managers who have at least a post-graduate diploma in Hospital Administration from a recognized institute. Large hospitals (bed strength 301 and above) should have an Administrator with a post graduate degree in Hospital Administration. Going by figures available from the Directorate General of Health services, Ministry of Health, Government of India, as on 1st January 1987, the actual requirement of Professional Administrators is given below.

Administrators with short term training in the specialty = 853

Administrators with post graduate diploma in the discipline = 1972

Administrators with post Graduate degree in hospital administration = 2316

The figures shown above are calculated from the following table.

Table 1.1 Hospital Management professionals required considering one trained professional for every 100 beds (as on 1st January, 1987)

Bed strength	No of Hospitals	Trained Hospital Administrators required per Hospital	Total requirement
51-100	853	1	853
101-200	611	2	1222
201-300	250	3	750
301-400	105	4	420
401-500	58	5	290
501-600	46	6	276
601-700	40	7	280
700 and above	105	10	1050
	2068		**5141**

Source: Directory of Hospital in India (1988)

From the Table shown above it is found that for a total of 2068 Hospitals all over India as on January 1987, total requirement of Administrators was 5141. With the increase in number of Hospitals over a period of 30 years, there is much more requirement of professional Health Administrators for running the Hospitals efficiently and effectively.

Though in India, there is a Human Resource Development Institute in New Delhi, yet it has not conducted any survey in Hospitals about engagement of Human Resource Managers by Hospitals. However, according to a study conducted by Thomas Erickson, an Interaction Designer and Researcher, Human Resource Managers have not been employed even in 1 percent of Health Care Institutions in India. Human Resource Managers are particularly remembered when the Hospital

Administration is in trouble either due to strike/demonstration threat given by the employees/union, or en mass resignations received from the medical / paramedical / nursing personnel, or other legal threat received from any other quarter. Whenever any replacement or extra person is required in any Department, requisition for recruitment of personnel duly approved by the Hospital Administrator is forwarded to the Human Resource Department, which thereafter is primarily responsible to notify the vacancy to the Employment Exchange or to place an advertisement in the newspaper, conduct interviews and complete necessary formalities with regard to the appointment. Beyond this Human Resource Managers have not much scope in so far as making of strategic organizational decisions are concerned. However, considering the aspect of professionalization of Health Services, there is an urgent need to appoint Human Resource Managers in all Hospitals, since they are professionals who can guide Hospitals in maintaining a workforce whose morale can be always kept high by adopting such Human Resource Management practices which are in the interest of organization. The Hospital, an institution dedicated to the attention of human sufferings, the treatment of human ailments and the promotion of general Health of the community, has to take care of the welfare of those who run it, i.e. its personnel. It is only the Human Resource Manager who can do it professionally. Human Resource Management is comprehensive and deep rooted than Training and Development and its approach multidisciplinary from beginning to the end. This process is for continuously enabling the employees to improve their competence and capability to perform. As such there is need to involve Human Resource Managers in making strategic decisions of the organization, something which is not visible in many of the Hospitals of India. For the growth of Hospitals in a professional way, involving Human Resource Managers is a necessity which should be realized both by Government and private Hospitals. Since the basic principles of Public Administration are applicable to Hospitals as well, factors like Authority, Span of control, Centralization, Decentralization, Departmentalization are required to be examined to come to findings about the Administration of Hospitals.

1.2 Operational definitions:

1.2.1 Human Resource Management

Human Resource Management is the all significant art and science of effective management of people in an organization. It can be defined as a strategic and coherent approach to the management of the most valued asset of an organization that is the people working there who individually and collectively contribute to the achievement of its objective. (Armstrong, 2009)

1.2.2 Human Resource Management practices

Human Resource Management Practices can be defined as a set of organizational activities that aims at managing a pool of human capital and ensuring that this capital is employed towards the achievement of its organizational objectives (wright and Boswell,2002).

1.2.3 *Administration*

The term "Administration" has been derived from the Latin word "Ad" and "Ministaire" which means to serve, to care for. Administration may be defined as a cooperative group effort to accomplish common goals. Administration is thus a goal oriented, purposive and cooperative activity which is necessary for smooth running of every institution including a Hospital (Naidu, S.P, 2006).

1.2.4 *Hospitals*

Hospital is an institution that is built, staffed, and equipped for the diagnosis of disease; for treatment, both Medical and Surgical, of the sick and the injured; and for their housing during this process (Garala Miral, 2012).

1.2.5 *Organization and Organizational structure*

Organization is the formal structure of authority through which work sub-division are arranged, defined and coordinated for the defined objective (Luther Gullick).

Organizational structure is the pattern of inter related posts connected by line of delegated authority (Millward).

1.2.6 *Span of control*

By span of control is meant the number of subordinates which a superior officer can effectively supervise, direct and control (Bhagawan, and Vaidya, 2011).

1.2.7 *Formal and Informal Organization*

By formal organization we mean the organization as deliberately planned, designed and duty sanctioned by competent authority. It is the organization as shown on the organization chart or as described in the manuals and rules.

An informal organization is a shadow sketch of the formal organization which has its own features different from those of the formal organization. The relations which are unofficial, informal and unauthorized and which inevitably develop among the members and groups working in an organization are informal organization (Sharma & Sadana, 2011).

1.2.8 *Centralization and Decentralization*

An organization is said to be centralized if most of the power of decision is vested in the top level show that the lower ones have to refer most problems to the head of the organization or his immediate subordinate for decision. A decentralized organization is the one in which the lower levels are allowed the discretion to decide most of the matters which come up reserving completely a few bigger and more important problems only for those higher up (Sharma, & Sadana, 2011).

1.2.9 *Health Establishment*

Health Establishments are institutions which deal with health care and provide services in Health related activities. According to 'The Assam Health Establishment Act, 1993 and Rules 1995', Health Establishment means a Nursing

Home, a Research Institute, a Hospital, a Maternity Home, a Physical Therapy Establishment, a Clinical Laboratory or an Establishment analogous to any of them.

For the purpose of this study the term "Health Establishment" is restricted to Hospitals only.

1.3 Classification of Hospitals

There is no universally accepted method for classification of Hospital available. *The Directory of hospitals in India* 1988 lists the various types of Hospitals and the types of Management. Based on this Hospitals can be classified according to their objectives or according to the type of patient treated or according to Management, ownership and control.

A Hospital according to Management can be one of Central Government; a State Government; an autonomous body; private body or of voluntary agency type. All the Hospitals administered by the Government of India, e.g. those run by the Ministry of Railways, Ministry of Home, Ministry of Defense; Ministry of labour and Hospitals under public sector undertakings of the central government like NTPC, SAIL, IOC fall under this category. All the Hospitals administered by state/union territory, Government authorities and public sector undertakings operated by the state/union territories, including the police, prison, irrigation department etc. fall under this category.

All the Hospitals administered by local bodies like corporation, Municipality, Zila Parishad, fall under the category of local body Hospitals. Hospitals established under the special Act of parliament/ state legislation and funded by the central/State Government/Union Territory fall under the category of Autonomous body Hospital. AIIMS (New Delhi), PGI (Chandigarh); NIMHANS (Bengalaru); BBCH (Guwahati) are some examples of Hospital of this type.

All the Hospitals owned by an individual, Trusts or by a private organization, fall under the category of Private Hospitals. Hinduja Hospital (Mumbai); Vijaya Hospital (Chennai); International Hospital (Guwahati) are examples. Voluntary

agency Hospitals are that category of Hospitals which are operated by voluntary body/a Trust/a Charitable Society registered or recognized by the appropriate authority under central/State Government laws fall under this category. This includes Hospitals run by Missionary bodies and Cooperatives like CMC (Vellore).

Other criteria for classification of Hospitals are according to Directory; according to the System of Medicine and according to bed strength. According to Directory of Hospitals, Hospitals can be divided into General Hospital, Rural Hospital, Specialized Hospital, Teaching Hospital and Isolated Hospital. An Isolated hospital is for the care of persons suffering from infectious diseases requiring isolation.

According to the System of Medicine the Hospitals in very broad term may be classified as Allopathic; Homoeopathic, Ayurvedic; Naturopathic; Unanni and Siddha etc.

According to the Bed strength Hospitals can be classified into Large, Medium and small depending upon the number of beds available in the Hospitals. Any Hospital having more than 500 beds is a large Hospital, one having the bed strength between 200 and 500 is a medium Hospital and a Hospital having less than 200 beds is a small Hospital.

1.3.1 Government Hospital

Government Hospital is a Hospital which is owned by a Government and receive fund from it. Health care delivery in India at Government level is visible at three levels namely Primary, Secondary and Tertiary. Primary Health Centre (PHC) covers a population of 20,000 in hilly, tribal or difficult areas and 30,000 populations in plain areas with 4 to 6 indoor/observation beds. It acts as a referral unit for 6 sub-centres. Cases from PHC are referred to Community Health Centre(CHC) which is 30 bedded Hospitals and higher order Public Hospitals located at Sub District and District level. The CHC were designed to provide referral health care for cases from primary level and for cases in need of specialist care approaching the centre directly.

Four PHCs are included under each CHC thus catering to approximately 80,000 populations in tribal/hilly areas and 1, 20,000 populations in plain area. CHC is a 30 bedded Hospital providing specialist care in Medicine, Obstetrics and Gynecology, Surgery and Pediatrics.

Sub District or Sub Divisional Hospitals are the referral centres for CHCs. They serve as First Referral Unit (FRU) for the Tehsil/Taluk/Block population in which they are geographically located. As FRU these Hospitals provide emergency Obstetrics care and Neonatal care and help in bringing down the Maternal Mortality and Infant Mortality. A Sub district/Sub divisional Hospital caters to about 5-6 lacs people and in such Hospitals number of beds varies from50 to 100.Every Sub District /Sub Divisional Hospital, CHC, PHC or Sub Centre is linked to the District Hospital. District Hospital is an essential component of the District Health System and functions as a secondary level of health care which provides curative, preventive and promote health care services to the people in the District. The bed strength of District Hospital varies from 75 to 500 beds depending upon the size, terrain and population of the District. Various specialists like Surgeon, Ophthalmologists, Anesthetists and Dentist are placed at the disposal of such Hospitals.

1.3.2 Private Hospitals

Private Hospital is a Hospital owned by a profit oriented company or a non-profit organization and privately funded through payment for medical services by patients themselves by insurers or by foreign bodies. A Private Hospital can be classified as Nursing Home; Super Specialty Hospital; Multi-Specialty Hospital; Specialized Hospital or a Corporate Hospital.

A Nursing Home is the smallest dimension of a Private Hospital. It is a place for people who do not need to be in a Hospital but cannot be cared for at home. Number of Doctors and Nurses are few in Nursing Homes. A Multi-specialty Hospital admits all types of Medical and surgical cases and they concentrate on patients with acute illness needing relatively short term care with an organized medical staff, a

professional nursing staff and diagnostic equipment. In addition to the essential services relating to patient care, it has Pharmacy, a Laboratory, X-Ray and Physiotherapy Department, more than one Operation Theatre; Recovery Rooms; a Maternity Division; an Outpatient Department and an Emergency Department. In somewhat larger Hospital there may be additional facilities like Dental Services; in-vitro fertilization unit and a department of renal dialysis .A Super specialty Hospital is better equipped with State of the Art Technology, Equipment and Manpower and is larger in functional operation than a Multi-Specialty Hospital.

Specialized Hospitals are those that are specialized in one type of ailment or meant for a particular type of patient. Types of specialized Hospital include Trauma Centres; Rehabilitation Hospitals, Children's Hospitals and Hospitals for dealing with specific medical needs such as psychiatric problems. Some Hospitals are affiliated with Universities for Medical Research and the Training of Medical Personnel such as Physicians and Nurses, often called Teaching Hospital.

Corporate Hospitals are those which are public limited companies formed under the Companies Act. They are normally run on commercial lines. They can be either general or specialized or both with more than 100 beds availability. In Corporate Hospitals there are always experienced Specialists available to initiate treatment without delay. The various specialties covered are Cardiology, Cardiothoracic Surgery, Neurology, Neurosurgery Orthopedics, Oncology, Ophthalmology, Rheumatology, Endocrinology, ENT, Gastroenterology and Pediatrics, Pediatric Surgery, Pediatric Neurology, Urology, Nephrology, Dermatology, Dentistry, Plastic Surgery, Gynecology, Pulmonology, Psychiatry, General Medicine and General Surgery. The diagnostic facilities offered by such Hospitals are most comprehensive and Laboratory Services are available around the clock. Such Hospitals keeps upgrading its technology by acquiring new state of the Art diagnostic and therapeutic equipment. Corporate Hospitals run specialized services like Oncology; Nuclear Medicine and Nephrology which are holistic. The

critical care unit in such Hospitals is also managed by highly qualified Doctors, Nurses and Staff who are specially trained in critical care.

1.4 Human Resource Management in Hospitals

The Hospital, an institution dedicated to the attention of human suffering, the treatment of human ailment and the promotion of general health of community has to take care of the welfare of those who run it i.e. its personnel. Every individual engaged in the singular service of promoting the cause and mission of a Hospital is a vital link in its overall chain, be a skilled surgeon or an unskilled labour. All employees are essential to Hospital functioning.

Time has come for the Governing Board and Administrations of Government and Voluntary Hospitals to adopt Human Resource Management as a part of Hospital Administration for various reasons. In big Hospitals the supervisors appointed to function as links between the Administration and Employees, fails in discharging this responsibility for the reason that they are only interested in getting the allotted work done. These supervisors need training in human relationship which is in fact embedded in their own work situation. The increasing complexity of the various problems in dealing with employee relations demands a specially trained individual who can give these problems continued attention so that desirable working relationship may be established among all employees of the Hospital. India is facing the problem of brain drain of its personnel. Apart from countries like the US, Australia, Canada & Germany, the Arabian countries have started attracting personnel from India by offering salaries which no employer can afford to pay in India. Proper Human Resource Management can result in enhanced job satisfaction making it more attractive to remain in India to work. During the last quarter-century numerous labour legislation imposing legal restrictions on employment in Hospitals have been passed. It is therefore, essential that a Human Resource Manager well versed in the labour laws can be of immense service to a Hospital. Proper employee selection, training and control which bring economy and efficiency to Hospital can be ensured only if there exists a Human Resource Department in the Hospital. Employee selection, training

and control require special skills, time & effort which cannot, usually be provided by the person charged with the general administration work of the Hospital. The rising costs of Hospital care have an implication for Hospitals similar to that of rising production costs in industry. It is essential that unit costs of operation be reexamined to ensure optimum performance by each employee. The worker must be given adequate training and guidance and also provided with the necessary tools for satisfactory works which is possible only if a functional Human Resource Manager is appointed in the Hospital who possess the skill in selection, training, planning workloads, motivation and supervision.

The significance of Human Resource Management in Hospitals can be visualized when a mark of distinction is drawn between Hospital and other Industries. It must be recognized that unlike an industrial employee, Hospital personnel are not dealing with machines and tools, but human beings. The significance of employee contact with human beings in the Hospital is greater than in other occupational areas. This is particularly so because a considerable number of the individuals with whom the Hospital employees have to deal is under more than average stress. Not only must Hospital employees be given adequate training in the professional skills necessary to perform their daily tasks, but they must also be trained in the art of getting along with people who are sick and worried. It is evident therefore that Human Resource Management in Hospitals involves more complexities than that in the average industries situation.

It is essential that the importance of Hospital Human Resource Management be recognized, so that by establishing a separate Human Resource Department, the workload of the General Administrator may be reduced and better service rendered to the patients. There are certain symptoms which indicate the need for establishing a Human Resource Department. These are poor selection of employees, irrational pay scales, high staff turnover, increase in absenteeism and frequent employee grievances, lack of adequate employee record and absence of Human Resource policies. Once the Administrator recognizes these symptoms, he or she should realize that without

wasting a single day a qualified and competent Human Resource Manager should be appointed for the Hospital. In general a Hospital employing 200 or more employees can use the services of a full time Human Resource Manager and a Hospital employing less than 200 employees can also use the services of a full time Human Resource Manager but he should be assigned some other responsibilities such as purchase, public relations, transport management, legal work etc. In Hospitals which employ more than 300 employees, assistance should be given to the Human Resource Manager. As the size of the Hospital increases, there will be specialization within the Human Resource Department. The exact size of the staff of Human Resource Department will depend upon the functions assigned, the degree to which the Hospital Administration wishes those functions to be implemented and the availability of funds for implementation. One formula used as a guide to determine the required size of the staff is that at each interval of 200 employees, the staff of Human Resource Department should be increased by one employee. Establishing the Human Resource Department according to this formula makes it possible for it to assume all the major functions considered to be part of Human Resource Management. It is important to set the objectives of the Human Resource Department within the framework of Hospital policies. Broadly speaking the objectives of most Hospitals are service and efficiency. The important objectives visualized by the Human Resource Department of any Hospital should normally include recruiting the best available candidates, evaluating the performance of employees for their promotion, ensuring reasonably good working condition for employees, giving adequate and fair emoluments to employees commensurate with their performance and motivating employees to work harder.

The area which is of utmost importance in the Human Resource Department of Hospital is Manpower planning. Manpower planning may be defined as a technique for the procurement, development, allocation and utilization of Human Resources in organization. It views employees as scarce and costly resources, whose contribution must be developed to the fullest by the Management. Manpower is basically concerned with having the right type of personnel for the right job at the right time. Systematic Manpower planning is a must for all organizations. The

emergence of more Hospitals in the vicinity and better opportunities offered by Hospitals coming up in developed, developing and underdeveloped countries abroad can result in high employee turnover and a source of potential loss. Every Hospital has to do Manpower planning. Manpower planning anticipates not only the required kind and number of employees but also the action plan for all the functions of Human Resource Management.

Before the Recruitment and Selection of personnel can be undertaken, the requirements for Human Resources must be analyzed in terms of number of personnel needed for each type of job. According to a report of the commission on University Education in Hospital Administration, a ratio of 2 employees per Bed has been prescribed. The term "Employee" means any person who works in any capacity in a Hospital, e.g. Doctors, Nurses, Pharmacists, Medical Laboratory Technicians, X-Ray Technicians, Physiotherapists, Dieticians, Medical Social Workers, Supervisors, Skilled/Semi-skilled/Unskilled employees etc. This ratio of 2 employees per bed cannot be applied in Indian Hospitals because the personnel required depend on the size of the Hospital, type of Hospital and degree of care it provides, area of Hospital, type of equipment used etc. Under prevailing conditions, to manage every bed whether in a small or big Hospital, it requires 3 to 5 personnel. According to Indian Medical Council the Doctor to beds ratio should be 1:5, but the ratio is applicable only to those Hospitals which are attached to Medical College and where the Doctors are required to participate in teaching programmes of the Medical Colleges. This ratio depends on the type of Hospital, such as Maternity, Pediatric, Infectious diseases, Referral, General etc. However it can be recommended that the Doctor to Bed ratio should be 1.10 in General Hospitals.

The Nurse to Bed ratio should be 1:3 according to the Indian Nursing Council. The Council has further prescribed that for every 100 Beds and to cover a 24 hour period, there should be 4 Ward Sisters and 30 Staff Nurses and for fractions of 100, the staff should increase in the proportion of 1 Ward Sister to 25 beds and 1 Staff Nurse to 3 beds. When the bed strength is between 150 and 400, in addition to the

Nursing Superintendent, there should be an Assistant Nursing Superintendent. There should be separate staff for Special Departments with a Sister In-charge of the Operating Room and a Sister In-charge of the Casualty Department. The Outpatient Department should have a Sister and a minimum of 1 Staff Nurse for each outpatient clinic operating daily, but not less than a total of two in the department. Thirty percent leave reserve personnel should also be provided in Hospitals.

Deciding the work load ratios and Human Resource Strength in various Departments is another area which should be taken care of by the Human Resource Department of the Hospital. For X-Ray Department one Senior X-Ray Technician is required for 7 X-Ray Technicians, to supervise and execute Radiographic work, to maintain efficiency and high quality of work. Also required are one Receptionist cum Typist to take care of Reception, Clerical and Typing work and one X-Ray Aide to fetch up to 25 patients from the wards every day. In case of Physiotherapy Department, one Senior Physiotherapist is required for 7 Physiotherapists, to supervise their working and to maintain a high standard. Also required are a Receptionist to look after reception and clerical work and one Physiotherapy Aide to fetch up to 25 in patients who cannot walk from the wards to Physiotherapy Department. In case of Medical Laboratory one Section Head is required over 7 Laboratory Technicians, Clerical Staff and Bottle Washers, keeping in view the work load and technology used in the Department. The number of Pharmacists to be employed depends upon the policy of the Hospital. Whatever the policy, one Pharmacist can dispose of one prescription of a patient, whether in patient or outpatient in approximately 2 minutes. Thus, one Pharmacist who works for 8 hours a day can take care of 100 out patients as well as 50 inpatients, but for every two Pharmacists, one Pharmacy Aid will have to be provided to assist them. If the numbers of Pharmacists in a Hospital exceeds 7, the Chief Pharmacist should employ one Senior Pharmacist to assist him in supervision so that the efficiency of the Department may be maintained. It is difficult to generalize on the size of Food Service Department of a Hospital. In Hospitals where bed strength exceeds 200, two dieticians should be appointed because one dietician can look after up to 200 beds. A

thirty percent Leave Reserve should be appointed because the Food Service Department functions round the year. In the matter of sanitation, Sweepers should be employed on the basis of one for every 10 beds or 1 Sweeper for 1200 or 1500 square feet area. For sanitation work also 30 percent leave reserve is recommended and one Supervisor should supervise 10 sweepers. For a 300 bed Hospital there should be one sanitation in charge, four Supervisors and 40 Sweepers (30 Sweepers for the daily requirement and 10 Sweepers as leave reserve) with regard to security, the norm is that one Security Guard is required for every 10 beds of Hospital and one Security Supervisor is required in every shift to take decisions on the spot in case of any untoward incident such as theft, fight between the Hospital staff and the public or amongst the Hospital Employees.

Guidelines set by the Central Council of Indian Medicine (CCIM)for minimum standard requirement of Ayurvedic College and Teaching Hospitals attached to it state the Manpower requirement of Nursing, Administrative and other categories of Staff. A detail of such Manpower other than Doctors as per requirement of CCIM is mentioned in Table 1.2.

Table 1.2: Manpower requirements in Ayurvedic College Hospital

Staff detail	**No of post**
Matron	1
Staff nurse	1 for every 10 beds
Pharmacist	2
Store keeper	1
Office staff for registration, record maintenance and data entry	2
Assistant Matron (More than 60 beds)	2
Gardener	1

Source: www.ccim india.org/ayurveda.php

1.5 Administration of Hospitals

Administration is a goal oriented, purposive and cooperative activity which is necessary for smooth running of every institution including a Hospital. Hospital is an integral part of social and medical organization, the function of which is to provide complete health care for the population, both curative and preventive and whose outpatient services reach out to the family & its home environment. The service in the Hospital is always personalized, professional and directly rendered by the Medical, Nursing and other specialized personnel according to the needs and requirement of each individual. The wide spectrum of people involved in the Hospital activity ranges from the highly skilled professional to a person who may not have even being enrolled in a high school. The work in a Hospital is specialized, heterogeneous and professional in nature. The core issue in Hospital Administration is that the cost of making a mistake in patient care by any staff, Medical, Non-Medical or Paramedic is likely to be very high and may be fatal, with serious legal consequences. So, those in Administration should take a serious note of this. The other issue related to Hospital Administration mainly in private Hospitals is controlling mechanism. The dual control by way of professional authority and the Executive Authority in the Hospital invariably leads to management conflict which is a peculiar situation every Hospital Administrator has to face in the day to day operation.

The Administration in Hospital is divided into General Administration: Medical Administration: Finance and Accounts Administration and Personnel Administration. The departments that work under General Administration are:

a) Medical Records
b) Hospital Kitchen &Dietary Service
c) Laundry and Hospital Linen
d) Sanitary and House Keeping
e) Security and Fire Fighting
f) Transport including Ambulance Service
g) Building and Engineering maintenance
h) Public Relation Office
i) Hospital Communication

j) Electrical Plumbing, Air Conditioning Department
k) Main Reception
l) Liaison work with Government
m) Hospital Information System/Computer
n) Research and Development

General Administration Department is headed by Manager, Administration and Maintenance.

The following departments work under the Medical Administration:

a) Nursing Services
b) Paramedical Services
c) Clinical Investigation Department
d) Operation Theatre
e) Imaging Services
f) Medical Gases
g) Patient's Grievance Regarding Treatment
h) Pharmacy & Medical Stores.

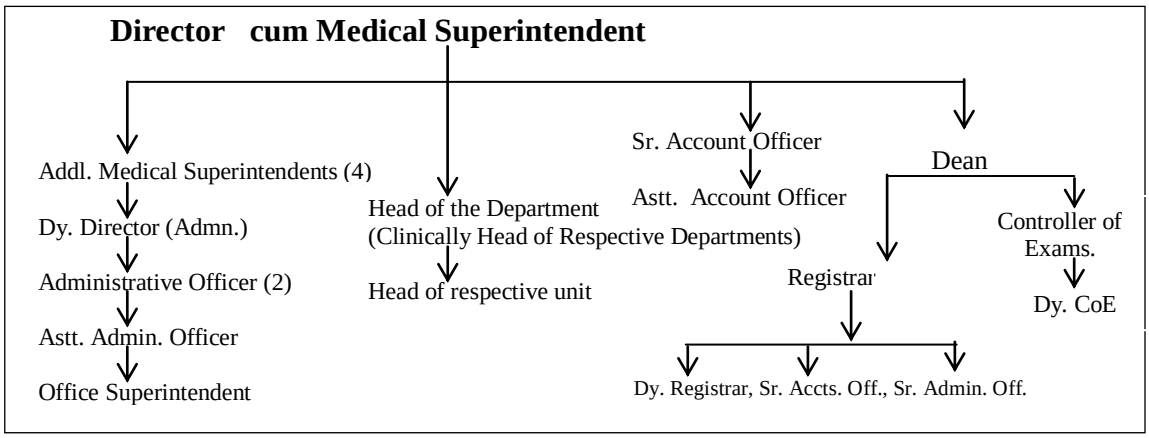
Medical Administration in Hospital is headed by Medical Superintendent. The Department under the Administration of Finance and Accounts includes the Billing Department, Cash Department, Accounts Department, Purchase Department and General Stores. Finance & Accounts Administration is headed by Manager, Finance & Accounts.

Administration of personnel involves Departments of personnel; Human Resource; Employees grievance cell and the Establishment section. A Human Resources Manager is the head of Administration pertaining to proper Human Resource utilization in the Organization. Human Resource Managers advise the line Managers throughout the organization. The Human Resource Department try to keep the organization going smoothly and efficiently by supplying with the right type of personnel in the right position whenever they are needed. The first &foremost duty of a Human Resource Manager is to see that square pegs are not fitted into round holes.

Administration of hospitals is determined to a great extent by its organizational structure. In those Government Hospitals which are also Post Graduate

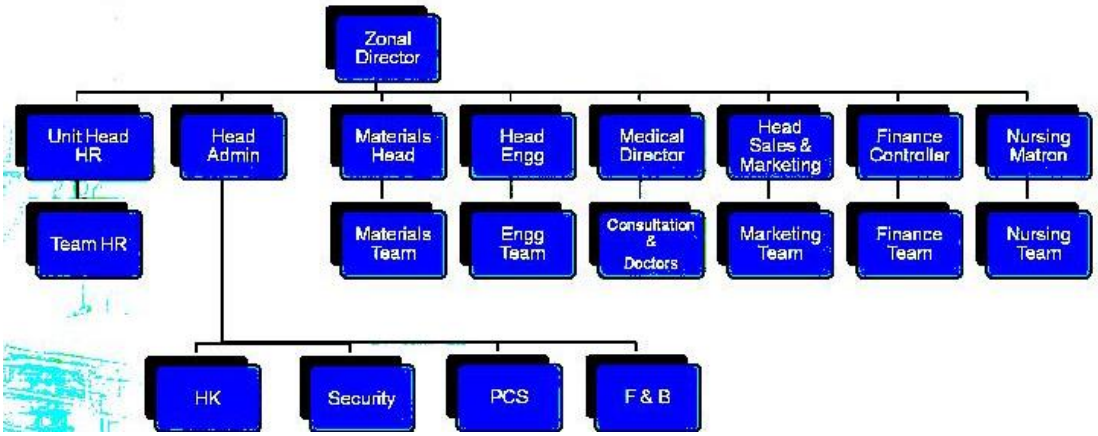
Institute of Medical Education and Research (PGIMER), the Director, who is the head of the institute is also the administrative head of the Hospital in the capacity of Medical Superintendent. In case of corporate hospitals, each department has a head who remains the administrator for that particular department. In the figures below the setup of the administration as determined by the organizational structure of Government Hospital and Corporate Hospital is furnished.

Fig. 1.1 Administration as determined by prevalent Organizational Structure of Government Hospital: Example from PGIMER, Dr. Ram Manohar Lohia Hospital, New Delhi.



Source: www.rmlh.nic.in

Fig. 1.2 Administration as determined by prevalent Organizational Structure of Corporate Hospital: Example from Fortis Hospital, New Delhi.



Source: www.fortisescorts.in

1.6 Health care services in different countries

1.6.1 The United States

In the United States the federal Government's Role in promoting and protecting the health of the public has evolved significantly over time. The Federal Government is divided into three branches: the Legislative, Judicial and Executive. Within the Executive Branch, it is the Department of Health and Human Services (DHHS) that is primarily responsible for public health activities. The United States primarily relies on employers to voluntarily provide health insurance coverage to their employees and dependents. Here Government programmers are confined to the elderly, the disabled and some of the poor. Person without health insurance receive less health care services than those with insurance but they do receive health care services through public clinics and Hospitals, state and local health programs, or private providers who finance the care through charity and by shifting costs to other payee`. Health Services in the United States are provided by a loosely structured delivery system organized at the local level. Most Hospitals are owned by private non-profit institutions; the remaining owned by Governments or private for profit corporations. Hospitals can open or close according to community resources preferences and the dictates of an open market for Hospital services. A vast majority of physician in the United States is in private practice and is free to establish their practice where they choose. They are paid on a Fee for Service (FFS) basis. There is no health planning at the federal level and state planning efforts vary from no review to stringent review of Hospital and Nursing Home construction projects. In inner cities and remote rural areas where there are not sufficient private providers, federal and state funded programmes provide some primary care to populations not otherwise served by the FFS system. A relatively small number of physicians are not in the FFS sector but are employed by the Government, Corporations, managed care networks or Hospitals. Municipal &Country Public Health Departments provide limited primary care services through public health clinics and regulate sanitation, water supply and environmental hazards. In the United States, problems exist in the geographic and specialty distribution of physicians. The physician to population ratio averages 0.9

active physicians per 1000 population in rural areas. Of those in active practice about 33 percent are primary care physicians and the rest specialists. The United States has a much higher percentage of specialists than the organization for Economic Cooperation and Development (OECD) countries.

There are about 6700 Hospitals in the United States, including 5480 Community Acute Care Hospitals, 880 Specialty Hospitals and 340 Federal Hospitals open only to Military personnel, veterans or Native Americans. Of the 5480 Community Hospitals, non-profit Hospitals represent 59 percent, local Government Hospital 27 percent and for profit Hospitals 14 percent. Hospitals finance capital purchases through a variety of means including savings, tax exempt Bonds and philanthropy. Because physicians in the Community admit their patients to Hospitals, Hospitals make every effort to make themselves the best in terms of the State of the Art technology. There is an alternative model of health care delivery in the United State which is recent in origin. This is called the Preferred Provider Organization (PPO) which selectively contracts with or arranges for a network of Doctors, Hospitals and others to provide services at a discounted price schedule. Individuals pay lower Co-insurance rates if they visit Physician who has agreed to accept lower price. The PPO model includes utilization, review and selecting formal standards for maintaining network between providers and physicians.

1.6.2 The Russian Federation

Since the dissolution of the Soviet Union in 1991, the Russian Federation has undergone dramatic changes in all sectors of society. In Health Care sector the aim of Russian reform has been to improve the financing base and increase the technical and managerial efficiency of the system. Rigid and bureaucratic central control was considered one of the main obstacles and the law on Regional (oblast) and District (Kray) Administration, adopted in 1992 was intended to overcome this problem. The law on Health Care insurance adopted in 1991 and amended in 1993 aimed to identify more finance for Health Care Services. The organization of the Russian Health Care system that has been adopted since 1993 is a complex system. The Ministry of Health

and Medical Industry of Russian Federation is the administrative body at the apex level which controls the overall Health care services in the Russian Federation. However there are other administrative bodies like the state committee of sanitary Epidemiological Surveillance, Federal Mandatory Health Insurance Fund and Russian Academy of Medical Services who are placed in the same position as that of the Ministry of Health & Medical Industry of Russian Federation. This system of having multiple authorities at the same level is prone to conflict regarding administrative decisions. Regional Health services controls Regional Health Authorities which operates under law on Regional administration. Under the control of Regional Health Authority are placed the Regional Tertiary & Secondary Hospitals under which operates the District central Hospitals. Under the District central Hospitals, Rural Hospitals are run who in turn exercises administrative control over Doctor out-patient Ambulatories and Filcher Midwife station which is the smallest unit of health care service in the Russian federation. There are two main lines of financing for the Health service available to the people. First, Health insurance and second, tax based financing from federal, regional (oblast) and district (rayon) authorities. According to the law on Health Insurance, most of the funds are collected directly from employers by the 89 Territorial Health Insurance Funds (THIF) and then distributed to their branch offices. As a special Russian innovation the branch offices do not distribute the funds to health care providers but to private, tentatively non-profit making Health Insurance Companies (HIC). They get their clients through agreements with employers, who normally insure all employees in one company. However, different arrangements exist in different regions. In some cases the funds collected as insurance premiums go directly into the regional budget as an earmarked tax. Common to all arrangements is that the insured person does not have much choice as to which insurance company he or she belongs to. This choice belongs to the employer. Another characteristic of the system is that neither the patient nor the provider of services knows what they are entitled to either in term of services or in terms of payment for the services given. An additional factor in the Russian Health Care System is the existence of twenty three parallel Health providers who serve the

employees of institutions under different Ministries of the Federation as well as their family members. It is difficult to know how much money is spent on the parallel Health Care System, as the funds appear under valuable items in the accounts of different Ministries. This system of Health Care is alleged to be designed by the Federation to provide services to privileged people in the key sectors of society.

The adoption of mandatory Health insurance, insufficient financing due to low insurance premiums and problems in collecting them, has provided a relatively stable source of income to Health Care providers. It has also created new relationship and methods of work between the providers and financing institutions. Decentralization of the Health care system in 1993 forced the Regional and District Local Authorities to change their attitude towards health care. They had to make more realistic financial estimates of available funds, expenses and services provided to citizens. A psychological change in the attitude and responsibility of the leaders of Local Authorities and Health Care institutions has taken place.

1.6.3 Australia

The Australian constitution of 1901vested responsibility for all Health services apart from quarantine with the states. The commonwealth came into services in 1946 when legislation paved the way for a National Health Scheme for pharmaceutical, sickness and Hospital benefits, and for some medical and dental services. The commonwealth Government has been providing a proportion of funds for Health services to the states through a number of special purposes grant since 1950. The level of commonwealth assistance rose during the 1970s with the introduction of the public Hospitals cost sharing programme between the Commonwealth and the states, the beginning of the Community Health Programme and a School Dental Scheme. On 1st July, 1981, the Hospital cost sharing arrangements and Commonwealth funding for Community Health and School Dental services were replaced by the Identified Health Grant which is a general purposes assistance grant to the states for Health purposes. During 1992-93, a National Health Strategy Review (NHSR) was made which considered the areas of universal Health

cover; equity of access to the Health Care system, the ability of consumers and providers to understand readily what services is available, high quality Health Care service and effective use of resources. On 1st February 1984 the Federal government introduced Universal Health Insurance Scheme, Medicare to ensure that all Australian residents regardless of income would be eligible for Health care. Medicare provides insurance against the cost of private medical services together with access to free care as Hospital patients in Private Hospitals. The major responsibility for the provision of Health service is still, however vested with the state.

Every state of Australia has its own structure and management system which is continually being reviewed. So, there is very little uniformity in the system. In 1986, they developed twenty three area Health services. In June, 1988, the number of area Health services was reduced from twenty three to ten and each of these covers populations from about 230,000 to 750,000. Each area has an Area Board of persons appointed by the Minister. The areas are responsible for the Public Hospitals and the Community Health Services, which consist of multidisciplinary teams of Health Professionals working to protect and promote the Health of defined communities. Services are free and available to all members of the public. Some services are integrated into Hospital environments. As on 31th March, 1990, there were 471 Nursing Homes, 19 day procedure centres in Australia in addition to nearly 270 Public Hospitals and Nursing Homes.

The funding for public health services within an Australian state comes primarily from the Commonwealth of Government (about 30 percent). The State Government finance their share of the cost of Health services from tax sharing agreements with the commonwealth and from other source of revenue, including license fees and taxation; in patient charge for private patients in public Hospitals and other Hospital charges.

In Victoria there are 170 Public Hospitals with the Health Department, which are being administrated via three metropolitan and five country regions. The Regional Directors and their associated Staff are all part of the Bureaucracy and each Hospital,

Nursing Home and Community Health Centre has its own Board of Management of up to twelve persons appointed by the Governor-in-council on the recommendation of the Minister, from people who answer advertisements in the public press. Each Hospital is a body corporate and the Hospital employs the whole of the staff. In Victoria, there is a unique organization, the Victorian Hospital's Association (VHA), which represents all Hospitals and most Community Health Centres as employer. It is structured with five separate divisions representing various sizes of Hospitals. Division-1 represents the large Teaching Hospitals, Division 2 – the Base hospitals, Division 3 – Geriatric centres, Division 4 – all the remaining small Hospitals and Division 5 – Community Health centres. There is a central Board of Directors elected from among the divisions and this body negotiates with the Government on a whole range of matters. There is no compulsion on Hospitals to use Victorian Hospital's Association trading but often their prices are lower than elsewhere.

There has been a voluntary accreditation programme in operation since 1974, when the New South Wales branches of the Australia Medical Association and the Australia Hospital's Association established an organization with the goal of improving the quality of patient care in Australia Hospitals. At first only Victoria was involved. This was followed by the Repatriation Hospitals and then gradually the other states followed suit. The present Australia council on Health Care standards operates as an independent nonprofit organization. The council has about twenty members representing the whole gamut of Hospital and Medical organizations in Australia. The standards are formulated by expert groups and represent a consensus of industrial opinion on the optimal achievable level of patient care and other services provided in health care facilities. Accreditation by the council involves the evaluation of facility's organizational structures and methods of providing care in the light of contemporary established professional standards. Accreditation may be for 1 year, 3 years or 5 years. The surveyors for accreditation are senior practicing Health Care Professional who receives training from the council.

1.6.4 China

China has engaged in the building up of Health Institutions, the development of medical services, and training of professionals by adhering to the principles of putting prevention first, uniting western medicine and traditional Chinese medicine and integrating Health Care with mass campaigns. In the course of economic development of the country, the infectious and epidemic disease that seriously threaten the people's Health have been eliminated or controlled and this has resulted in a notable improvement in the Health status of the population. By implementing the principles of putting prevention first and controlling diseases in a phased manner, the serious infections and epidemic diseases have been effectively brought under control. The Government has devoted much attention to the building up of medical and Health Institutions and the training of Health Professionals to provide a solid foundation for the development of primary health care.

The rural three tier medical service network is composed of the Medical and Health Institutions of the country, the town and the village. This enables a medical contingent to take shape in the rural areas comprising the senior, intermediate and primary medical worker. Senior medical workers are those who have graduated from medical colleges and majored in Medicine, Public Health, Pediatrics, Stomatology, or traditional Chinese medicine. They work mainly in the Medical and Health Institutions at the country level which act as training centres for health staff and also provide technical guidance. In the towns, these institutions play a pivotal role in the organization of medical and health work and the development of Urban Primary Health Care Services. The intermediate Medical workers are Graduates from the Secondary Medical Schools. They work at the country or town level as Nurses, Laboratory Technicians and Assistant Pharmacists. The primary Medical workers are selected from among local villages. They have had a primary education and on selection they receive a further 3–6 months training though in some cases the training may last for a year. Born and brought up in the local areas and with a long and close association with the local community, they are enthusiastic about their work and welcomed by the local presents. Those primary Medical Workers who receive

refresher training are subjected to professional assessment by the Health Administration and based on this assessment are granted a certificate of Rural Doctor.

The principle of 'prevention first' is at the heart of the Health Services in China. The patriotic health campaign is one way in which Health activities are carried out by combining the efforts of different Departments–Agriculture, Water Conservation, Culture, Public Health, etc. as well as of the community. The Government has also devoted much attention to traditional Chinese medicine, which has been undergoing rapid development in the 1980s, particularly with regard to the number of institutions in which it is practiced. Between 1952 and 1986, the number of Hospitals offering traditional Chinese medicine increased 85 times and the number of beds 510 times. China is abundant in medical herbs and their application has been found to be simple and effective. Chinese medicine thus deserves to play a full part in the development of Rural Primary Health Care.

Health institution in China are state owned and are funded by a budgetary allocation from the state. Hospitals serving towns are publicly owned undertakings, with the state providing 60 percent of the budget. They are however, independent accounting units assuming sole responsibility for their profits and losses. Health institutions in the towns are funded in various ways, some by community, some by individuals and some by a combination of the two. In the rural areas of China, people initiated the Cooperative Medical System where the Health Insurance scheme relied partly on funds from the community and partly on individual contributions. However in the late 1970s, the Cooperative Medical Care system was badly affected due to change in the rural economy. In recent years a number of experiments have been tried out including accepting the Health insurance scheme covering specific expenditures that is those for immunization maternal and child health and oral health which have received a favourable response from the people.

In certain areas of China, laws and regulations governing Primary Health Care services are being formulated. The experience gained from this exercise can lead

to National legislations that guarantee the development of Primary Health Care Services.

1.6.5 Sri Lanka

For over 2000 years the people of Sri Lanka have had recourse to an indigenous system of medicine based on Ayurveda. Organized western type Health Care was introduced by the British in the latter part of the nineteenth century. Initially it was largely curative oriented and was motivated by the need of the colonists to look after their economic interests in urban and plantation areas in which an extensive network of well-staffed hospitals was gradually built up. Concurrently, organized and preventive services were being made available from the time of establishment of the health unit system in 1926, which incorporated and put into practice important concepts of the primary health care strategy enunciated 50 years later.

In 1980, Sri Lanka signed the charter for Health Development. In March of the same year, the National Health Council was established. This council, which is chaired by the Prime Minister, includes as its members the Minister of Health and Ministers from other Departments related to Health. It provides political commitment at the highest level as well as policy guidelines for health development within inter sectorial framework. The Health for All policies that have evolved under the direction of the National Health Council specifically aim at correcting existing inequities in Health Care provision and removing disparities in Health status between different sections of the population by making the best possible use of all available resources.

The operational side of the Government Health Services includes different kinds of Health Personnel working individually or in teams. They carry out their functions in three fairly independent subsystems; Medical care services, Public Health Services and Laboratory Services. The Medical Care Services represent the largest part of the Government's Western Sector. Their aim is to meet the demand of the population for curative care, which provide both outpatient and inpatient treatment. In 1970 there were 3.15 Hospital beds per 1000 population. In general, better medical care is provided in the larger institution, but an effort is being made to develop a

referred system between the various Medical institutions of the country. The main function of the Public Health Services is the promotion of Health and the prevention of disease. In Sri Lanka these services are carried out by ninety eight health units, each of which is generally staffed with eight Public Health inspectors and twenty three public Health Midwives, who are allotted specific areas of operation or ranges. The inspectors are responsible for environmental sanitation and the control of communicable diseases, the midwives for family health work. The organization of Public Health Services is carried out by the Medical Officer of Health, one for each Health unit with the assistance of supervisory staff. In addition to the general public health work, there are other specialized campaigns which undertake the diagnosis and treatment of individual cases in addition to the usual preventive work connected with control of diseases. For the Laboratory Services, at the operational level there is only one institution, the Medical Research Institute in Colombo that performs routine Laboratory tests for the Medical and Public Health Services and carries out basic Laboratory research. However, Laboratory facilities are available in the Colombo group of Hospitals, Provincial Hospitals, Base Hospitals and District hospitals, as well as for the specialized campaign. The smaller Hospitals and units have no means of making Laboratory diagnosis, except by referring cases to one of the above institutions or through the private sector.

Since the establishment of the National Health Council certain changes have taken place in the organizational setup of Health Care System of Sri Lanka. Of particular importance are the increase in the decentralized health division from fifteen to twenty one and the further expected increase in number to match the twenty four administrative districts into which the country is divided. The Heads of the Health Divisions are now known as Regional Directors of Health Services. The Regional Director of Health Services assists the District Minister who is a democratically elected Member of Parliament in drawing up and implementing the District Health Plan and also works closely with the District Secretary in coordinating input from other sectors of the economy. Another major change that had been effected is the restructuring of the Health Care delivery system into a three tire Primary Health Care

complex, supported by more specialized secondary and tertiary level of care to make the system more manageable. The emerging structure within a Regional Director's area can be depicted as a pyramid where at the base lies the village health centre which is headed by a Midwife, one for each *grama sevaka* area. Such health centres provide Health Services to an average population of about three thousand and receives adequate referral, managerial and logistic support from the higher levels. Above the village health centre are the Sub Divisional Health Centres which are under a registered Medical Practitioner or Assistant Medical Practitioner and have only outpatient facilities. The Human Resource component of such centres includes two Public Health Inspectors, a supervising public health midwife, and a public health midwife. Patients will be referred to the divisional health centre or the district hospital, depending on their condition. At the next level lies the Divisional Health Centre which provides all health care services including in-patient care and also incorporate the service functions of the Health units. These centres are headed by a Medical Officer who is responsible for the health of the 60,000 people within the area and serves as the referral centre for the rest of the area. At the apex level of the pyramid level lie the higher level institution which includes large District Hospitals, Provincial/General Hospitals, and Teaching Hospitals and post Graduate Teaching Hospitals.

To ensure that the National Health Council is strong and effective, it is serviced by the National Health Development committee which is chaired by the secretary of the Ministry of Health and has as its members the secretaries of all the Ministries represented in the National Health Council, together with a few senior officials from related departments. This committee provides the National Health Council with advice on National Policy formulation and it is also directly responsible for intersectorial coordination in the planning, programming, implementation and monitoring of health policies and programmes. The National Health Development committee is in turn supported by six technical standing committees with a very wide representation from Government Departments, Academic Institutions and Non-Governmental Organizations. The six standing committees are on Primary Health

Care; Health Manpower and Training; Drug Policies and Management, Health and Medical Research; indigenous system of medicine and technical cooperation among developing countries and appropriate technology for Health. In order to ensure intersectorial coordination and community participation at district level and below, Health Sector committees have been established for the Development Councils in each district, sub-district and village. The Government has earmarked on a far reaching decentralization of its Administration, involving people at the level of the village, sub-district and District. Since the main thrust of decentralization is towards the total development of the people at village level, the restructuring and reorganization of the health care delivery system has been carried out as an integral part of the overall development process and not as an isolated exercise. The increase in the number of Health Personnel combined with improvement in training and management, community participation and intersectorial cooperation in a decentralized District Administration have contributed substantially to Primary Health Care in Sri Lanka.

1.6.6 The United Kingdom

In Britain and Canada, Medical Care is financed through a monopolistic-single payer payment system funded predominantly through Government sources. In Canada, the Central Government and the Provinces share the cost of Medical care, as is the case for Medicine and Medicaid in the United States, whereas in Britain medical care costs are overwhelmingly borne by the National Government. The responsibility of Central Government or a combination of Central and Local Governments for sole responsibility for the funding of Medical Care maximized opportunity to spread the costs as equitably as possible. In 1948 when the NHS act was passed, Britain clearly endorsed the principles of collectivism, although for pragmatic political purposes, the architect of the NHS, Anuran Bevin, allowed a Small Private Medical Care Sector to persist. While Margaret Thatcher attempted to reduce the collectivist orientation, a policy continued under John Major in Canada, even without taking the Hospital sector into public ownership and continuing with a fee for service reimbursement system for physicians. Annual growth of medical care

expenditure has been held within reasonable bounds and although it is the second most expensive Medical care delivery system in the western world, expenditure on medical services in Canada is still almost four percentage points in terms of GNP below that of the United States.

The National Health Service (NHS) of the UK has been the proud epitome of the welfare state. The creation of NHS in 1948 brought order to a fragmented Health Care System in Britain and made provision for free Health Care from cradle to grave. In 1989, the then Secretary of State introduced wide sweeping NHS reforms based on the prevailing market force. Reorganization and reforms have been designed partly to reduce the risk of organizational anarchy by strengthening lines of accountability and imposing stringent checks and balances. Improving health and securing high quality care for patients are the key objectives for the 100 new Health Authorities which have been formed by the amalgamation of former Family Health Services Authorities and District Health Authorities and their replacement by regional offices of the NHS. A single Health Authority with responsibilities across the whole range of acute, Community and Family Health Services have been created. During 1993-95 a number of developments occurred in the NHS which reduced the ability of local Health Professionals to influence purchasing; mergers and change of function of Health authorities at regional and district level. This led to the abolition of long established advisory structures. There continues to be a commitment by the Government to involve local clinicians in advising purchasers and in taking part in contract negotiation. The new Health Authorities working with General Practitioners (GP) and their local populations remain responsible for the whole range of services for the areas they serve, including Mental Health, acute services and community services. The recent Health reforms are having a fundamental impact upon the culture, structure and financing of the NHS and the way in which patients receive care.

In the UK, in the Government promises such as NHS, patients come first, decisions are based on most up-to-date knowledge of Medical Science; the public are well informed and patient's share in decisions about their case is always visible. Here

Hospital treatment is for those who need it, is the best which Medical Service can offer and is provided promptly. In the UK the most specialized services are organized to perform at their very best and staff is proud to work in the Medical Services because it is the best in the world.

1.7 Health Care System in India

Health Care Systems in India are represented by five major sectors or agencies which differ from one another by the Health Technology applied and by the source of funds for operation. The Public Sector includes (a) Primary Health Centres (PHC) and Sub Centres (SC) which provides Primary Health Care; (b) Hospitals and Community Health Centres (CHC); Rural Hospitals, District Hospitals and Health Centres, Specialist Hospitals and Teaching Hospitals; (c) Health Insurance Schemes like Employees State Insurance, Central Government Health Schemes and (d) other agencies including Defense Services, Railways etc. The private sector includes (a) Private Hospitals, Polyclinics, Nursing Homes and Dispensaries (b) Clinics and General Practitioners.

The staffing pattern at a PHC includes one Medical Officer, one Block Extension Educator, one Health Assistant (male) and one Health Assistant (female); Support Staff which includes Laboratory Technician and Medical Assistant.

CHCs serve a population of one lakh. Against each Community Development Block one CHC exists. Such centres are with 30 beds where services of specialists in Surgery, Medicine, Obstetrics and Gynecology and Pediatrics with Laboratory and X-Ray facilities are available.

At the secondary care level District Hospitals play the most important role in providing health care. As such the twin factors of Man power availability and infrastructure is of great significance in District Hospitals. A detailed requirement of manpower for District Hospitals is given in Table 1.3, 1.4 and 1.5.

Table1.3: Requirement of Man Power–Medical: District Hospitals

Specialty	100 Beds	200 Beds	300 Beds	400 Beds	500 Beds
Medicine	2	2	3	4	5
Surgery	2	2	3	3	4
Obstetric & Gynae	2	3	4	5	6
Pediatrics	2	3	4	4	5
Anesthesia	2	2	3	3	4
Ophthalmology	1	1	2	2	2
Orthopedics	1	1	2	2	2
Radiology	1	1	2	2	2
Pathology	1	2	3	3	4
ENT	1	1	2	2	2
Dental	1	1	2	3	3
MO	11	13	15	19	23
Dermatology	1*	1*	1	1	1
Psychiatry	1	1	1	1	1
Microbiology	1*	1*	1	1	1
Forensic Specialist	1*	1*	1	1	1
AYUSH Doctors#	1	1	1	2	2
Total	**29+3**	**34+3**	**50**	**58**	**68**

Source: Indian Public Health Standards (IPHS), Ministry of Health & Family Welfare, Government of India

*Desirable # If more than one AYUSH doctors are available, at least one doctor should have a recognized PG qualification in relevant system under AYUSH.

Table1.4:Requirement of Manpower: Nurses and Paramedics: District Hospitals

Cadre	100 Beds	200 Beds	300 Beds	400 Beds	500 Beds
Staff Nurse	45	90	135	180	225
Lab Tech	6	9	12	15	18
Pharmacist	4+1#	6+1#	8+1#	10+1#	12+1#
Storekeeper	1	1	2	2	2
Radiographer	2	3	5	7	9
ECG Tech/Eco	1	2	3	4	5
Audiometric Tech.	-	-	1	1	1
Ophthalmic Assistant	1	1	2	2	2
EEG Tech	-	-	1	1	1
Dietician	1	1	1	1	1
Physiotherapist	1	1	2	2	3
O.T. Technician	4	6	8	12	14
CSSD Assistant	1	1	2	2	3
Social Worker	2	3	4	5	6
Counselor	1	1	2	2	2

Dermatology Technician	-	-	1	1	1
Cyto-Technician	-	-	1	1	1
PFT Technician	-	-	-	-	2
Dental Technician	1	1	2	2	3
Darkroom Assistant	2	3	5	7	9
Rehabilitation Therapist	1	1	2	2	3
Biomedical Engineer*	1	1	1	1	1
Total	**76**	**132**	**201**	**261**	**325**

Source: Indian Public Health Standards (IPHS), Ministry of Health & Family Welfare, Government of India

#For AYUSH

*Desirable

Table1.5: Requirement of Man Power – Administration: District Hospitals

Cadre	100 Beds	200 Beds	300 Beds	400 Beds	500 Beds
Hospital Administrator	1	1	1	2	2
Housekeeper/Manager	1	2	3	4	5
Medical Records officer	1	1	1	1	1
Medical Record Asst.	1	2	3	3	3
Accounts/Finance	2	3	4	5	6
Administration Officer	1	1	1	1	1
Office Asst. Gr. I	1	1	2	2	2
Office Asst. Gr. II	1	1	2	3	4
Ambulance Services (1 Driver + 2Technicians)	1	1	2	3	3
Total	**12**	**15**	**21**	**26**	**29**

Source: Indian Public Health Standards (IPHS), Ministry of Health & Family Welfare, Government of India.

The indigenous system of Medicine which also provides Health Care System in India includes (a) Ayurveda and Siddha (b) Unanni and Tibbi (c) Homeopathy and(d) Some unregistered Practitioner.

Voluntary Health agencies and National Health programmes are also associated with the Health Care System in India.

1.8 National Health Policy of India

The Government of India evolved a National Health Policy (NHP) in 1983 keeping in view the goal of Health For All (HFA) by the year 2000. This laid down a plan of action for reorienting and restructuring the rural infrastructure with specific

goals to be achieved by the year 2000. The NHP (1983) proposed reorganization of Primary Health Centres on the basis of one PHC for every 30,000 people in the plains and one PHC for 20,000 people in backward tribal and hilly areas, for effective coverage. This policy proposed to equip the PHC with the facilities for selected minor surgical procedures and for pediatric care. In order to reorient medical education towards the need of community care, three PHC's were attached to each of 106 Medical Colleges. After the NHP, 2000 was evolved NHP, 2002 which have served India well in guiding the approach for the Health Sector in five year plans and for different schemes. However, considering the fact that better Health contributes immensely to improved productivity as well as equity, the draft NHP, 2015 has been prepared. In preparing this policy the issues that have been considered are: India is world's third largest economy in terms of Gross National Income; India has potential to grow larger and more equitably and to emerge to be counted as one of the developed nations of the world; India has a sophisticated arsenal of interventions, technologies and knowledge required for providing Health Care to the people; there exists wide gap in Health outcomes and there is prevalence of much of ill Health, disease, premature death and sufferings in people which can be tackled by effective and affordable intervention for prevention and treatment. The NHP, 2015 has taken care of all these issues which are relevant in formulating a policy on Health which can be made applicable for whole of the country. The primary aim of NHP, 2015 is to inform, clarify, strengthen and prioritize the role of Government in shaping Health System in all its dimensions which includes investment in Health; organization and financing of Health Care Services; prevention of diseases; promotion of good Health through cross sectorial action; access to Technology; Developing Human Resources, encouraging medical pluralism; building the knowledge base required for better Health, financial protection strategies regulation and legislation in Health. In preparing this policy it has also been considered by Government that focused attention needs to be given in attaining MDG with respect to maternal and child mortality and also to consider that in India expenditure due to Health care cost is growing which is one of the causes of poverty. There is a drain in family income due to Health care cost

which has the possibility of neutralizing the gain of income and every Government scheme aimed to reduce poverty .In India Health care industry is growing at 15% compound Annual Growth Rate (CAGR) which represents twice the rate of growth in all services and thrice the National Economic Growth rate. Under such circumstances there is indeed a need for such a NHP which can shape the Health system of India in all its dimensions and perspectives. It is expected that NHP, 2015 can fulfill such needs despite all constrains which India faces.

1.9 Reforms in health sector in India

Health Sector reforms is a feature of 1980s and 1990s. There was a global disequilibrium on the economic front with the oil crisis in 1970s. India experienced an economic crisis due to availability of less foreign currency and balance of payment situation. Under these circumstances India preferred to bring in Health Sector Reforms (HSR) incorporating more selective and technology centered changes in the programmes for Health. A change in "Conceptualization of Health Care" was brought in by switching over the category of Health sector to 'Commodity' from 'Service'. It promoted assumption that expenditure on public systems are wasteful, public systems have thoroughly been inefficient and ineffective, markets need to be given greater prominence and market principles can be introduced in public system to make them more efficient. This Health Sector reform which came in the 1990s in the form of reforms including amongst others contracting staff; promoting public private partnership; encouraging setting up private Hospitals is a turning point in the history of Health Management and Administration of Health Establishments. It can be said that a paradigm shift occurred with the eighth five year plan when the Government of India agreed to accept the major recommendation of the World Bank, the progenitor of the reforms who came forward offering required financing for the restructuring of intended Health Sector reforms. The various forms of proposed reforms included the budgetary cuts in public spending on Health Services, introduction of user fee to augment the meager resources; privatization of medical care along with hiring contractual staff and public institution cell to Private Sector. Due to shrinkage in

Health budgets and to meet ever increasing growth of population since 1980s, many states in India saw emergence of Health Establishments either in Private Sector or on Public Private Partnership mode. This was based on three basic assumptions: one, it will reduce the financial burden of the Government; two, strengthen the capacity of private sector to cater to the health need of people and three, improve the quality of Health care through new management structure. Public private model paved the way for establishment and concentration of PPP Hospitals in the southern and western parts of our country in cities like Mumbai, Chennai, Delhi, Bangalore, Hyderabad, Chandigarh, Ahmadabad, Surat and Vadodara etc.

As part of the health sector reforms, the 1990s witnessed an increase in 'state of the art' Medical Technology meeting international standards. This mainly catered to a particular class of society, suited the aspirations of a section of Medicos and the Medical Corporate Sector and was conducive from the perspective of the internationally powerful lobbies of the pharmaceutical and medical equipment industry as well as insurance capital. This resulted in a rise in the secondary and tertiary level services promoted in the private sector, while strengthening Primary Health Care in the public sector was reduced to primary level services. The private sector made inroads into the Health Sector and experienced boon with tax incentives, Government subsidies granted to them for investing in Health. Assam, the gate way to the North East also saw emergence of Private Hospitals during this period with Guwahati taking the lead. The first Corporate Hospital in the North East was established at Dispur, Guwahati.

1.10 Health sector in Assam

1.10.1 Public Health Infrastructure:

To a large extent, the Health Sector in Assam is dominated by private Hospitals. The public Health infrastructure in Assam comprises of District Hospitals, Sub Divisional/ Sub District Hospitals, CHC (Community Health Centre), Block PHC (Public Health Centre), and State Dispensary, Sub Health Centre, Mini PHC, Sub

Centre, B.Sc. Nursing College, GNM (General Nurse Midwives) and ANM training centre.

A detailed Public Health Infrastructure in Assam is given in Table 1.6

Table 1.6: Public Health Infrastructure in Assam

Sl. No	Details of Infrastructure	No
1.	District Hospital	25
2.	Sub Divisional Hospital	03
3	Community Health Centre	93
4.	Block Public Health Centre	149
5.	State Dispensary	239
6.	Sub Health Centre	71
7.	Mini Public Health Centre	380
8.	Sub Centre	4592
9.	B.Sc. Nursing College (State)	1
10	GNM Training Centre	15
11.	ANM Training Centre	18

Source: *Economic survey*, Directorate of Economic & Statistics, Assam 2014-2015

1.10.2 Health Administration in Assam

Health being a state subject, policies pertaining to functioning of the Health Sector in Assam is framed by the State Government. From the view point of Administration, the Principal Secretary, Health who is a senior I.A.S. officer of the State is appointed as the authority at the apex level who exercises all sorts of administrative control over the Health Sector of the State. Next in hierarchy is the Commissioner, Health who is supported by the Joint Secretary, Health who in turn is assisted by the Deputy Secretary. In Assam the incumbent officials appointed as Joint Secretary and Deputy Secretary are Senior Officers from the state civil service. For the purpose of effective Administration, Health Sector is divided into two segments viz. Health (A) and Health (B). Directorate of Medical Education (DME) which falls under Health (B) oversees the administrative matters related to Medical Education like controlling admission procedure for entry into courses imparted in Government Medical Colleges of Assam. This Directorate is also entrusted the job of transfer and

posting of teachers in Medical Colleges of Assam who are designated as Assistant Professor, Associate Professor or Professor depending upon their length of service and seniority. These teachers apart from teaching have to render medical service in the Hospital attached to their respective colleges. Health (A) is controlled by the office of the Director of Health Services which is headed by a Medical Officer from the State Health Services Cadre. This Directorate is vested with the responsibility of controlling the functioning of Health Centres, Hospitals and Dispensaries located at different districts of the state which are related to Health and Family welfare programmes of the Government. One of the important functions attached to the Directorate of Health services is controlling and regulating the Private Health Establishments of Assam. It is this authority which issues license to Private Hospitals, Nursing Homes, Maternity Homes, Research Institutes and Clinical Laboratories to carry on activities which are related to medical service. The organizational structure of Directorate of Health, Assam is detailed in Table 1.7.

Table 1.7: **Directorate of Health Services, Assam**

DIRECTOR OF HEALTH

Addl. DHS (G)		Addl. DHS (SP)		Addl. DHS (Hills)		Addl. DHS (LAR)	Addl. DHS (UAR)		Drugs Controller	
Jt. DHS (HQ)	Jt. DHS (HEB)	Jt. DHS (PH)	Jt. DHS (UIP)	Jt. DHS (Nursing)	Jt. DHS (Opth)	Jt. DHS (TB)	Jt. DHS (Mal)	Jt. DHS (Lep)	Jt. DHS (Attached to NHM)	Jt. Drugs Controller
Dy. DHS (Homoeo)		Dy. DHS (Pharmacy)		Dy. DHS (Ayur)		Dy. DHS (Nursing)	Dy. DHS (HEB)		Sr. FAO	SRO
Planning Officer				Research Officer			Designated Food Safety Officer			
Statistical Officer	Asst. Research Officer	Inspector of Drug		Asst. DHS (Nursing) Attached to DHS (FW)		Technical Officer IDD	Registrar		Superintendent	Statistician (G)
Stenographer			Research Asst.				Artist			
Statistician (NG)			Senior Assistant		Internal Auditor		Sub Editor		Technical Supervisor	
Jr. Assistant		Statistical Asst.		Steno Typist		Compiler	Cinema Operator			
Driver						Grade IV				

Source : Directorate of Health Services, Assam

In Assam there is another Directorate called Directorate of AYUSH which is entrusted the responsibility of controlling and monitoring of functioning of the Ayurvedic College and Homoeopathic Colleges of Assam. However like the Directorate of Health, Assam this Directorate is not vested with the power to grant license to Ayurvedic, Homoeopathic, Unanni or Siddha Hospitals operating in the state. The Government of Assam established this Directorate on 25th May, 2011 with the object of promoting Medical Education, Planning, Training and Research in the field of Ayurveda; Unanni; Siddha and Homoeopathy. All the three Homoeopathic Colleges and the only one Ayurvedic College of the State and the Hospitals attached to these Colleges were brought under this Directorate. Opening of separate wings of AYUSH in all Civil Hospital of the Districts and Sub-Divisions were the other areas entrusted to this Directorate. National AYUSH Mission, Assam was launched with the aim of promoting Indigenous, Traditional and Community Medicine Research in the state and coordinate with various councils of Alternative Medicine under AYUSH sector. The other target area of this Mission had been to streamline AYUSH and make possible assimilation of Indian System of Medicine with the Allopathic System of treatment.

The Directorate of AYUSH is entrusted with the responsibility of maintaining a complete and correct statistics about the AYUSH Educational Institutions; Health Establishments (Hospitals, Dispensaries, and Health Centres etc.), Registered Practitioners; Registered Pharmacies; Licensed Pharmacists and Medicine Manufacturing Laboratories/ Pharmaceuticals etc. and also to regulate and control the activities of Medicine manufacturers and Pharmaceutical Units. Under the Directorate of AYUSH, Assam, there are four colleges out of which three are Homeopathic colleges and one Ayurvedic College. One Hospital is attached to all these four colleges. The Government Ayurvedic College Hospital, Jalukbari, Guwahati, is 264 bedded while all the three Homeopathic College Hospitals have 50 beds each although all beds are not functional in a few Homoeopathic College Hospital and the Government Ayurvedic College Hospital located at Jalukbari, Guwahati. There are 358 Ayurvedic Dispensaries under State Health Service and 287 Dispensaries under

National Health Mission. The number of Homeopathic Dispensaries under State Health Services is 75 while under National Health Mission it is 50. There are 697 registered Ayurvedic practitioners and 120 registered pharmacists under this Directorate. The number of licensed Ayurvedic pharmacies is 22 while the Homoeo Pharmacies numbers 680. According to available data the number of Medicine Manufacturing / Pharmaceutical Units of Ayurvedic treatment numbers 51 while this number in case of Homeopathy is 1.

The State Government is implementing various Central Government Schemes besides its own schemes / programmes by continuously increasing allocation of fund to the Health Sector in State Planes. The State Government along with National Health Mission (NHM) has taken up schemes to strengthen existing health facilities and also to build new Public Health Infrastructure in Rural, Hilly, Char and Tribal areas to reduce Infant Mortality Rate (IMR), Maternal Mortality Rate (MMR) and Crude Birth Rate (CBR) in the state. The Health Indicators released by RGI shows that the under-five mortality rate in Assam is very high as compared to all India rate. The Neonatal Mortality Rate (NMR) has decreased during the last few years compared to the all India rate. A comparison of some Health Indicators of Assam and India is detailed in Table 1.8.

Table 1.8: Comparison of Health Indicators of Assam and India

Activity	Total		Rural		Urban	
	Assam	India	Assam	India	Assam	India
Crude Birth Rate	22.4	21.4	23.5	22.9	15.4	17.3
Crude Death Rate	7.8	7.0	8.2	7.5	5.6	5.6
Infant Mortality Rate	54	40	56	44	32	27
Neonatal Mortality Rate	27	28	29	31	10	15
Under 5 (five) Mortality Rate	73	49	77	55	34	29

Source: RGI

All the schemes of the State Government and those of Central Government are implemented through various State Government Hospitals and Health Institutions located in various districts of the state. Number of State Government Hospitals and Health Institutions in Assam as on 2012 is detailed in Table 1.9.

Table 1.9.: State Government Hospitals and Health Institutions of Assam

Sl. No.	District	CH	SDCH	PHC	FRU	CHC	SC
1	Kokrajhar	1	1	38	1	5	159
2	Dhubri	1	1	40	1	5	246
3	Goalpara	1	0	39	1	1	151
4	Barpeta	1	1	51	2	7	264
5	Morigaon	1	0	25	1	2	123
6	Nagaon	1	0	74	6	9	354
7	Sonitpur	1	2	47	2	4	274
8	Lakhimpur	1	1	28	1	5	155
9	Dhemaji	1	0	21	0	3	98
10	Tinsukia	1	0	21	3	5	164
11	Dibrugarh	0	0	29	2	5	231
12	Sivsagar	1	2	42	3	2	219
13	Jorhat	1	2	41	3	5	144
14	Golaghat	1	1	39	1	5	144
15	KarbiAnglong	1	1	51	0	5	145
16	Dima-Hasao	1	0	11	0	2	65
17	Cachar	1	0	32	0	4	270
18	Karimganj	1	0	21	0	1	217
19	Hailakandi	1	0	13	0	2	105
20	Bongaigaon	1	0	44	2	4	76
21	Chirang	1	0	23	0	2	86
22	Kamrup	1	1	21	5	9	280
23	Nalbari	1	0	67	2	6	121
24	Baksa	1	0	44	0	5	157
25	Darrang	1	0	47	1	3	163
26	Udalguri	1	0	23	0	3	147
	TOTAL	**25**	**13**	**932**	**37**	**109**	**4558**

Source: Directorate Health Services. Assam

CH: Civil Hospital, SDCH: Sub Divisional Civil Hospital. PHC: Primary Health Centre, FRU: First Referral Unit, CHC: Community Health Centre, SC: Sub Centre.

During the period 1997-2012 the relative overall decline of MMR in Assam was 42% as against 55% in the country. The Maternal Mortality figure of Assam and India during thisperiod is detailed in Table 1.10.

Table 1.10: Maternal Mortality figures of Assam and India

Period	Assam	India
1997-1998	568	398
1999-2001	398	327
2001-2003	490	301
2004-2006	480	254
2007-2009	390	212
2010-2012	328	178

Source: RGI

The proposed outlay of Assam for the Annual Plan 2014-2015 is ₹ 572.32 crore. The schemes to be taken up during the Annual Plan 2014-2015 are as follows.

Infrastructure developmentof HealthInstitutions.

- Effective implementation of the scheme National Programme For Prevention and Control of Cancer, Diabetics, Cardio Vascular Diseases and Stroke (NPCDCS).
- To continue the scheme, National Programme for Prevention and Control of Deafness (NPPCD).
- Procurement of long lasting mosquito bed net for BPL families.
- Procurement of surgical and other consumables.
- Procurement of Machinery and Equipment for Health Institutions.
- The District Mental Health Programme (DMHP) will be continued in the four districts viz. Nagaon, Goalpara, Morigaon and Nalbari following the guidelines of NMHP.
- Awareness Programme, Training of Doctors and Nurses.

The Joint Director of Health Services (JDHS) having offices in all the Districts of Assam is the highest Authority who exercises all sorts of administrative control over all Hospitals and Health Establishments located in their respective district. This office is supported by one CM & HO (CD): One Additional CM & HO (FW) and one Superintendent who works under it. The Deputy Commissioner of each District of the state is designated Head of the District Health Society (DHS) in their respective Districts, which is entrusted the task of keeping a record of family welfare programmes being implemented at the District Level.

In Assam the Urban areas are dominated by Private Hospitals and Nursing Homes. The number of private sector Hospitals in Assam is 131 which is spread over 13 districts. People in rural areas mostly depend upon the PHCs for their medical treatment .However a section of rural people rely on Traditional and Local Systems and practices of Medicine which exists in very unorganized and officially not recognized forms. People holding BPL card are mostly covered by Pradhan Mantri Bima Yojana (PMBY) which is a Health Insurance scheme for the weaker section of

the society. Some other schemes implemented by the State Health Department to provide better health care among the people in the state are “Mamoni” “Majoni” and “Morom” which are meant for pregnant woman, girl child and indoor patients of Government Health Institutions respectively. The scheme Assam Arogya Nidhi (AAN) provides financial assistance up to ₹1.50 lac for General and specialized treatment of life threatening diseases and injuries caused by Natural or Man-made Disasters to families which have a monthly income of less than ₹10,000.00. In Assam it is mandatory for Health Establishments to provide free service to the BPL card holders and it is for the Directorate of Health services to oversee whether provisions of the Assam Health Establishment Act and Rules (as amended up to date) are followed by the Private Hospitals and Health Institutions or not.

The geographical area of Assamis 78,438 square kilometer with a population of 312, 05576 of which 15939443 are Males and 15266133 are Females. In the stat, there are 25 District Hospitals, 13 Sub Divisional Civil Hospitals, and 986 PHCs, 38 FRUs, 110 CHCs and 4609 Sub Centre with 11459 numbers of total beds. Apart from this there are six Teaching Government Hospitals in the state. Due to insufficient number of Medical Colleges and reluctance of passed out students from Government Medical Colleges to serve in rural areas, there has been acute shortage Doctors in rural areas. That apart, a state of ailment appears in the Health Sector of Assam due to non-filling of various posts which are related to Health Administration at the District, Sub-District and State level. According to Indian Public Health Standards (IPHS), to serve the entire population of Assam there is a need of at least 11000 doctors. However, according to Government’s own sources, against the required number of 4250 Doctors in Hospitals and State Dispensaries other than Teaching Hospitals attached to Government Medical Colleges of Assam, only 2200 Doctors are available to offer such service. The media in Assam has been very vocal in highlighting inadequacy of Human Resource and collapse of Health Administration on many fronts. According to report available from Newspaper, in the year 2010, although 300 Doctors were selected by the Assam Public Service Commission (APSC) to fill up vacancies in different Government Hospitals and Health Institutions of the state,100

only joined the service. In the year 2012, against selection of 280 Doctors by the APSC, only 98 joined and in the year 2014 against 350 selections made by APSC only 105 joined Government Service in Health Department.

Having faced criticism from people in general and Media in particular for poor state of affairs in the Health sector, the Health and Family Welfare (HFW) Minister, Government of Assam, made some announcements in the year 2015. According to the statement of State Health Minister made in the State Assembly, to serve as a link between Health and Family Welfare Department of Government and the Field Directorates, Commissioner ate of Health and Family Welfare has been created. 2028 Regular and 1390 Contractual Employees which includes Nurses and Para-medics have been appointed, 200 posts of Medical Officers (Ayurveda) have been upgraded to 150 Senior Medical Officers (SMO) and 50 numbers to Sub-Divisional Medical and Health Officer (SDMHO).National Ayush Mission (NAM), Assam has been made functional and steps taken for establishment of 9 AYUSH wings in 9 numbers of Civil Hospitals and 15 OPD in other Hospitals. It is also stated by Government that there is no official record about Doctors practicing Unanni System of Medicine. However, there is a proposal to open two Unanni Hospitals in Assam which would function under the Directorate of AYUSH, Assam.

1.10.3 NHM in Assam

NHM in Assam plays a major role in strengthening the health system by engaging Paramedic; Administrative Staff, Nurses, Doctors and specialist on contractual basis on the apprisal of requirements proposed by the state to the centre in their annual health programme implementation plans. The state health society determines the terms and conditions of employment of staff engaged by NHM in the state. NHM in Assam is headed by a Mission Director. NHM which has subsumed major programmes of the Union Ministry of Health & Family Welfare (MoHFW) has played a key role in the matter of managing human resource required for different District; Sub-district & Teaching Hospitals of the State. Man power position in

different Government Hospitals of Kamrup (Metro) District under the Administrative control of NHM Assam is shown below.

Table 1.11 Availability of NHM Staff in Government Hospitals of Kamrup (Metro) District.

Manpower		Mohendra Moham Choudhury Hospital	Gauhati Medical College Hospital	Govt. Ayurvedic College Hospital	Dhirenpara Maternity and Child Welfare Hospital(FRU)	SJN Homoeopathic College Hospital
Doctor including specialist		23	01*	01 (AYUR)**	0	01*
Nursing staff	Matron	0	0	01	0	0
	ANM	62	89	08	12	0
	Staff Nurse	55	92	13	0	02
Paramedics	Radiograffer	01	0	0	0	0
	Lab. Technician	16	0	0	0	0
Hospital Administrator		01	0	0	0	0
Family Planning Counselor		0	01	0	0	0
Ward Boy		01	0	0	0	0
Grade – IV		04	0	0	0	0
Dresser		0	0	0	01	0
General Duty Office Staff	Block Accounts Manager	0	0	01	0	0
	Block Data Manager	0	0	0	0	0
	Block Project Manager	0	0	01	0	0

Source: Office of the Mission Director, NHM Assam

* Medical Officer

** Medical Officer (Ayur)

The service conditions of NHM staff provides for casual leave and medical leave for those who have completed at least six months of contractual service. However in contrast to regulr employees of Health department they are not entitled to

earned leave, study leave, special disability leave, paternity leave etc. Maternity leave is availabele as per provision of Maternity Benefir Act and Abortion leave admissible as per Medical termination of Pregnancy Act, 1971 to all female employees working under NHM provided they have completed one year of service in the mission on the date this leave is applied for. The salary payable to NHM employees is consolidated because of which Assam witnessed agitation by them throught the state in the year 2016 resulting in disruption in Medical Service for a long time.

1.10.4 System of Medicine in Assam

In Assam the System of Medicine practiced most is the Modern System which is better known by the term 'Allopathic'. However the Traditional System of Indian Medicine which is based on Ayurveda is also popular in Assam though not to the extent of Modern System of Medicine. Homoeopathic System of Medicine is also prevalent in Assam which is popular amongst the economically weaker section of the society because of its low cost as compared to other two Systems of Medicine. At present there are six functional Government Medical Colleges to which Teaching Hospitals are attached. Out of these six Hospitals where Modern System of Medicine is practiced, two are yet to produce Medical Graduates. For the Ayurveda System of Medicine, there is only one Government Ayurvedic College to which a Teaching Hospital is attached. In Assam there are three Homoeopathic Colleges in the Government Sector which produces Doctors who are eligible to practice Homoeopathic System of Medicine. In Assam, the Directorate of Health Services is the authoritative body of Government which maintains record about Health Establishments where the Modern System of Medicine, Treatment or Diagnosis is practiced. In the absence of any regulatory body to oversee the work of licensing of Hospitals practicing Traditional Systems of Medicine, there is no laid down Rules and procedures for controlling activities of Hospitals associated with Ayurveda, Unanni, Siddha and Homoeopathy. As such there is no official data available regarding Private Hospitals or Clinics which render service and treatment under Indian Systems of Medicine. Field survey conducted in Guwahati revealed presence of two Private Hospitals where Ayurvedic and Siddha System of Medicine practiced and

panchakarma, a treatment therapy adopted for patients. According to data available from National Health Mission, Assam, there are 697 Ayurvedic Registered Practitioners and 120 registered Pharmacists in the state. The number of Pharmacies licensed for Ayurvedic Medicine is 22 while for Homoeopathy it is 680. In the absence of any official data it is difficult to ascertain the number of clinics operating in Assam in the private sector which treats patients with Homoeo Medicine.

With the introduction of the concept of integrated AYUSH Hospital, time has come for Assam to witness setting 200 bedded Hospital where a blend of Ayurveda, Unanni, Siddha, Homoeopathy, Yoga and the Modern System of Medicine based treatment would be available under one roof. Setting up of such a Hospital has taken a concrete shape after Ministry of AYUSH, Government of India vide its letter no Z/28051/211/2014/NI sent to Government of Assam in the last part of December,2015 asked for allotment of land measuring50-100 acre for construction of such a Hospital.

Some other systems of medicine like Acupuncture; Magnetic therapy and application of local herbs for Medicine are also prevalent in Assam. Late Gunaram Khanikar was instrumental in popularizing treatment through local herbs available in different parts of Assam. For his contribution to the field of discovery of Herbal Medicine he was rewarded the '*VexajRatna*' award by the Government of Assam.

Some other traditional and local methods of treatment is also visible in the unorganized and rural sector of Assam which however has no official approval and is trustworthy to only a few.

1.11 Control and Regulatory Mechanism of Government over Hospitals

1.11.1 Control by Central Government

Generally speaking, Central Government Hospitals are controlled by the Ministries under which they are placed in so far as matters of Management and Administration are concerned. There are Autonomous Councils functioning under the Ministry of Health and Ministry of AYUSH, Govt. of India which exercises

regulatory power over Hospitals. Medical Council of India (MCI), Central Council of Indian Medicine (CCIM) and Central Council of Homoeopathy (CCH) are such regulatory bodies which exercises control over Teaching Hospitals attached to Medical Colleges, Ayurvedic Colleges and Homoeopathic Colleges respectively.

Manufacturing of Drugs entails many functions such as licensing, regulation, procurement etc. Accordingly these matters are handling by a number of Ministries. Under the Drugs and Cosmetics Act, 1940, states are responsible for the regulation, manufacture and sale of drugs while Central Government Departments are responsible for other issues related to drug regulation and monitoring. The Central Drugs Standard Control Organization (CDSCO), under the DGHS, Ministry of Health & Family Welfare is the nodal body for the approval of new Drugs, clinical trials in the country, laying down the standards for Drugs, control over the quality of imported Drugs, coordination of the activities of State Drugs Control Organization. Functions of Central and State monitoring bodies in this area is detailed in Table 1.12.

Table 1.12:Functions of Central and State Monitoring Bodies for Drugs.

CDSCO (Central Government)	**State Licensing Authorities**
• Laying down standards of Drugs, Cosmetics, Diagnostics and Devices. • Laying down Regulatory measures, amendments to Acts and Rules. • To regulate market authorization of new Drugs. • To regulate Clinical Research in India. • To approve licenses to manufacture certain categories of Drugs as Central License Approving Authority i.e. for Blood Banks, Large Volume Parenteral and Vaccines & Sera. • To regulate the standards of imported Drugs. • Work relating to the Drugs Technical Advisory Board (DTAB) and Drugs Consultative Committee (DCC). • Testing of Drugs by Central Drugs Laboratories • Publication of Indian Pharmacopoeia.	• Licensing of Drugs, Manufacturing and Sales Establishments. • Licensing of Drugs Testing Laboratories. • Approval of Drug formulations for manufacture. • Monitoring of quality of Drugs & Cosmetics manufactured by respective State Units and those marketed in the state. • Investigation and prosecution in respect of contravention of legal provisions. • Administrative actions. • Pre-and post-licensing inspection. • Recall of sub-standard Drugs.

Source: India *Governance Report, 2012*

1.11.2 Control by states

Statutory obligations are designed to ensure all round safety of the patients; providing quality care and protection of the premises and Hospital building keeping in mind Accident and Emergency situations which needs to be tackled in an efficient way. The statutory obligations to be met and license/permits to be obtained for running of Hospitals are the following:

1. Building permit (completion certificate)
2. Hospital/Nursing Home registration from corporation/Municipality
3. Registration under MTP Act
4. Registration of the Ultrasound Machines under PNDT Act.
5. The whole sale and retail Drug license.
6. Permit from the Excise Department to store spirit.
7. No objection certificate from the Chief Fire Officer of the region.
8. No objection certificates under Pollution Control Act.
9. Registration and No Objection Certificate under Bio Medical Waste Rules, 1998.
10. The vehicle Registration certificate in respect of all vehicles the Hospital owns.
11. Radiation protection certificate in respect of all X-Ray equipment for BARC.
12. PAN Number.
13. ESI Registration.
14. Pharmacy License.

In ensuring compliance with the above mentioned statutory provisions the working of Hospitals are regulated by the Department of Municipal Administration; The Drug Licensing Authority; Department of Excise; State Pollution Control Boards; The Regional Transport Authority of the state concerned; Department of Fire and Disaster Management; The Income Tax Authority and the Indian Medical council. The Directorate of Health of the concerned state Health exercises overall power of

monitoring and regulating the activities of Private Health Establishments. In addition to existing statutory provisions, states on their own can frame Rules and Laws which shall be applicable to all Health and Diagnostic Establishments. Since Health is a state subject almost all states have made statutory provisions to regulate the activities of Hospitals, Nursing Home & Diagnostic Centers which are established in the private sector. In Assam, the Assam Health Establishment Act, 1993 and Rules 1995 (amended in 1996) is an instrument in the hand of Government to regulate and control the activities of Hospitals, Nursing Homes, Research Institutes (associated with Hospital); Maternity Home, Physical Therapy Establishments, a Clinical Laboratory or an Establishment analogous to them.

Regulatory authorities for the Hospitals of Assam are shown below.

A. Office of the Director, Health and office of Joint Director, Health (HQ)
B. Central Council Of Indian medicine
C. Indian Homoeopathic Council
D. Indian Medical Council

1.12 Background of the Study

In addition to the various committees set up to look into issues of planning Health Services and Health Care development, the Government formalizes its policy on Health in the form of National Policy Documents like National Health Policy and National Population Policy etc. The draft National Health Policy 2015 aims at making India move towards making Health a constitutional right. The key points of the draft amongst others are making Health a Fundamental Right and raising Public Health Expenditure to 2.5% of the GDP. This expenditure shall have to be in terms of Health Sector Infrastructure up gradation and Manpower enhancement. The fact remains that Private Hospital provide 80% of outpatient care and about 60% of impatient care accessing market fund. From 1990's onwards there is a sharp increase in number of Health Establishment in the private sector while in the Government Sector there has been increase in the number of Primary Health Centre only. The Hospitals in the Secondary and Tertiary Sector which are located in the Sub Division and District level are supposed to be very strong in infrastructure; Human Resource and

Administration. Those states which are receiving funds from the Central Government or outside agencies for implementing National policies like immunization; Malaria Eradication. National Health Mission has to undertake activities under these programmes in addition to normal duty of attending to health related problems and treatment of the people within their locality. This puts the State Government Hospitals in a critical position since methods of recruiting Doctors and Nurses under programmes like National Health Mission is quite different from those recruited on regular basis. The type of Management including Human Resource Management Practices and Administration that prevails in Government Hospital is decided by policy of Government. For the Private Hospitals, the system of Administration and Management depends upon the type of Hospital, its organization and how it functions. In the absence of any statutory mechanism which can put a ceiling in the number of Private Health Establishments operating in a state, there is a likelihood of increase in number of such institutions. What is important here is not the quantity but the quality of care that such Private Establishments can provide to the sick or those who need thorough investigation, treatment and care. Regulating the activities of Health Establishments; their techniques of Management of Human Resource; adherence to all statutory prevision should be strictly monitored by Government. In Assam, the Assam Health Establishment Act 1993; The Assam Health Establishment (Amendment Act), 1995 & 2003 and Rules, 1995 provides for control over Private Health Establishments by scrutiny committee in matters of renewal of license and also for appointment of Inspecting officers who is assigned the task inspecting such Establishments at periodic intervals. As per this Act, in all Health Establishments names, qualifications, experiences with date of appointment of the attending specialist or Medical Officers and other Technical Manpower are to be kept on record. According to some other provision of this Act all licensed Health Establishment should have Clinical Laboratory with requisite infrastructure for necessary laboratory examination for diagnosis & treatment of different ailments. For establishing and maintaining Clinical Laboratory for carrying out Biological, Pathological and Biochemical tests for diagnostic purposes, at least one fulltime Pathologists with required number of

Laboratory Technician and required Staff shall be appointed having requisite qualification like degree/diploma from Government recognized institutions. Doctors for different disciplines recognized by Medical council of India with at least three resident doctors up to thirty beds and proportionate Nursing Staff, Equipment & other staffs should be appointed by Private Health Establishments. Number of Resident Doctors, Nurses, Equipment & other staffs should be increased proportionately by the Health Establishment having more than 30 beds. As a part of Health Sector Reforms and Government encouraging establishment of Private Hospitals, Assam saw growth of many Health Establishments in the private sector from 1989 onwards. During the last two decades, Guwahati city has witness a mushrooming growth of Big, Medium and Small Size Private Hospitals and Nursing Home signifying the near defunct status of public health institutions. In 1989 itself, under the aegis of a trust the first Corporate Hospital was established at Dispur, Guwahati. This Hospital is the first in North East India to get accreditation from NABH. The Assam Public Health Act,2010provides for certain mandatory provisions to be followed by all Health institutions, Public or private operating in the State of Assam.

Presently the number of Private Hospitals and Nursing Homes in Guwahati registered under the office of Joint Director of Health Services, Kamrup (Metro) is 50. As against this, in this city there are 52 Government Hospitals including those under Central Government under different Ministries. However, the tendency of people to seek Medical Service from Private Hospitals continues since they feel that all special and super specialty Departments and facilities exist there and the infrastructure, quality of Human Resource and Patient care is better in these Hospitals. However, during the course of association for more than half a decade with a few Private Hospitals of Guwahati, this Researcher found that the Human Resource Department was virtually defunct in these Hospitals. Many of the practices adopted by these Hospitals for Human Resource Management were against statutory norms. This prompted him to take up some study which can help in having some insights into the organizational structure of these Hospitals and find out if it had anything to do with Administration of Hospitals and Human Resource Management practices adopted by

them. In the backdrop of coming up in Guwahati many Super specialty Hospitals in private sector, there is a need to take up study to find out as to what are shortfalls in Government Hospitals from the view point of available Manpower, Departments and Services which might attract people towards Private Hospitals despite the fact that treatment in Private Hospitals is very costly.

1.13 Relevance of the Study

The all-round wellbeing of an individual is rooted in the condition of Health. In so far as Governance is concerned Health Sector finds importance in policies of Government. Policies pertaining to Health Institutions and Administration therein are made by State Government. Hospitals which are centres of Health care, diagnosis and treatment are managed by a group which consists of Medical and Non-Medical Staff. It is the quality of Personnel that a Hospital possess which determines the amount of care, cure and comfort that patients are likely to get in that Hospital. In other words, it is the not the giant building; large and beautiful lobby or the glossy Hoardings which signifies the services offered by a Hospital. It is the Human Resource i.e. the personnel engaged in various duties and Administration i.e. the system of managing and coordinating different departments which speaks about quality of Medical Service available in a Hospital. Guwahati, the nerve centre of Assam which is also the headquarter of Kamrup (Metro) District of the state is a place where different types of Government and Private Hospitals including multispecialty and Super specialty Hospitals are situated. Since the organizational set up in Government Hospitals is different from Private ones, its system of Administration is bound to be different from Private ones. In Government Hospitals, Human Resource Management Practices are guided by policies of Government and the System of Administration is based on rules made by the Government. But in Private Hospitals it is influenced to a large extent by the strategies adopted by the promoters, Board of Directors or those running it. There is bound to be difference in different categories of Hospital in matters of service conditions, incentives and benefits to employees as well. But that does not mean that Private Hospitals should be given a license to adopt such Human Resource Management Practices or a System of Administration which exploits employees and

set rules which are against statutory provisions. How effective are the regulatory mechanisms of Government in controlling Hospitals? Do all Hospitals have Human Resource Department managed by qualified staff? Is the Administration of Hospitals equipped to ensure compliance of all Rules & Regulations and ensure satisfaction of employees which in turn has an effect on patient care in Hospitals? Answers to all these questions could provide a basis for making a critical study about Management of Human Resource and Administration of Hospitals. A study of these aspects if undertaken taking Kamrup (Metro) district as a study area can throw enough light on the status of Human Resource and Administration of Hospitals located in other parts of the state of Assam since other places cannot be better than Guwahati, the later being the largest city of the region which is also the gateway to North-East India. A scientific study of the areas mentioned above would help the Researcher in suggesting and recommending modifications in policies of Government to control functioning of all Hospitals. This study is significant because it would throw light on the adequacy of Manpower and availability of different Departments in Government and Private Hospitals which has a direct bearing on the quality of patient care in Hospitals. This study is considered relevant because the survey of literature revealed that such kind of exploratory study has not been undertaken in Assam so far.

This study also has relevance from the view point of analyzing the status of regulatory mechanism and Statutory provisions which are applicable to Hospitals more particularly to Private Hospitals of Assam and also in ascertaining the quality of hospitals in so far as accreditation and standardization of service is concerned. The study also has the potential of offering suggestions and recommendations for ensuring Good Governance in Government Hospital.

1.14 Scope of the study

The present study which attempts to provide answers to a few research questions has the scope to pave way for framing of hypotheses based on which many analytical researches can be undertaken by the future researchers. The findings of this study about human resource management practices in hospitals have the potential of

guiding future researchers in finding out the relationship that exist between employee turnover and human resource practices in hospitals and also about different aspects of human resource management like linking organizational strategy to human resource planning, staffing pattern, employee motivation, incentive plans, performance appraisal etc.. Further, this study has the scope to identify clearly the gap that exists between the recommended human resource management practices and the actual position that prevails in both the Government and private hospitals. The result obtained about adequacy of human resource in terms of quality and quantity can be helpful in suggesting policies that would be fruitful to tackle this issue. Moreover by examining the effectiveness of the prevailing control mechanism of Government in so far as the regulatory acts are concerned, suggestions can be forwarded for amending or annulling the Acts that are in force in Assam. Though this study is an exploratory one, it has the scope of giving an overall picture about the administration of hospitals from the view point of professionalism in administration and manpower position, the twin factors upon which patient care depend to a large extent.

1.17 Objective of the Study

Having assessed the relevance of the subject, this study has the following main objectives.

- To examine the adequacy of organizational strategy adopted by Hospitals for Human Resource Management.
- To examine effectiveness of regulatory mechanism of Government to monitor service of Hospitals.
- To examine adequacy of Human Resource of Government and Private Hospitals from the perspective of available Departments and Manpower therein.
- To examine the functional effectiveness of Human Resource (HR) Department of Hospitals and examine the Human Resource Management Practices adopted by them.

- To study if there is link of organizational structure with Administration of Hospitals.

1.18 Research questions

1.18A: How functional and effective is Human Resource (HR) Department in Hospitals?

1.18B: What are the prevailing Human Resource (HR) Management Practices and Service Conditions of Employees in Hospitals?

1.18C: Are Human Resource (HR) Heads engaged by Hospitals in taking major strategic decisions?

1.18 D: What has organizational structures of Hospitals to do with Administration of Hospitals?

1.18 E: Are there sufficient monitoring and regulatory measures of Government to control Administration and Management of Hospitals?

1.19Limitations of the study

(i) There could be biasness and fear among the general duty staff because of which there could be some amount of incorrectness in the answers given by them.

(ii) Since head of hospitals were busy more with matters related to patient care, there were difficulties in getting sufficient time from them to conduct unstructured interview for them

(iii) Opaqueness in furnishing of data on the part of Ministry of Defence and Ministry of Home because of which hospitals under the administrative control of these two Ministries could not be included in this study.

(iv) The study being exploratory in nature where an attempt has been made to find answers to research questions only, there is absence of hypothesis testing and quantitative method of data analysis.

1.20 Chapter Schemes/Planning

Chapter I: Introduction

This chapter starts with an over view of Administration and Human Resource Management in Hospitals and is followed by the operational definitions of the terms Human Resource Management; Human Resource Management Practices; Administration; Hospital; Organization and Organizational structure; Span of Control; Centralization; Decentralization and Health establishment. This chapter also deals with classification of Hospitals; Human Resource Management and Administration in Hospitals. The other subjects covered in this chapter include Health care services in different countries of the world; National Health Policy of India and Reforms in Health Sector in India. The Health sector in Assam with a detail of Public Health infrastructure and the system of Health Administration in Assam is also described in this chapter. System of Medicine in Assam and Control and Regulatory mechanism of Government over Hospital are the other subjects covered in this chapter. This chapter also discusses the background of the study; the relevance and objective of the study; Scope and limitations of the study, Research questions in this study and the chapter schemes made.

Chapter II: Review of literature

In this chapter, a thorough review of different studies including National and International Books and Journals, Published articles in Newspapers and a review of relevant Acts and Rules connected with control of hospitals have been made to find out the research gap of these studies as well as to determine important factors that are related to the present study.

Chapter III: Methodology of the Study

In this chapter the research design ,the universe of the study; method of sample selection and sample size, tools of data collection, rationale for framing questionnaires and its type, and the method adopted for data analysis have been explained.

Chapter IV: Study area: A Brief Profile

In this chapter a brief profile of Kamrup (Metro) district of Assam based on secondary data have been presented. Also discussed in this chapter are different types of Hospitals that are functioning in Kamrup (Metro) district. This chapter also details the list of Government and Private Hospitals of the District.

Chapter V: Results of Data Analysis

This chapter relates to analysis of data that has been obtained through three questionnaires and interview of organizational Heads.

Chapter VI: Findings and Interpretation

This Chapter relates to findings of the study based on data collected and its analysis. The findings thus obtained are interpreted to come to conclusion.

Chapter VII: Summary and Conclusion

This chapter is about conclusions drawn from the study. This also includes certain recommendation and suggestion made regarding issues which are critically studied.