Emerging Trends in Health Care Management System in Kerala

THESIS

Submitted in partial fulfilment
of the requirements for the degree of

DOCTOR OF PHILOSOPHY

By

MAHESH R PILLAI

Under the supervision of

DR. G. NARAYANA PILLAY

BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE
PILANI (RAJASTHAN) INDIA

2006

Acknowledgement

Maintenance of health is the primary objective of human existence. It has mainly two dimensions: one is the natural genetic endowment and the other is the individualistic and environmental influence. The health care system generally depends on various issues. Attainment of this fundamental aspect of human life is the result of interplay between the managerial forces of the system and the beneficiaries associated with it. Very often, this process manifests different kinds of issues in the society. In this context the development of awareness of the masses, their educational background and other facilities provided to them offer positive results. The main problem of the study was to examine the nature and the trends in the changing pattern of the management of the health care service system in the State of Kerala.

I express my respectful gratitude to **Prof. S. Venkateswaran**, Vice Chancellor and **Prof. L. K. Maheshwari**, Pro Vice Chancellor of Birla Institute of Technology and Science, Pilani for allowing me to carryout the doctoral programme at this esteemed organization.

Respectful thanks and profound gratitude are due to my beloved teacher and Guide **Prof (Dr.) G. Narayana Pillai**, for his inspiration, meticulous guidance, expert advice and constant encouragement at every stage of the study, which helped me to complete the research and bring it into the present shape.

My sincere thanks to **Dr. (Mrs.) B. Mahila Mani**, Director, Directorate of Health Services, Government of Kerala, **Dr. P. Chandramohan**, Former Director of Medical Education, **Dr. T. K. Kuttamani**, Addl. Director of Health Services – Planning, **Dr. J. Jamuna Rani**, Zonal Malaria Officer, **Ms. Shoba Ganesh**, State Mass Education and Media Officer, **Ms. V. J. Lathika**, Demographer, Directorate of Health Services, **Dr. K. S. Anil Kumar,** District Medical Officer – Kottayam District, **Mr. K. N. Chandran**, District Mass Media Officer – Kottayam and all other persons from the Health Services department of the State of Kerala for the co-operation and support they extended to me for the collection of the primary data required for the study. My sincere thanks are also

due to all those who have helped me in gathering the data from Directorate of Health Services Library, Central Archives, Secretariat Library, Law Library and University Library. My sincere thanks are due to my respondents of the study without which the study could never have been completed.

I am happy to place it on record my heartfelt thanks to **Dr. Ravi Prakash**, Dean, Research and Consultancy Division, **Dr. S. D. Pohekar, Dr. P. Santhappa Raj** and **Dr. Nirupama Prakash** of Birla Institute of technology and Science, Pilani for their timely help and encouragement throughout the study.

Words are too poor to express my heartfelt gratefulness to my loving parents **Dr. P. G. Ramakrishna Pillai** and **Mrs. Suseela R.Pillai** who led me to this scholastic career and for their everlasting blessings, constant encouragement and untiring unconditional support to this venture. Last but not the least my profound thanks and obligations are due to **Dr. Sreelatha C. G.** who came to my life and walked with me during every stages of this study.

Mahesh R. Pillai

BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE
PILANI, RAJASTHAN

CERTIFICATE

This is to certify that the thesis entitled **Emerging Trends in Health Care Management System in Kerala** and submitted by **Mahesh R.Pillai *ID No. 1999 PHXF405*** for award of Ph.D. Degree of the Institute, embodies original work done by him under my supervision.

8th May 2006

DR. G. NARAYANA PILLAY
Professor

Table of Contents

List of Abbreviations

ARI	:	Acute Respiratory Illness
CHC	:	Community Health Center
DFID	:	Department of International Development
EPI	:	Expanded Programme of Immunization
FWP	:	Family Welfare Programme
GDP	:	Gross Domestic Product
GNP	:	Gross National Production
GRR	:	Gross Reproductive Rate
HFA	:	Health for All
IDD	:	Iodine Deficiency Disorder
IEC	:	Information and Education Council
IUD	:	Intra Uterine Device
JHI	:	Junior Health Inspectors
JPHN	:	Junior Public Health Nurses
NACO	:	National AIDS Control Organization
NCAER	:	National Council of Applied Economic Research
NEP	:	New Economic Policy
NFCP	:	National Filaria Control Programme
NGO	:	Non Governmental Organization
NIHFW	:	National Institute of Health and Family Welfare
NLEP	:	National Leprosy Survey Organization
NSSO	:	National Sample Survey Organization
PHC	:	Primary Health Center
PPI	:	Pulse Polio Immunization Campaign
PRI	:	Panchayati Raj Institutions
RTI	:	Reproductive Tract Infection
SAP	:	Structural Adjustment Programs
STD	:	Sexually Transmitted Disease

STI	:	Sexually Transmitted Infection
TFR	:	Total Fertility Rate
UIP	:	Universal Immunization Programme

Introduction

"Sarve nam Sukhino Bhavanthu". Man from time immemorial has been trying to fight disease. It has been truly said that medicine was conceived in sympathy and born out of necessity. The first doctor was the first man and the first woman the first nurse. Medical knowledge has been derived from the intuitive propositions and cumulative experiences learnt from others. Medicine in the course of its evolution has drawn richly from traditional cultures of which it is a part and later from biological and natural sciences and more recently from behavioral and social sciences. Medicine is thus built on the best of the past.

Kerala – General Features.

Kerala has been a great reservoir of Indian heritage. When other parts of the country were ravaged by continuous attacks by marauders from outside, Kerala had comparatively a history devoid of any large-scale bloodshed and arson, and could preserve its heritage to a great extent. Thus with traditions of Art, Literature, Architecture etc, indigenous systems of heath care, based on Vedic knowledge and ancient tribal wisdom came into practice in the state. The pre-historic trade links with outside world also helped in enriching this knowledge and in bringing to our land, other methods of healing techniques prevalent in distant lands ranging from China to the Middle East and Greece.

Kerala derives its name from "Keram" – the coconut palm. Family medicine or grandma's treatment system, followed through ages by common people, is still prevalent all over Kerala. These are a combination of locally available herbs prepared by boiling or pulverization. Every family in the olden days used simple medical preparation for common ailments of children like cold, fever, headache, toothache, etc. Some well-known families had their own tradition of family medicine even for serious diseases.

There were people or families in every village, who had specialized in the traditional folk medicines.

The State is unique in its scenic beauty, high literacy, cleanliness, rich cultural heritage and political consciousness. The State of Kerala was formed in 1956. Kerala is noted for its many developments outside health care such as growing literacy, increasing household incomes and population aging, which fueled the demand for health care. Implementation of land reforms, establishment of minimum wages in agriculture and industry and better working conditions, improvement in the environment of both urban and rural dwellings, improved sanitation, increased access to electricity and improvement in accessibility of drinking water have all produced a conducive environment in Kerala and made it stand high above with respect to health indicators in India. The State of Kerala being people oriented committed to equitable and universal access to health services adopting a multicultural approach to health with a strong political will to support these health care initiatives. Kerala has a long history of organized health care with the foundation being laid long before 1956. There was a remarkable growth and expansion of the government health services.

Adequate planning and management of resources like manpower, money, materials, skills, knowledge, techniques and time is very much essential health care delivery system to reach people. The concept of management is often considered on par with administration with the major view of getting things done with effective use of resources and manpower. The current emphasis given by many organizations is on the improvement and multifunctional development in all areas of life. Health care system is one among this. The real effectiveness of the developmental services, especially health care delivery system may depend on the utilization or participation of the services or programmes providing these services and these too are not similar among all. Men or women, the old or the adult or the young have different kinds of attractions or interests on these matters. Here the beneficiaries of various kinds manifest different kinds of responds to these. Such conditions depend on the nature of services available to them, which always depends on the nature of administration or real process or trend of management. Hence these aspects were examined in the study.

Health Care Scenario in Kerala

The history of Kerala's health and demographic transitions provide a number of observations on the phenomena of its management. In Kerala, the implementation of social policies in conjunction with the development of health infrastructure resulted in the health and demographic transition within a short span of time. Kerala has achieved remarkable progress in human development as reflected in the high levels of education and health of its population. The level of literacy among Keralites is far higher than the national average. Crude death rate, infant mortality rate and life expectancy at birth in Kerala are comparable even to those in the developed countries. However, the question whether low mortality rates signal better health has generated heated debate in the light of the sequence of changes in the health profile, termed as "health transition, which the developed countries have experienced. Apparently, Kerala also has been passing through an advanced phase of health transition, despite remaining economically backward". [i]

Health is a multi-dimensional and multi-causal variable. It is defined as a "state of complete physical, mental, and social well being" (World Health Organization) [ii]. Being a holistic concept, it is beyond measurability in terms of mortality and morbidity prevalence rates (Becker; 1974)[iii]. The health status of a community depends on its socio-economic, environmental, biological, and political factors. Moreover Kerala's experience in the healthcare pinpoints the importance of education in the health transition.

The picture emerging from a scrutiny of available data on morbidity pattern is a mixed one. On the one hand, the dominant disease group comprises acute infectious diseases including fever, diarrhea, and worm infestation, resembling the morbidity profile of a typical underdeveloped country. On the other hand the emergence of chronic diseases like diabetes mellitus, blood pressure, heart disease, and cancer as the major causes of death of the adult population resembles the situation in developed countries, which have gone through the epidemiological transition.[iv]

In brief, Kerala has made significant advances in health transition in terms of the rate of mortality and pattern of morbidity. True, high morbidity rates still persist. Of the different factors governing the health status, spread of education - especially female education and awareness of medical care facilities have emerged as the most important. The role of the State government as the principal agent in the promotion of education, universal literacy, and expansion of medical care facilities aimed at 'health for all', has to be duly acknowledged. The high rate of prevalence of acute communicative diseases, despite these advances is a cause for concern. The causes for the persistence of infectious diseases - the diseases of poverty - are not far to seek. They are unfavorable environment, lack of access to safe drinking water and sanitary facilities for the majority of the households in the State. Health care systems and the response among the people to this new phenomenon have been undergoing rapid changes in modern society. Health care is a basic fundamental right and it is the important concern at the national, international and community level. Health care management depends on various factors like the variation in culture among people, religious principles, local customs, traditions, attitude of the people towards the disease, sex, age etc which are all important concerns for effective health system management.[v]

The hallmarks of the Kerala model were low cost of health care and its universal accessibility and the availability to poorer sections but the scenario is changing and is posing challenges to this model. Some of this is as stated earlier, re-emergence of diseases as an apparent stagnation of the public health system is marginalizing the poor. As a solution for this is to develop methods for adequate planning and management of resources like manpower, money, materials, skills, knowledge, techniques and time is very much essential for the health care delivery system to reach people.

In this situation it is clear that the public health has two responsibilities: preventing the consequences of diseases and injury and providing health care as stated by Hanlon (1990)[vi]. Health care management involves a lot of connected variables, especially when concerning each and every issue at all levels of activity. This ensures better organizational work. The relative importance of the technical, human, conceptual and design skills may differ at various levels in the organizational hierarchy. Technical skills

are of great importance at supervisory level, and human skills are helpful in frequent interactions with subordinates.

When looking into various factors of health care administration and the various studies in this regard it can be seen that the elements of health services are broadly divided into three major components: structure, process and outcome by Schonic W and Price W[vii]. The structure of health services includes such elements as the number distribution and qualification of professional personal. The process as the care or health services provided to the patient or population in question and outcome as the resulting effect on health of individual or population.

Health is always relative, as will resources. Therefore one challenge of public health officer is to obtain the best return on investment resources. This remains a combination of weighing factual information, including prevalence, incidence, severity, death rates, age of cases, type and cost of interventions with the less tangible interventions of population judgments of public health workers and influence of political process. This context of various factors related to health issues were argued by many authors. We have outlined our study on this framework.

Review of Literature

Health of a community is a matrix of social, economic and political relations. The community-oriented health generated the issue of public health and it gained momentum in the present day discussions among various health professionals. Medical \ health care means service provided directly by the physician or indirectly by others under the direction of the physician to individuals for maintenance and restoration of health and for prevention of disease (Bryan C. Smith: 1979)[viii]. Alleviation or cure is available for many of our health needs but the consumer of health products and services needs to know how to select, locate these services and use health products if he / she is to profit from the scientific advances of recent years. The goal of health care system is to provide the highest possible quality care. Medical care plays an important role in determining the health status of the population. This involves not only the quality of care but the manner in which it is provided including issues of equity access and resource limitation.[ix]

Public Health is the process of mobilizing local, state, national and international resources to ensure the conditions in which people can be healthy. Hanlon John. J (1990)[x] in his comments about public health states it as the process of mobilizing local, state, national and international resources to ensure the conditions in which people can be healthy. Hanlon (1990) commenting on public health and its concerns explains that the four major public health strategies for influencing health are preventing disease and promoting health, improving medical care, promoting health enhancing behavior and controlling the environment. Firstly, the prevention of diseases is the new major area of activity of all organizations in the health care sector. The organized development programmes and activities through health care marketing programmes have contributed significantly for the promotion of health activities. The marketing of activities will bring in better services to public and at the same time involves cost concerns. Medical care plays an important role in determining the health status of the population. This involves not only the quality of the care, but the manner in which it is provided, including issues of equity access and resource limitation. The basic social and economic conditions of existence have a direct impact on people's level and mode of living and thus constitute the foundation of health[xi]. Curran (1989)[xii] further adds that the magnitude and success of public health efforts will vary both in time and place and in different areas but the public health principles remain the same. The actions that should be taken are determined by the nature and magnitude of the health of the community. What to be done will be determined by the scientific knowledge and resources available. What is actually done depends mainly on the social and political commitments of the community existing at a particular period of time and place. Beginning in the 19th century and continuing through the 20th century, industrialization has produced a vast change in the way the people live and correspondingly in the nature of their health and related problems. Recent sophisticated medical technologies and drugs have improved the treatments available to fight diseases but because of the high cost, they have raised the question of the society, ability to provide the same to all which remains unanswered. And a result, prioritizing of health services will become a reality for the future in even the wealthiest of the countries. The resolution of several current health problems requires intensive additional research into the relationship between nutritional factors, health and disease. Public health's focus

in medical care emphasizes the necessity for enhancing a community's health with emphasis on its cost[xiii]. Considering this aspect of health and health services, Jesani Amer[xiv] (1996) express the view that public health relies primarily upon physicians to achieve preventive medical care through public health agencies which have organized immunization activities and often maternal and child health services.

Hanlon (1990) further comments that both public and private institutions tend to be conditioned by the cultural political and organizational patterns of the countries in which they are located. Clinical services for most of the population have been left in the private sector with federal governments paying only for a certain segment of population. Jesani Amer (1996) supporting this view feels that public health has got a population based approach to identify the health problems and in solving them, which is not the characteristic of private sector and which is absolutely essential to the development and implication of effective and efficient public medical care programmes. Harold Koontz (1990)[xv] elaborating on these points explains that health care is always a service industry. The effective management of service industry will take the health resources of the community to the expected standards. In this set-up the forces of change may come from the environment external to the firm, from within the organization or from the individual themselves. It is also true that the environment has a major influence on our perception of secondary levels. But the strategies and policies are closely related. It is the framework of plans, both are the basis of operational plans and both affect all areas of managing. In terms of operational level, it is true that in studying management, it is helpful to break it down into five managerial functions- planning, organizing, staffing, leading and controlling – around which can be organized the knowledge that underlies those functions. [xvi] Whatever the government structure for public health, the need for good management is increasingly recognized. The responsibility for handling budgets that are often substantial and of complex organizations involving many different category of people and maintaining effective relationship with a wide array of health agencies as well as other bodies require great managerial skill. Hanlon explains that public health programmes have an opportunity cost i.e., money used for such purposes cannot be used for other purposes, such as personal and decretory, consumption, public education or highway maintenance. A decision to consume resources for one purpose denies people

the opportunity to spend those same resources on some other needs. Moreover the expenditure for public health services represents an area of considerable expansion. As a whole generally it is felt that as the determinants of health are often to be found outside the realm of human biology, so that the changes leads to the maintenance of health status. Public health centers are generally expected to promote the planning of health services for residents in the area, to collect information on the health of residents, to implement projects for the prevention of public nuisance, to evaluate environmental; health and to conduct laboratory examinations. Public Health centers have been the key institutions for the promotion of public health policies. On many occasions it has been found that public health has evolved for the most part on a piecemeal basis. Usually it has assumed responsibility for meeting those needs not otherwise met by private, local and state government agencies. Thus the role of federal government remains largely to suggest and encourage - some with specific subsidies - actions that are either implemented or ignored at local level[xvii]. With respect to health system management in modern times, health care marketing is a comprehensive programme involving the product or service, its costs, its distributions and the education of the public to influence voluntary exchange transactions that will result in the prevention of disease and promotion of health (Hanlon J.John: 1990). The controlled activities through planned programmes help for an effective implementation of health care strategies through predetermined strategies. In the expert committee report 1993 on health systems[xviii]. It is indicated that planning as a process in health systems helps to identify the various resources available and the alternatives that can be adopted for effective implementation. For planning, the ability to develop alternatives is often as important as being able to select correctly from among them. (Harold Koontz: 1990)[xix]. A managerial activity is always faced by the issue of alternatives and the accuracy in choosing the best among them depends on the situation of demand. Major programmes in the area of health care management can be easily carried out with the available alternatives. Evaluation of alternatives may involve utilizing the techniques of marginal analysis to compare additional revenues arising from additional costs. (Harold Koontz: 1990)[xx]. An essential component of public health strategies are evaluation. The effectiveness of surveillance and intervention programmes changes over time owing to changes in incidence of diseases, the development of new health hazards and development of new technologies for measurement and control.[xxi] In

this situation of health care management, it is clear that the public health has two responsibilities: preventing the consequences of diseases and injury and providing health care for those "not otherwise provided for" (Hanlon J.John: 1990)[xxii]. The health management activities are expected to oversee that the responsibilities are met with and the more effective challenges are taken-up for providing health care for those who are at the lower level strata of society. Koontz (1990) expresses that to ensure this the managers at different levels in the organizational hierarchy are concerned with different kind of objectives. Many a times these objectives vary with the amount of work involved. Health care management involves a lot of connected variables, especially when concerning each and every issue at all levels of activity. This ensures better organizational work. The relative importance of the technical, human, conceptual and design skills may differ at various levels in the organizational hierarchy. Technical skills are of great importance at supervisory level, and human skills are helpful in frequent interactions with subordinates. Conceptual skills are not critical for lower-level supervisors. In this regard, basic plans will be prepared to have a smooth functioning of the organization. The plans are the basis of control. (Harold Koontz: 1990). Successful health information managers are equally skilled in understanding and managing both technical and human factors within the work process. A productive work environment often depends on the manager's ability to manage people. Health care reform provides an excellent example of how hospitals, health maintenance organizations, nursing facilities and all kinds of health providers must be engaging in external environmental assessment to plan strategic direction. More over it has been seen by Chatterjee, Debashis[xxiii] in his management studies explains that the initial stage of planning is necessary for establishing conditions for successful goal setting at all organizational levels. Stage setting is basically the time of data gathering to understand the environment facing the organization and its individual parts. Continuous assessment of the external environment is necessary as an aid to developing action plan for how the institution will respond to the evolving situation in its external environment. Further it needs to be noted that the introspective into these views by Lothan[xxiv] shows that community diagnosis may focus not only on the community as whole, but also on its component groups. A differential approach in community diagnosis is a basic importance for the identification of priorities and the allocation of resources. Lothan (1975) further explains that community surveys can be used as tools for community health education.

Involvement of key community members in the planning and conduct of a health survey may be a useful way to motivate them to a more active participation in the promotion of their community's health. A major theme of this work is the complex interrelationship between population change and human health. Census has much strength and is generally the only source of information for small areas or small population subgroups[xxv]. The health of population in developing countries has an impact on market conditions that affect the economy. A survey that has obvious relevance to health may be useful means of stimulating community's interest and involvement in its own health care. (NCAER, 1991)[xxvi]. A simple way of testing the effectiveness of health programmes is to compare the status of the people who have and have not been exposed to the programme. Considering these factors Hanlon (1990) feels that good public health management requires intelligence, a firm base in epidemiology, an understanding of fairness and specific knowledge about financial management, organization behavior, human resources community planning and organization. Management of public health is made more complex because of the dominance of business ethics. Creative Management of the health sector in future will require the same intense effort that has been devoted to private business these past 200 years. In order to reap the benefits of modernization, Goel S.L[xxvii] states that a growing awareness has emerged of the need for a more efficient administration, management and delivery of health care services, which will have to be more adapted to local conditions. The challenges of health administration which needs the attention of policy makers, planners and health administrators to provide adequate and effective health care to all at the earliest. Effective administration and management call for more intensive preparation and training of senior medical and non-medical administrative personnel, whose functions must be considered in the wider context of national public administration and not just in the mere limited sphere of public health administration. The major share of national budgets in the future will most certainly go to the departments that develop and use the best systems of planning, performance and programmes. Many health agencies have attempted to reorganize public health functions into a product-oriented array of activities. (Hanlon J.John : 1990). Health care administration always faced many shortcomings which includes inability of health care system to make available the services required to meet the demands of those most in need, who are usually too poor and too geographically or socially remote from such

facilities according to Goel. (1983). Further to that the wider differences in resources distribution and services and a municipality of institutions which are unrelated and not functioning as a system added to the shortcomings. Again the health care administration failed in a way by placing emphasis on medical rather than overall health care. The curative aspect of care has been stressed with insufficient priority to promotive, preventive and rehabilitative care, which again resulted in a fragmentation of care provided to the individuals. An effective health approach and strategy requires the co-ordinated efforts of sectors and agencies that can contribute directly or indirectly to the promotion of health care. Soon the co-ordinated efforts would promote health services that will be more efficient and effective from both the standpoint of the providers and that of beneficiaries. The need of coordination is so great that according to Evans J. R.[xxviii], 'it represents the organization in total; nothing less and this happens to state level organizations too. Co-ordination and linkages on a systematic rather than an adhoc basis will definitely reduce costly duplications of effort and lead to increased health coverage of the needy population and neglected area while making the optimum use of resources. Three-quarters of our population are rural, yet three quarters of our medical resources are spent in the towns where three quarters of our doctors live according to Minna Field[xxix]. Three quarters of the people die from diseases which could be prevented at low costs and yet three quarters of medical budgets are spent on curative services. The benefits of modern medicine are available only to the chosen few living in the metro cities where ten to twenty percent of the people are consuming eighty percent of the resources invested in health care in the state. Thus it appears that growing awareness has emerged of the needs for a more efficient administration, management and delivery of health care services, which will have to be more adapted to local conditions. The challenges are almost daunting and cannot afford to fail. The major concern of the various states and areas across the region are mass poverty.[xxx] Health organizations have a difficult time organizing and co-coordinating the work of professionals who wish to work independently. (Levey S and Loomba NP) [xxxi] and it can be seen that the training of health personnel is directed primarily towards medical and institutional care and largely irrelevant to the tasks and functions required outside institutional settings added to the shortcomings according to Goel.S.L. (1982). As everywhere else, education and training of health professionals were accentuates the social distance between health professionals

and the population resulting in an inability on part of providers of health services to identify with consumers. Further, it is observed by Goel (1982) that inadequate assessment of other community resources imposing unnecessary limitations on the scope of action of health services and often preventing them from approaching major community needs in an effective manner always formed a hurdle in providing better health care administration. New factors are introduced into human environment not only by the technical innovations and geologic or climatic changes but also by ever evolving human wants, habits and aspirations. Public Health not only involves, but it actually demands confrontation with received wisdom and established powers.[xxxii] John J. Hanlon (1990)[xxxiii] states that organizational problems in medical care and public health are plentiful. They not only impede the effective delivery of needed services, both preventive and therapeutic, but they preclude effective policy analysis and problem solving at the sate and community levels. Grostick, Sara[xxxiv] is of the view that health information as a study of nature of information and its processing application and impact within a health care system and states that health care industry is struggling to satisfy the most basic and fundamental needs. The purpose of the basic vital statistics programme is to formulate and maintain a co-operative and co-ordinate vital record and vital statistics system in addition to promoting high standards of performance. This was supported by Duncan WJ (1994) [xxxv]. Health outcomes are usually as the effects of health care or health service activity on health and well being of individuals and population. When looking into various factors of health care administration and the various studies in this regard it can be seen that the elements of health services are broadly divided into three major components: structure, process and outcome. (Schonic W and Price W: 1977)[xxxvi]. They defined structure as the human physical and financial resources available to provide health services. The structure of health services includes such elements as the number distribution and qualification of professional personal. The process as the care or health services provided to the patient or population in question and outcome as the resulting effect on health of individual or population. The health status and quality of life assessment instruments can in general be classified along many dimensions, but perhaps the two most important are the range of population or domain for which the instrument is intended and the type of score produced on the application of the instrument. People realize that the “Universal Principles” of good management do not apply equally to all

situations. All these principles depend on how people behaving, communicating and working together in a way that makes for the economical achievement of organizational goals.[xxxvii]

A better awareness of the causes of behavior can lead not only to a better understanding of the nature and role of managerial work but also improved effectiveness. (Berg, Per-olof: 1985)[xxxviii]. During the last ten – fifteen years, a number of studies have looked at what makes management effective. It can be seen from various studies related to behavior that behavioral factors figure highly in their findings. The views on the meaning of effectiveness vary from highly philosophical to highly pragmatic nature. Effective managerial work brings about the desired results in terms of the purpose of organization and in terms of task requirement of the managers job. At the lower levels of responsibility, much of the effectiveness of an individual is determined in advance through targets, schedules, resources, timings and so on that are preplanned and often impose tight limits of flexibility. At higher levels, particularly in top management, individual action and organizational performance become indistinguishable. Considering these factors of management in its seriousness, Gardner[xxxix] and Drucker[xl] offer certain advices to managers, which are more effective. Gardner states that the key elements of effectiveness are time, delegation, planning, decision-making and management controls. For Drucker the effectiveness can be learned through managing time, establishing priorities, building on strengths and making good decisions, which are essentials. Science it is said relies on inductive reasoning while old-fashioned logic is concerned with deductive reasoning. Management should expect a wide range of ideas, some sound, some impractical, some insignificant and some very profound. The ideas in total should represent several functional areas. In organizational life, politics is more concealed, encompassing shifting alliances of individuals and departments, seeking to influence decisions and the distribution of resources. Mayes and Allen[xli] (1998) held the view that many managers resent to such internal politics, seeking it as a diversion from the main task and a means whereby pressure groups can bring about bad decisions that weaken the effectiveness of the organization. Managers may join together in collations to push things through and to acquire more power or they may react defensively in collation to block new initiatives, which they dislike. Based on this, Mintzberg[xlii] (1979) views

organizational behavior as a power game in which various players seek to control the organizations decisions and actions.

In a different context, John Evans and his colleagues[xliii] (1994) describes the obstacles to progress as the uneven distribution of health services, lack of appropriate technology, pharmaceutical policies, bad management and inadequate or in appropriate government programmes to finance needed services. Elaborating the qualitative and quantitative aspects of management, Duncan W. J.[xliv] states that management and administration refer to the organizational activities that involve goal formation and accomplishment, performance appraisal and the development of an operating philosophy that ensures the organizations' survival within the social system. On this particular point, Hanlon[xlv] (1990) states that in health management programmes the orientation is towards an individual autonomy and decision-making. The work of such professionals is standardized and efficiency depends on the ability to classify problems and standard solutions; the urge to solve problems by diverging from accepted norms is necessary in administration but is not a characteristic of clinical professions. According to Akio Morita[xlvi] of Sony Corporation the primary function of management is decision making. Herbert Simon states that decision-making is the heart of executive activity. Still further, Udai Pareek[xlvii] in his various studies focuses on two things that health managers need to know about decision-making. The first has to do with normative decision theory, which attempts to assist managers by providing ways to make better decisions. In a sense, normative decision theory adapts the scientific methods and applies it in making choices that are relevant to managers. The second thing that is useful for managers to know about decision-making is how decisions are made. This has been the goal of behavioral decision theory. This view of managerial decision-making is more consistent with Mintzberg[xlviii] (1979) as it focuses on the manner in which the decisions are made. It may be noted that, McGinnis[xlix] recognized the need for administrative reforms, admitting that poor quality lymph and inadequate training and supervision of local vaccinators caused injury and death. Every time when management plan, they take into account the wants and desires of members of society outside the organization, as well as the needs of material and human resources, technology and other requirements in the external environment. Public Health and its administration according to Pickett George[l] involve economics, sociology,

psychology politics law statistics and engineering. Inadequate preparation in management skills of many health professionals who have occupied public health administrative post in the past has induced some governing authorities to call up on as "managers" rather that public health expert for key positions in public health. The ideal is to combine the talent of leadership in public health with managerial skill.[li]. As an important functional step in the management of practice of public health, health education efforts increased visibility of public health departments. In his study, Grant[lii] points out those public health officials must develop more imagination, political skill and knowledge of human motivation and behavior. In a free society public activities ultimately rest on public understanding and supporting, not on the technical judgment of experts. "Expertise is made only when it is combined with sufficient public support a connection acted upon effectively by the early leaders of public health". The argument that public health departments should be more effectively managed have clearer and more specific goals and objectives and make stronger alliances with schools and other training programmes in public health has had considerable influence. (1990).[liii] Berman with Kutzin J[liv] have identified the need for health education. Every stage of life, every type of person or social group and all occupations and profession are appropriate targets of programmes for the prevention of illness and disability, control of diseases and promotion of wellness. (Hanlon J.John: 1990)[lv]. In most situations medical schools are poor place to learn how to be an effective administrator, the orientation towards individual autonomy and decision-making. Because social classes are a powerful determinant of health, Max Weber[lvi] is usually held accountable for the invention of the term bureaucracy. His influence on the organization of governmental agencies has been strong but in the last two decades, the inflexibility of the bureaucracy has increasingly yielded to the heterogeneous pressures of environment, purpose and personality. (Hanlon J.John: 1990). In short, public health was a vehicle for carrying civil service systems into local governments. The operations of such systems are expensive, involving classification, task analysis, recruitment and testing. Education is both a measure of intellectual training and an indicator of socioeconomic status. Reflecting opportunity and effort in the early decade of life it is the most important and basic qualification in the labor market. Kothari, Ranjini[lvii] emphasizes that both intellectual training and vocational preparations are required in matters of administrative process. Education identifies the knowledge; literate skills and credentials that

individuals qualify as they come through school, college and University. In a thoroughly meritocratic society, education represents something close to personal ability, aptitude, skill and intellect. It is the education of the masses which leads to identification of various sources of information in health care systems. Hanlon has further tried to explain that the alternative to viewing health as the dependent product of the social and economic organization is to see it as an independent force in socioeconomic development and in social stratification. Comparison between societies offers one means of identifying the action of non-material factors in health.

Rokeach.M[lviii] viewing the phenomena from a different angle, states that sex is a fundamental source if health stratification. The material difference between men and women is self-evident at two levels. Biological sex has a material reality independent of cultural norms, which prescribe the appropriate behavior for men and women. Thus the role of men and women in deciding the issues related to health and health care become very important. It has been stated that, when health care management is considered as an organizational process it states that occupation is a powerful determinant of social status viz the prestige the person posses as viewed by others in the society. This was stated by Garg Pulin K and Parikh Indira[lix] in their study related to organizational climate. Occupation in the higher reaches of the occupational hierarchy confers all kinds of benefits besides the high earnings that usually go with status. When occupation is considered as the determinant of social status, a contrasting approach to personality, idiographic approach was placed forth by Bannister and Mair[lx]. The approach emphasis the unique development of each individual. This approach is useful in counseling, training and developing individual at work and gives insights into more dynamic aspects of personality such as changing moods, expectations and morale. According to D.Banerji[lxi](1974), health is always relative, as well as resources. Therefore one challenge of public health officer is to obtain the best return on investment resources. This remains a combination of weighing factual information, including prevalence, incidence, severity, death rates, age of cases, type and cost of interventions with the less tangible interventions of population judgments of public health workers and influence of political process. Thus it is highly essential to search for the various factors related to health systems management like the awareness of the population related to health

management programmes and the sources of information in this regard. This context of various factors related to health issues were argued with reference to the study made by Honey.P (1980)[lxii] in Solving People-Problems. The argument states that public health had borrowed and adapted knowledge from the physiological, biological, medical, physical, behavioral and mathematical sciences and is quick to recognize the potential of new fields such as computer sciences for improving, promoting safeguarding maintaining health of community. When commenting on the various problems related to health and health hazards, Hanlon[lxiii] (1990) is of the opinion that improvements in health of the public in the future will be achieved by inducing public awareness and concern which results in the introduction and passage of effective legislations and regulations that are implemented by professionals committed to the principles of public health. The effectiveness of such efforts in the past and the realizations of cost effectiveness of preventive strategies for promoting and maintaining health have brought renewed attention to public health and have set stage for new public health revolution. The term prevention must encompass community based preventive services and prevention oriented social and economic policies. Included in the social determinant so mortality are occupational stress, environmental hazards, dangerous neighborhoods, poverty and unemployment. (Roger Detels: 1997)[lxiv] . He further states that the public health centers are generally expected to promote the planning of health services for residents in the area, to collect information on the health of residents, to implements projects for the prevention of public nuisance, to evaluate environmental; health and to conduct laboratory examinations. Management finally determines whether or not a group of people actually benefits from a given body of public health knowledge.[lxv] A challenge to public health leaders is to make the case for evaluation. Shortage of resources often results in shifting from evaluation to the operations and it requires tenacity to demand measure for the impact of interventions. When such information is available it is possible to change tactics rapidly to train additional people to measure effectiveness of each action. Moreover Breslow L and Breslow N[lxvi] observe that one challenge in public health today, when the increasing gaps between the rich and poor is provided, is to find innovative ways to present standard deviations with the clarity through presentations of mean or average. Another challenge is to link pleasurable activities to the daily decisions that must be made for better health. Another challenge that should be mentioned with respect

to the use of the new tools is to identify ways of extending public health activities with out major additional resources. In general and most commonly employers in the field who are eager to go beyond price comparisons to compare health outcomes are monitoring health delivery programmes[lxvii]. Hanlon (1990)[lxviii] feels that public health professionals are required to promote the long-term health of the public by reduction of problems such as infant deaths, environmental pollution, occupational hazards and heart disease. Information on disease and health is the basis of rational public health decision-making. Individuals and community behaviors as well as circumstances and conditions determine the occurrence of disease and risk factors for ill health in population. Thus the social sciences play a major role in public health is to prevent and control diseases. The demands on public health include both urgent calls for immediate action and persisting needs for the long-term improvement of health of the society. This is the viewpoint of Russel[lxix]. He feels that typically public health professionals will use the methods of epidemiology, biostatistics, microbiology and toxicology to identify the cause of outbreak of disease, its magnitude and strategies for control and uses strategies of sociology and behavioral intervention to implement control measures. The role of social network and its specific values, opinions, attitudes and cultural background act to suggest, advise or coerce an individual into taking or not taking a particular course of action regarding health care (William C Cockerham: 1978)[lxx.] It has also been felt that (Asha.A.Bhande[lxxi]) in a society with ageing population where various kinds of health needs increases every year, there is consensus that it would be almost efficient in cities, towns and villages when to respond to these doing needs. Thus all these examinations related to health care explain that public health is almost synonymous with control of infectious diseases. Much less attention was paid to injuries, violence, chronic diseases, environmental conditions, obesity and other conditions. It is the need of the public, government or the private voluntary undertakings to fulfill healthy living of the community. The needs of the people vary with response to various factors namely age, educational status, job, living conditions etc. Life table analysis is a core demographic technique and life tables provide one of the most powerful tools for analyzing mortality and other non-renewable processes. When whole population of defined geographic area is considered the only means of entry are birth or immigration and only means of exit are death or emigration. Smith P[lxxii] and Webster C[lxxiii] narrate in their views on various phenomena related to

health. Generally, population growth is obviously a function of the balance of births and death and the extent of net migration. Consumer power is dictated by income and property. It is the means by which individuals and families literally purchase their socio-economic address, their immediate environment in the society at large. In the study of health, class is used to determine points on a range of probabilities for healthy human growth, development and longevity. There is no perfect measure. Occupation, education or tenure is all possible conditions each producing a slightly different division of range (G.Austin)[lxxiv]. Thus it is further evident that the variables related to health care vary with people and age. This has been clearly underlined by Mossley W.H[lxxv] et al. Thus at the outset we can elaborate that management creates change, utilizes available human and material resources productively and is the custodian of welfare of the enterprise. Management further ensures better quality of life for human beings through increased productivity and employment. (Sudha G.S: 1994)[lxxvi.] The people are responsible for the progress or the problems of any organization. Staffing provides the management proper personnel to the management who are competent, qualified and with the essential skills to perform the job efficiently. This needs manpower planning and manpower management and the methods to analyze the effectiveness of the management programmes for the organizers as well as the beneficiaries. (Satya Raju R., A Parthasarathy: 2000)[lxxvii.]

The health care delivery system is not able to organize national approaches to surveillance, analysis, community intervention programmes and many of the duties of the public health departments. Like wise public health departments are not ideally suited to the provision of comprehensive medical care. However both systems could be strengthened by better co-ordination. Specifically for the public health community great opportunities are available to improve disease prevention through health care delivery programmes. Increasingly employers who are eager to go beyond price comparisons to compare health outcomes are monitoring health delivery programmes.

Everywhere, patterns of illness vary in relation to a variety of socio-demographic indicators including age, sex, socio-economic factors residential and geographic conditions (Carl L and Joyce E Berlin: 1974)[lxxviii]. Anderson and his associates (1973)[lxxix] have developed a descriptive multivariate model that they use to account for differences

in medical care utilization. They view utilizations a consequence of predisposing, enabling and illness variables. Predisposing variables include demographic indicators (age, sex and marital status), socio-structural variables (race, education, religion and ethnicity) and knowledge of health care.

In a different context it may be stated that patterns of utilization depends on factors as levels of illness, age and sex of the population, presence or absence of health facilities, family income and the perception of the providers. Use of service is basically a function of age and sex (Freeman: 1963) [lxxx.] Hence it is quite likely that the beneficiaries of health care may vary on these lines.

According to Tesler, Rochard, David Mechanic et al (1976) [lxxxi] the sex variable is more powerful. Cultural learning, dependency patterns, life situations and modes of expressing distress etc are relevant to understanding of different behaviors with regard to health among men and women. Ethnic membership, family composition, pure pressures and age and sex play an important role towards the attitudes of awareness and acceptance of medical services. Mechanic David (1968)[lxxxii] and Mehtha S.R (1992),[lxxxiii] studied the predictors of health status among the elderly and the use of medical care by this age group. They found that aged people irrespective of their infirmity prefer an attempt to be active and self-sufficient because they feel that an admission of illness is a sign of weakness and thought that the reasons many old people do not use medical care are primarily psychological.

The foregoing discussions have brought in various aspects of health care management system in modern time. The study has been framed on these lines, which are discussed in detail in the following sections.

***

Methodology.

Health status of any population has two broad influences that ultimately shape it: one a natural, genetic endowment and the other as the environmental influence. Social processes and behavioral aspects of individuals in the changing social environment

always bring about new areas of enquiry on the health care system. These problems are always complex and varied. Utilization of health care facilities by the people in the modern society open new areas of interests. Emergence of formal institutional medical care brings forth new problems and trends in the health care service sector. Modern society witnesses specific and very clear ideas about the needs and problems it faces.

The Problem: -

Health is influenced by a number of factors such as food, habits of people, housing, sanitation and the life style. The frontiers of health extend beyond the narrow levels of medical care and health care includes a multitude of services provided to the communities and individuals by the agents of health services for the purpose of promoting, monitoring and maintaining health service. Utilization of health care facilities depends mainly on the awareness, education and acquisition of health related information by the masses. The problem of the study is to examine the nature and the trends of the changing pattern of the management of the health service machinery in the state of Kerala. The patterns of the utilization of health care facilities by the beneficiaries and the changes in the health care delivery system under the new trends that have developed over time also form part of the research.

The objectives of the study are to assess the pattern of the current trends of health care management in the state. The study aims at the assessment of the nature and extent of the emerging trends in the health care system and its acceptance by the community at large in the state. The various sources of information on health care service and the extent of community participation will also be targeted here during the research. The contribution of the beneficiaries in health care programmes at various levels will also form part of the objectives of the study.

Hypotheses: -

1. The response to health care programmes differs on the basis of the sex of the respondents. Men and women differ in their actual responses towards health

care programmes. Men show more interest in participating health care programmes at the local region.

2. The process of developing awareness may not be the same among all sections of the society. The awareness of people on health care programmes depends on the difference of sex among the beneficiaries. Men develop more awareness on health issues.

3. Nature of people's participation in health care programmes varies with respect to the sex difference of beneficiaries. Women participate more frequently in health care programmes. Participation of beneficiaries in health care depends on the type of programme.

4. Age of the beneficiaries and their health care enjoyment are related. Development of awareness on health care facilities depends on the age structure of people. Younger members of the community tend to avail health care programmes. Youngsters gain more awareness on health care facilities in the community. Aging among individuals influence their response to health education programmes.

5. Elders tend to develop awareness on health care programmes in society. Age of members and their actual involvement in various health care programmes are related. The utilization of health care techniques very often depends on the age of the beneficiaries attending the health care programmes.

Definition of Concepts: -

Health Care: **-** In this study, health care refers to any programme of health service of both preventive and curative kind provided to the individuals. This includes all facilities of medical and allied services needed to generate and maintain the health status of the people.

Hospitals: **-** Hospitals are health organizations to provide complete health care to the people, both curative and preventive through inpatient and outpatient services.

Hospital Services: **-** They include all types of clinical and paramedical services provided by admitting the sick to the hospital either in the general / pay wards for medical care.

Hospital Utilization: **-** It is the manner in which people utilizes the services available in the hospital which includes medical, non-medical and allied medical services in the institution.

Public / Government Hospital: **-** This refers to those hospitals or medical care institutions that are managed and financed by the State Government

Private Hospital: **-** They are medical institutions run on a voluntary service or commercial basis, founded and managed by an individual or group of individuals on private funds.

Health Care Management: - It is the management of health care services either at the public or private sector.

Health Care Beneficiaries*:* - Members of the society who are utilizing health care programmes and who derived health care benefits from such programmes.

Policy Makers: **-** Programmes of any kind are formulated based on a policy of the governing institutions. These institutions may be under the government sector or the private sector and will have a top-level management system to decide upon the organizations' activities. Such bodies responsible for the organizing, developing and implementing the programmes are known as policy makers.

Rehabilitation Programmes: - Health of a person is said to be proper when he is mentally and physically fit. People are usually rehabilitated in case of any kind of physical or mental disturbances. There are programmes to rehabilitate the mentally and physically ailing persons for their betterment.

Population and Sample: -

Population for the study included the health care beneficiaries and policy makers associated with the health care programmes at various levels of activity in the state. The

policy makers included were the people working in the government and private health care institutions. These respondents included officials from Directorate of health services, District Medical Officers, Medical Superintendents, Mass Media Officers, Health Education Officers, Public relations officer and others engaged in the profession. The beneficiaries were selected from among members who have actually participated or who were instrumental in organizing health care programmes covered in the study. There were 423 officials / representative staff from the government sector, 345 such members from the private sector who were associated with the various programmes either at the top or at the middle level of management and 320 persons as beneficiaries who actually attended the health care camps and meetings. Thus there were 1088 cases in total. Systematic sampling procedure was adopted for the study. The sample items were selected at random from the three revenue districts namely Thiruvananthapuram, Kollam and Allappuzha from the south, Kottayam Idukki and Eranakulam from the central and Trissur, Kozhikode and Kasargod from the northern region so as to have adequate representation from all areas for the purpose of data collection. As the population to be covered for data collection was so wide, it was decided to take twenty five percent sample for the study. Accordingly the sample items were to be fixed 272 from the population. Among these 272 items, 19 items could not be covered for data collection, as these members were either repeatedly absent or not responding to the interviews. Thus collection of primary data was to be confined to the remaining 253 cases.

Pilot Study: -

A pretest was carried out among 40 respondents at various health care camps and other sources making use of an interview guide prepared for the purpose. On the basis of the findings of the pretest, final interview schedule was reformulated to make an effective research tool for collection of the empirical data proper for the research.

Data and Data Collection: -

Data required for the study included both primary and secondary types. Primary data was collected through personal interview with the help of interview schedule prepared for the fieldwork at the selected sources. Major tools depended on for the data collection included Interview Schedule and Personal Interviews. Discussions were held with the

officials at various levels and important personnel in the field of health management functioning in the State to enable the acquisition of primary data required for the research.

Secondary data was obtained from all available sources of published works on the problem of research and various other sources like the official records of the Directorate of Health Services and related institutions, Central Archives and similar sources relevant to the research.

Dependent and Independent Variables: -

The major variables used for the analysis of the data as dependent and independent variables included sex of respondents, professional experience, age, education, type of management and health care programmes.

Analysis of the Data: -

The data was analyzed on the basis of the relationship between the variables fixed. The data was classified, codified and cross tabulated to proceed with the analysis. In relevant cases suitable statistical tests and techniques were applied.

***

Health Care Administration in Kerala

India has a long tradition of health care service and the healing system. The Vedic influences on medicine and the practice of the same had derived a kind of social and cultural tie in the pre-British Indian society. The British rule in India had its impact on the practice of Indian medicine as in the case of other areas of Indian culture. The patronage was now shifted to the western system and this shift was amply supported by the great medical revolution that was taking place in the western countries. Hospitals as they are known today arose from a nearly unbroken tradition dating back to at least 1700 years[lxxxiv]. Hospitals were started by Christian missionaries primarily as institutions for the practice of charity. As the needs changed and the political environment was also undergoing change, religion and religious behavior became influenced by secular beliefs. It was only in the 17th century, that physicians acquired a virtual monopoly over the existing body of medical knowledge that places them in distinct positions. Physicians now have become more influential in society assuming potential role in medical and social care. Medical education and health care services were available for the privileged upper class. With Independence and formation of Ministry of Health in free India the need for medical services for the general population was recognized. Health care systems have hence been streamlined so as to provide health care to all. Health care systems and the response among the people to this new phenomenon have been undergoing rapid changes in modern society. Health care is a basic fundamental right and it is an important concern at the national, international and community level. Health care management depends on various factors like the variation in culture among people, religious principles, local customs, traditions, attitude of the people towards the disease, sex, age etc which are all important concerns for effective health system management.

History of Medicine

Health is a basic theme to all cultures. It is said that those who failed to read history are destined to suffer the repetition of its mistakes. Henry Siegerist[lxxxv] the medical historian has stated that every culture had developed a system of medicine. In ancient times health and illness were integrated on cosmological and anthropological lines. The primitive man attributed disease, human sufferings and other calamities to the wrath of Gods or

supernatural influence of stars and planets. So the medicine he practiced consisted of appeasing Gods by prayers, rituals, sacrifices, witchcraft and other methods to protect him from calamities. Later came administration of certain herbs and drugs, which was followed by more improvised, and flinted instruments with which he performed amputations, circumcision etc that were all intermingled with superstition, religion, witchcraft and magic. Folk medicine is a part of every culture and Indian society is not an exception to this. If we look around the world, we still hear of various forms of primitive medicine, which still persists in many parts like Asia, Africa, S.America, Pacific Islands etc. Though primitive man is extinct, his progeny the so-called traditional healers exist even today. Various civilizations like the Chinese Medicine considered as the worlds' first organized body of medical language, Egyptian Medicine where the doctors was said to the best of all according to Homer, Greek Medicine which gave scientific direction to medical thought and produced some of the finest men in medicine like Hippocrates and the Indian Medicine developed during prehistoric times with specialized branches.

Indian Medicine

Medical historians are of the view that Indian medicine has played a significant role in Asia. Ayurveda and the Siddha system of Medicine are truly Indian in origin. Ayurveda originated during the Vedic times (5000 B C). Ayurveda implies the "knowledge of life"[lxxxvi]. The celebrated authorities in ayurvedic medicine are Atreya (The first great Indian physician and teacher), Charaka (The man who piled the Charaka Samhitha which mentions around five hundred drugs) and Sushurtha (Sushurtha Samhitha – The father of Indian Surgery) apart from Medicine, Pathology, Anatomy, Midwifery, Midwifery hygiene etc. It is said that early Indians set fractures, performed amputations, excised tumors, repaired hernias and excelled in cataract operations[lxxxvii]. The golden age of Indian medicine lasted until 600 A.D when the mughals invaded India. Unani medicine was introduced by these Muslim rulers to India in the 10th century and enjoyed state support till the 18th century when the British set foot in India. Homeopathy, which originated in Germany, found a foothold in India in the 18th Century and currently both Unani and Homeopathy have become the part of the Indian culture and the medical system

Evolution of Modern Medicine

The fifteenth century was marked by revolutions, political, industrial, religious and medical. It was an age of individual, scientific endeavor. Various theories were put forward during this period. Fracastorius (the father of epidemiology), Andreous Vesaelius (the first man of modern science – raised Anatomy to a science), Ambreous Pare (Father of Surgery) all contributed to the elevation of Medicine as Science. This advent continued through the 17th and 18th centuries with even more exciting discoveries like Harvey's discovery of circulation, Jenner's vaccination etc.[lxxxviii]

In the mid nineteenth century there was a great new thinking led by England in the field of health. This led to the enactment of the Public Health Act, which was born out of the realization that the state has a direct responsibility for the health of the people. With this there emerged the concept of Public Health, which spread to America and subsequently followed by France, Spain, Australia, Germany and other nations. After the First World War underdeveloped countries like Turkey, Yugoslovakia also had come to the mainstream of public health. The establishment of World Health Organization, providing a health charter for all people provided a great fillip to the public health movement in all the countries and particularly in India.

Modern Medicine: -

After 1900, the approaches to the field of medicine moved faster towards various dimensions including specialization and a number of rational approaches to the treatment of disease. Realization of the fact that apart from the germ theory there are other factors in the etiology of diseases like social, economic, genetic, environmental and psychological factors have contributed to the growth and development of health care in the modern society. Medicine from its earlier stand 1000 years ago moved to modern medicine, which is around 100 years old and has two branches namely curative medicine and preventive medicine under it.[lxxxix]

Allopathic Medicine, which came into being in the middle of the twentieth century, brought about profound changes where the disease was treated by drugs. A vast body of technical skills, medicaments and machinery not only to treat diseases but also to

preserve human health came into existence. Medicine is now in the stage of microspecilisation. Contemporary medicine is no longer solely an art and science for the diagnosis and treatment of diseases. It is also the science of prevention and promotion of health. The scope of medicine has expanded during the last few decades to include not only health problems of the individual but those of the communities as well. In view of the glaring contrast in the picture of the health of the developed and developing countries in the year 1981 the World Health Organization members pledged themselves to an ambitious target to provide "health for all". Medicine will continue to evolve so long as man's quest for better health continues.

Administrative set up of the health systems:

Ancient system of medicine was considered as a sacred skill. The right to practice medicine was vested with a section of people or individuals based on the caste or culture. The medicine man was either the priest, the herbolist, the magician who undertook various methods to cure man's disease and bring relief to the sick. During the middle ages in Western countries the religious institutions called the monasteries headed by monks, saints and abbots helped to preserve medical knowledge. They also rendered active medical and nursing care to the sick.

In India[xc] during earlier times the knowledge of health granted through the Vedic ages with the Lord Dhanwanthiri as its head was the exclusive right of the members of a particular caste. This knowledge was transcended through generations. Every king had a physician in his court and every village had a healer who attended to the needs of the people and the system of medicine practiced was either folk medicine, ayurveda or unani. These traditional healers enjoyed the patronage of King who was the head of state. As political revolution took place parallel to the medical revolution, scientific thinking in the area of medicine and medical administration began to originate. England was the pioneer in this field and with the spread of Christianity through legions and missionaries, this concept of scientific medicine reached the shores of India. The first hospital on record was in England built in 937 AD. Medical education was now being developed on the lines of scientific, rational and secular thinking.

Evolution of the Health System in Kerala: -

Kerala has been a great reservoir of Indian heritage. When other parts of the country were ravaged by continuous attacks by marauders from outside, Kerala had comparatively a history devoid of any large-scale bloodshed and arson, and could preserve its heritage to a great extent. Thus with traditions of Art, Literature, Architecture etc, indigenous systems of heath care, based on tradition and ancient wisdom came into practice in the state. The pre-historic trade links with outside world also helped in enriching this knowledge and in bringing in other methods of healing techniques prevalent in distant lands ranging from China to the Middle East and Greece. With the colonalisation of India by the British, Western medicine was introduced, initially among the ruling class.

In the beginning of the nineteenth century, the rulers of the states of Travancore and Kochi took the initiative in making the western system of health care available to their subjects. These states later formed the State of Kerala combining the then Malabar district, which was under the direct rule of the Madras Presidency of that time.

In 1810 when Rani Gowri Lakshmibai took the reigns of the erstwhile Travancore State, realised the modernity, effectiveness and usefulness of western medicine, thus making the same available to all the people in the palace. In 1813, first resident doctor was appointed and under his supervision, vaccination was introduced. At that time the local people had viewed vaccination with fear. The Rani and the family members got themselves vaccinated first setting an example to the venture. In 1816, first charity dispensary of the State was opened within a room of the royal palace at Thiruvananthapuram. In 1818, a palace dispensary was opened to serve the medical needs of the soldiers. In 1837, the first Resident Surgeon Dr. Eaton took charge and a charitable hospital was opened. In 1847, with the ascension of Marthanda Varma to the throne, allopathic medicine became more popular in practice due to his personal interest. The King during his spare time started studying western medicine. All these years the doctors attending the people in the palace were called Durbar Physician. During the reign of Marthandavarma, the people were slowly being enamoured by western medicine and this form of medicine became popular. In 1860, King Ayalyam Thirunal Maharaja felt that

there was a need for bigger and better place for tending to the medical needs of his subjects. The first General Hospital in Malabar region was opened in Kozhikode during 1845[xci]. In November 1865, the first General Hospital was opened in Travancore at Vanchiyoor by the King and he stated that 'Health of the subjects was no longer an individual need but the responsibility of the State'. In the same year separate women's wing and ophthalmic units was also opened at Thiruvananthapuram.

During the year 1868, under the directions of the Durbar Physician, a request was placed before British Government asking for more medical schools to be started so that trained people could be sent to villages to administer primary care. Thus in 1869, a medical education department to train people in primary health care was started at Thiruvananthapuram. Realising the importance of the shortage of medical personal, in 1887, Diwan Ramarao requested for more qualified professionals from the Indian.Medical.Services.When considered the importance of the public health needs, the then government established the State Sanitary Department during 1895 and appointed a Sanitary Commissioner. In the year 1896, the functions of the medical officers as well as the Durbar physician was streamlined. The Durbar physicians from the Indian Medical Services were appointed for a period of five years whose responsibilities included both administrative and clinical duties. The medical officers were directly working under durbar physicians. It was the function of the District Inspector to collect and compile the Birth and death registration details, evaluate the effectiveness of the sanitary programmes, conduct the vaccination programmes as well as make the essential drugs available to the houses. By 1915, there were 27 hospitals and 26 dispensaries functioning throughout the Travancore region[xcii] at that time. Health units incorporating many units of primary care was started in Kerala as early as 1928. During this time, mission hospitals under the auspices of the Christian churches were functioning at a rampant pace. Young women from Christian communities had started taking up nursing career long before than in other states.

Health administration reports were prepared every year from 1928 by the Chief Medical Officer in charge of the Travancore and Cochin Regions and the same was submitted to the officer in charge of Health matters at Madras duly attested by the rulers of these

regions thus setting a precedence of health system administration on the lines that were being followed in England at the time. The appointment of the Surgeon General of Travancore in the year 1930 to look after the medical and administrative duties of medical units was a step in that direction.

As per the request of the erstwhile Maharaja of the State, Department of Public Health services were established in the state during 1929, under the guidance of Rock Feller Foundation. On September 1, 1933, a new Public health Department came into existence in the Travancore state and later established a Public Health Laboratory. In 1933 the Sanitary Department established during the reign of the Maharani, was merged with the Public health department and the post of sanitary officer ceased to exist. Thus in 1934, the new post of Director of Public Health came into existence.

In order to establish and maintain public health programmes, a special unit was established at Neyyattinkara and from 1937 onwards the officer on duty was designated as District health officer. With the introduction of the Travancore Education Reforms Committee in 1937, School health programmes were implemented in the state to make children aware of health care measures. As a part of the publicity measures, there were slide shows during cinemas, utilised print media to convey the people either through bit notices or through magazines. These publicity measures came into effect during 1937. Considering the importance of women's health, in 1937, the then government established a women and child care centre adjacent to the General Hospital at Vanchiyoor, Thiruvananthapuram and appointed one lady doctor and a number of midwives for assistance. In 1937, an Indian Durbar Physician was appointed and subsequently in 1938 the office of the Durbar Physician was merged into the position of the Surgeon General. Under him were one surgeon, one deputy surgeon and seven assistant surgeons. The post of district health officer was created under whom there were one assistant surgeon, four public health nurses, ten midwives, six sanitary inspectors and all these people functioned under the supervision of the Surgeon General. They all worked at the General Hospital in Thiruvananthapuram. During 1939[xciii], there were 32 government hospitals and 52 dispensaries in the state all providing free medical treatment to the patients. After

Independence, i.e., in 1947 when India became a free country, the Government of India instituted a separate Ministry for Health.

History of Health System in British India and its administration:

It was during 1757, the British established their rule in India. In 1859, the first step to public health started with the appointment of the Royal Commission to investigate the poor health of the British soldiers stationed in India. This lead to the establishment of the Commission of Public Health. In 1864 the civil surgeons and district medical officers based in the three major provinces of India i.e., Bombay, Bengal and Madras (under which Travancore and Cochin belonged) became ex-officio district health officers[3]. In 1881, the first All India census was taken and by 1885 the Local Self Government act was passed. In the year 1912, the Government of British India decided to help the local bodies with grants and also sanctioned appointment of health officers. In 1919, the first step towards decentralization of health administration in India took place following the Montague Chelmsford constitutional reforms. It constituted a Minister elected by the health service professionals under whom the Surgeon General, Deputy. Surgeon general, Assistant Surgeons, Junior Medical Officers, House Surgeons work under. In 1935 the Government of India Act was passed revitalizing the 1919 Act.[4] This gave greater autonomy to the provinces. All the health activities were grouped under the three lists i.e., federal, concurrent and provincial which were under the control of the Central, Central cum Provincial and Provincial Governments respectively. A central advisory board was set-up with the Public Health Commissioner as the Secretary and the representatives from the Provinces and Indian States as its members. The next major development was in the year 1943 with the constitution of the Health Survey development Committee (Bhore Committee) to survey the existing position in regard to the health conditions and health organizations in the country and to make recommendations for the future development. The committee studied the health of the nation under Public health, Medical relief, professional education and international health. In 1946, this famous report was submitted. The committee observed, "If the Nations health is to be built, the health programme should be developed on a foundation of preventive health work and such activities should proceed side by side with those concerned with the treatment of the

patients."[xciv] Some of the important recommendations of the committee includes: integration of preventive and curative services at all administrative levels and the development of Primary Health Centers in two stages i.e., in short term and long term measure for the attainment of reasonable health services based on the concept of modern health practice.[xcv] The committee's report continues to be a major document and has provided guidelines for national health planning in India.

Health System after Independence & its administration:

India attained independence in 1947 after a long struggle. A democratic regime was now in place with its entire machinery geared to a new concept, the establishment of welfare state. Improving health of the people and widening the health measures were the priorities of the new government. In 1947, the Ministry of Health was established at the center. The posts of the Director General – Indian Medical Services and of the Public Health Commissioner were integrated to the post of Director General of health services who was the principal advisor to the Union Government in both public and medical health matters.[9] All the states followed this example. In 1950, the constitution of India came into force and India was declared a republic and the Planning Commission was set-up by Government of India and the First Five year plans was drafted. Emergence of the State Reorganization Commission and its recommendations had reorganized the states and State of Kerala came into existence on the 1st of November 1956.

Administrative Machinery of the State Health System of Kerala

Kerala state has its own Ministry of Health as in the case of all other all other states. The management sector comprises the State ministry of Health and the Directorate of Health services. The Ministry of Health and Family Welfare is headed by a Minister for Health and assisted by a Deputy Minister at the center. For long time, two separate departments – Medical and Public Health were functioning in the State. The heads of these departments were the Sergeant General and the Inspector General of Civil Hospital and

Inspector of Public health respectively. Later these posts were integrated in all states including Kerala into the Director of Health Services. The Director of Health Services is the chief technical advisor to the State Government on Medical and Public Health issues and is also responsible for the organization and direction of all health activities[11]. Deputy Directors and Assistant Directors assist the Director of Health Services. They are of two categories viz., regional and functional. The Regional Director is in charge of all branch of Public Health irrespective of the specialty. Functional Directors are specialists in any particular branch such as Maternal and Child health, Family Planning, Nutrition, T.B, Leprosy, Health education, Filaria or Ophthalmology. The Central of Council of Health, which was organized by a Presidential Order in 1952, continues to play a great role for promoting co-coordinated and concerted action between the center and the state for the implementation of all programmes and measures pertaining to the health of the nation.[xcvi]

Five year Plans and Contribution towards Health and Welfare:

During the formation of the State of Kerala, the second five-year plan 1956 – 61 was launched. It had an outlay of Rs 4672 Crores of which 145 Crores was earmarked for Health care programmes. The health programmes during the first five year plan like the National malaria Control programme, National Water Supply and Sanitation Programme, National Leprosy Control Programme, the National Filaria Control Programme all continued through the second five year plan. During the second five-year plan, the National Malaria Control Programme was converted to National Malaria Eradication Programme. The National TB survey was completed, the Mudaliar Committee was appointed to survey the field of health, the school health committee was constituted and pilot projects for the eradication of smallpox was constituted. [xcvii] The third five-year plan 1961 – 66 was launched with an outlay of Rs 8,576 Crores out of which Rs 250 Crores was for health. The Central Bureau of Health Intelligence was established and the report of the Mudaliar Committee was submitted. According to the recommendations of the Mudaliar Committee, some of which are: strengthening of the District Hospitals with specialist services; regional organizations in each state under the charge of a regional deputy or assistant director who was to supervise two or three district medical officers,

each Primary.Health.Centre not to serve more than forty thousand population and constitution of All India Health services on the pattern of Indian Administrative Services. The following year a Central Family Planning Institute was established, the National Smallpox Eradication programme, the National Goiter Control Programme, District Tuberculosis Programme were all launched and the School Health programme was initiated. The other programmes launched are the Applied Nutrition Programme, the National Trachoma Programme and the Extended Family Planning Programme. The Population council started the International Postpartum Family Planning programme in twenty-five hospitals in fifteen countries two of which in India are at New Delhi and Thiruvananthapuram[xcviii].

In 1968, the Government of India appointed the Medical education Committee to study all the aspects of medical education in the light of ever growing needs. Development in some states is the appointment of a Director of Medical Education to coordinate and strengthen the system of medical education at all levels including specialized teaching and research in the field of medical practice. In Kerala this was started in 1984.

The fourth five-year plan 1969 – 1974 was launched with an outlay of Rs 15,779 Crores, of which Rs 613 Crores were allocated to health and Rs 315 Crores were allocated for Family Planning. It was during this period that the Central Birth and Death Registration Act were passed. Government medical stores were started; training and research centers were established Physical Medicine and Rehabilitation was recognized as a separate specialty. All India Hospital (Postpartum) Family Planning Programme was started. The famous Medical termination of Pregnancy Act came into force on April 1, 1972.[xcix] The Committee on Medical Education recommended the guideline for Medical Education in India during this period.

The fifth five-year plan was launched in 1974 with an out lay of Rs 39426 Crores of which Rs 762 Crores were allotted to health and Rs 491 Crores to family planning. The National Programme of Minimum Needs was incorporated in the fifth five-year plan, which covered elementary education, rural health nutrition, rural roads, housing etc. A

thirty-bedded rural hospital for every four Primary Health Centers was recommended. The Karthar Singh Committee recommended the formation of a new cadre of health workers designated as multipurpose health Care workers for the delivery of health, family planning and nutrition services to the rural communities. In 1975 India became free of smallpox[c]. The Srivasthava Committee constituted in 1975 recommended the development of referral services complex by establishing a link between the Primary Health Centers and a higher-level referral center. In 1977 India was declared free of smallpox by international commission, rural health scheme was launched, training of community health workers was taken up, revised modified plan of malaria eradication was put into operation, the forty-second amendment of the constitution made Population control and family planning a concurrent subject (1977) WHO adopted the goal of Health for All by 2000 A.D. The World Health Assembly endorsed the declaration of Alma Atta on primary health care. In 1979 the offices of Family Welfare and National Malaria Eradication Programme were merged and named as the Office for Health and Family Welfare.

In the year 1980 the sixth five-year plan was launched with an out lay of Rs 109291.7 Crores of which Rs2025 Crores were allotted to health and Rs 1387 Crores to family planning and the census was taken in 1981.The new twenty point programme was announced during the plan period and the government of India announced its national health policy. India launched IMPACT – National Plan against avoidable disablement. The National Leprosy Control Programme was renamed National leprosy Eradication Programme and the Guinea Worm eradication Programme was also launched.

From 1985 – 1990 the seventh five-year plan came into effect with an out lay of Rs 218729 Crores of which Rs 3688 Crores were allotted to health and Rs 3120 Crores to family planning. The Universal Immunization Programme was launched along with an Environment Protection Act, Juvenile Justice Act, new twenty-point programme that are some of the programmes undertaken at the national level. A worldwide "Save Motherhood Programme" was launched by the World Bank, which was undertaken in India also. National Diabetics and the National AIDS Control Programme were launched

in 1987. The Central planning and Monitoring Unit was established. In Kerala, Malayalam was declared as the official language .The seventh five-year plan was extended up to 1991. The blood safety programme was launched and in 1991 the last census of the century was undertaken. Health education was given a lot of emphasis; the motto being OUR PLANET, OUR HEALTH, THINK GLOBALLY, ACT GLOBALLY.[ci]

During the eighth five-year plan (1992- 1997) the Child Survival and Safe Motherhood Programme was launched. The approved out lay for the plan was Rs 434100 Crores of which Rs 7495 Crores were allotted to health and Rs 6500 Crores to family planning. It was during this plan period that Government of India introduced budgetary allocation for the development of Indian Medicine[cii]. A total of 108 Crores was allocated for the same. The revised National Tuberculosis Programme with DOTS was introduced as a pilot project in India in 1996, Pulse Polio Immunization – the largest single day public event took place on 9th December 1995 and 20th January 1996. The focus of the 8th plan has been to improve access to health care for the underserved and underprivileged segments of society, through consolidation and operationalization of the health infrastructure at all levels with emphasis on primary health care. In view of the high maternal mortality, upgrading of existing maternal health facilities and establishing first referral units (FRUs)[ciii] have been prioritized. The Kerala Coastal Project and the Anemia Control Programme was started. In 1995, to protect the patients and their rights; the "Concern for Consumer" programme was started. The Family Welfare Scheme was expanded to include new projects: Baby friendly hospitals, First referral units and Neonatal Tetanus Clinics. Nutritional programmes were started with one day nutritional educational cum medical check up camps for pre-metric students. Special attention was being given to SC / ST students and tribals under this programme.

The ninth five-year plan **(**1997-2002) was launched with an outlay of Rs 30,940 Crores, of which Rs 19818.4 Crores were allocated to health and Rs 15120.2 Crores were allocated for Family Welfare. The solutions to the emerging challenges in the sector include improvement in the quality of services with added emphasis on disease

prevention and health promotion, improvement in infrastructure and facilities in public health system and locally specific interventions.

India has processed a new national health policy (NHP-2001). The existing national health policy (NHP) was adopted in 1983. Its main focus was the formulation of an integrated and comprehensive approach towards future development of health services, appropriately supported by medical education and research, with special emphasis on Primary Health Center and related support services. During the 7th five-year plan (FYP), there was considerable achievement in terms of establishment of a health infrastructure, especially in rural areas. The 8th five-year plan (1992-97) identified "human development" as its main focus, with health and population control listed as two of six priority objectives. It was emphasized that health facilities must reach the entire population by the end of the 8th plan. The plan also identified peoples' initiative and participation as a key element. With the enactment of the 73rd Constitutional Amendment Act (1992), Panchayati Raj Institutions (PRIs) were revitalized and a process of democratic decentralization ushered in, with similar provisions made for urban local bodies, municipalities and nargapalikas.[civ]

The tenth five-year plan (2002 -2007) was launched with an outlay of Rs 52980 Crores, of which Rs 31020.3 Crores is allocated to health and Rs 27125 Crores is allocated for Family Welfare. Standardization of facilities is been one of the major initiatives of this plan. As part of it, Directorate of Health Services, Kerala constituted a committee to recommend standards in service delivery, infrastucture, equipment and staff pattern at various health care institutions[cv]. Reforms in the health care sector on a war footing have started in 2002-03 and as part of it specialty departments in major hospitals are being set up and plans are on line to set up an administrative cadre with expertise in hospital management.

The provision of health care by the public sector is a responsibility of the state, central and local governments, although it is effectively a state responsibility in terms of service delivery. State and local governments incur about three-quarters and the center about

one-quarter of public spending on health. The responsibility for health is at three levels. First, health is primarily a state responsibility. Second, the center is responsible for health services in union territories without a legislature and is also responsible for developing and monitoring national standards and regulations, linking the states with funding agencies, and sponsoring numerous schemes for implementation by state governments. Third, both the center and the states have a joint responsibility for programmes listed under the concurrent list. Goals and strategies for the public sector in health care are established through a consultative process involving all levels of government through the Central Council for Health and Family Welfare[cvi]. The outcomes from meetings of the Central Council for Health and Family Welfare have provided a thrust to various sub sectors within the health sector.

Health Care Delivery System

For an effective health care delivery system it is important to understand the health problems and the health status of the people and also study the resources for proper planning[cvii]. Health care services are designed to meet the health needs of the community through proper use of available knowledge and resources. The health care system is intended to deliver health services and constitutes the management sector, involving organizational matters. The scope of health care services vary from country to country and is influenced by general and ever changing national, state and local health problems, needs, attitudes and available resources. Health services have to be accessible, acceptable, involving the community and cost friendly. These are the essential ingredients of primary health care, which forms part of the integral health of India of which it is the central function and main agent for delivering health care.

Health care systems operate within the socio-economic and political framework of our country. In India, it is constituted into 5 sectors or agencies, which differ from each other by the application of different technology[cviii].

So far we have been examining the various aspects of the health system developments during various plan periods. Here in this chapter, some important aspect of institutional infrastructure of Kerala as a whole is looked at, both rural and urban combined. Two aspects of the health care systems have been examined here. One is the composition, organization and quantified dimension of health care institutions and the other is the awareness / demand aspects pertaining to the utilization of the health care system by the people.

The different health systems are organized under the two broad systems namely Government and Private. The public health sector consists of the central government, state government, municipal & local level bodies.

Chart 1: HEALTH CARE DELIVERY SYSTEM

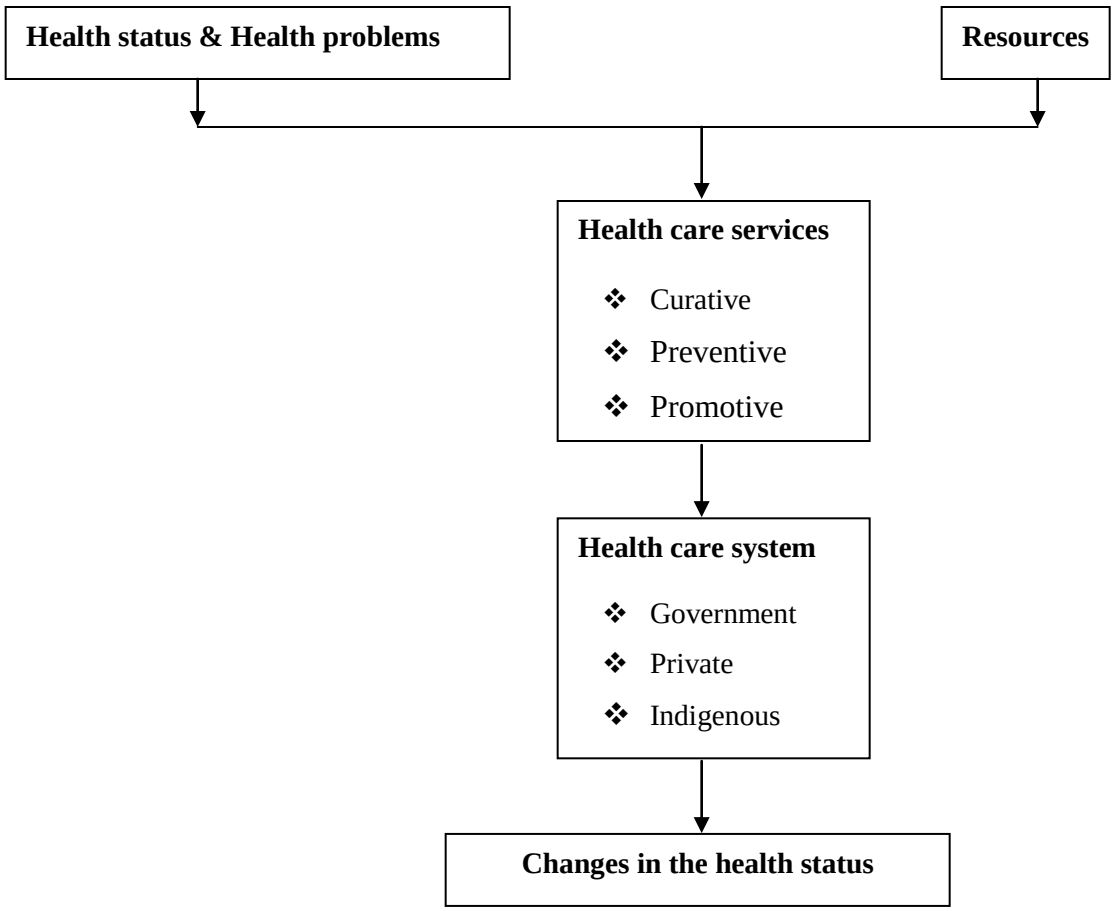


Chart: 2: Organization structure of Government Sector.

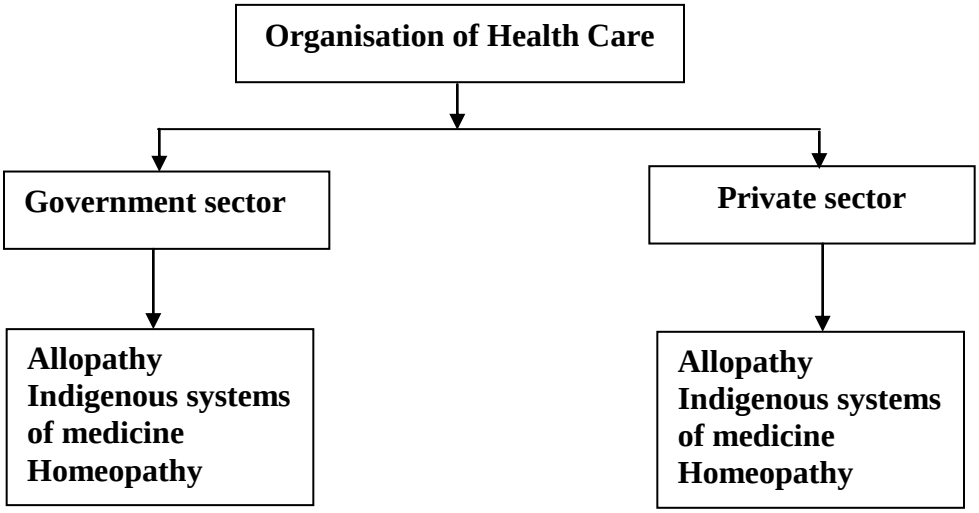
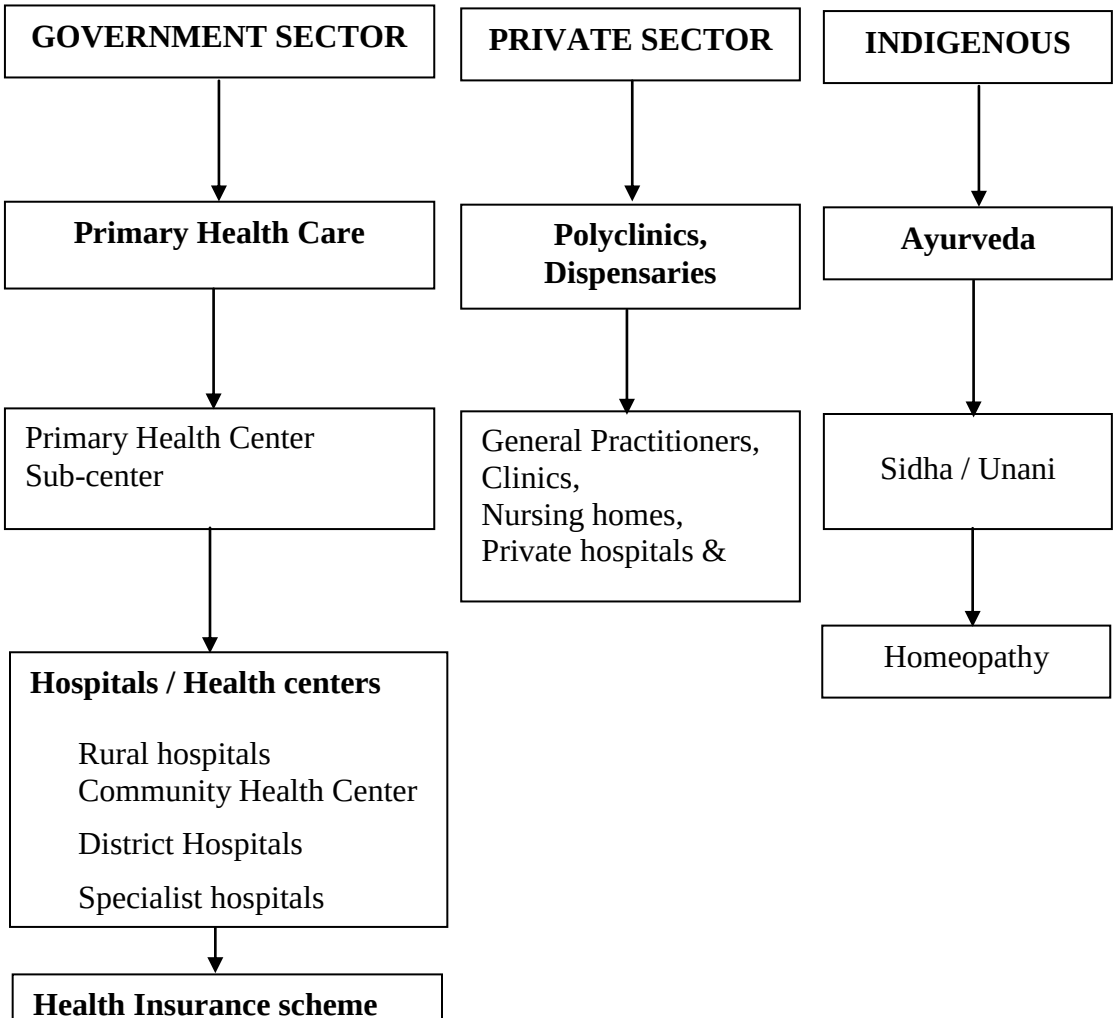


Chart 3: ORGANISATION STRUCTURE OF THE HEALTH CARE SECTOR



Others:

- Voluntary health agencies
- National health programmes

Health is a state responsibility, however the central government does contribute in a substantial manner through the legislation and monetary grants and centrally sponsored health programs/schemes. The private health sector consists of the 'not-for-profit' and the 'for-profit' health sectors. The not-for-profit health sector includes various health services provided by Non Government Organisations (NGO's), charitable institutions, missions, trusts, etc.[cix]

It is important to note that in Kerala the three major medical systems namely the modern medicine, the Ayurveda and Homeopathy are recognized and instituted under the government as well as the private or the voluntary sector. Thus the organization of healthcare services under the government sector is one of the three parallel organizational structures, parallel because there is hardly any meeting point among them in terms of training, research or organization. Since the intervention of the state in providing healthcare directly to the people is an important feature of the health care system in Kerala and account for the Organization structure established.

State level: -

Indian constitution explains that the responsibility for providing health services is vested with the state department, the Department of Health and Family Welfare headed by a minister of the cabinet rank. The Department of Health is the official organ of the State and headed by a Secretary to the Government assisted by Joint secretaries, Deputy

Secretaries, Under Secretaries and a large number of subordinate administrative staff who are looking after the policy of administration. Similar to the Director General of the Health Services at the Central Government, there are State Directorates of Health and Family Welfare headed by the Director of Health Services. Below him are Additional, Deputy and Assistant Directors for individual programmes. In Kerala there are two directors for the health services department – one in charge of Medical and Public health Services and other in charge of Family Welfare Programme.

District level: -

In Kerala, the Health organization of the district is under the overall control of the District Medical Officer assisted by two deputy medical officers and in some district in addition to these deputy officers, there are the District Malaria Officer and District Leprosy officer to look after concerned programmes in the respective district. There is a District Immunization Officer in all districts of Kerala, who looks after all the immunization activity of the district. Kerala has district hospitals in all the districts were curative services are provided apart from the specialist services in the departments namely Pediatrics, E.N.T, Ophthalmology, Gynecology.

Rural Health Infrastructure.

The Primary Health Center is the core institution of the rural health infrastructure in Kerala. The concept of the rural health services delivery through the primary health centers was in line with the recommendation of the Bhore Committee in 1946 and the National Planning Committees, sub committee for National health. The MOTTO of the rural health services is 'to place people's health in people's hands'.[cx]

Structure of rural health services.

Starting from the fifth plan, the rural health care delivery was made a part of the minimum needs programme. Health services are now provided based on a five-tier health

delivery system with government dispensaries and Primary Health Centers serving the population of 20 – 30,000 in the panchayat and is maintained at the grass root level. At the next tier, community health centers continue to provide in addition to curative services, preventive and promotive health services to a population of about one lakh. Specialty services were provided at the next tier i.e., Taluk hospitals to a population of half a million. District hospitals, which are also, basically curative oriented with facilities for specialized treatment existed at the fourth tier and functioned as referral units. At the fifth tier, as apex institutions certain institutions were functioned exclusively for special treatment of cases of leprosy, Tuberculosis, Mental health etc supplementing curative services of complex nature rendered by medical colleges.

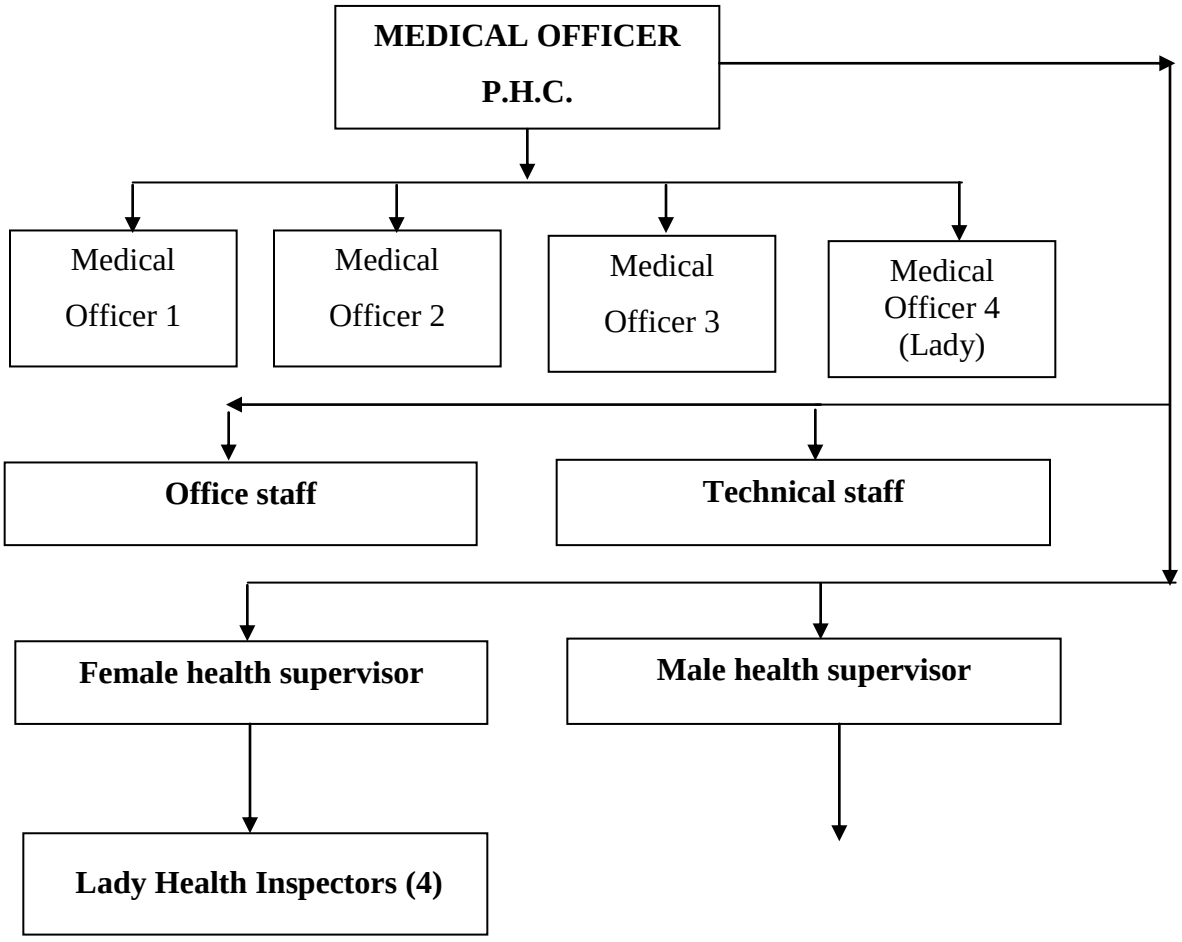
Minimum needs programme (Basic minimum services)

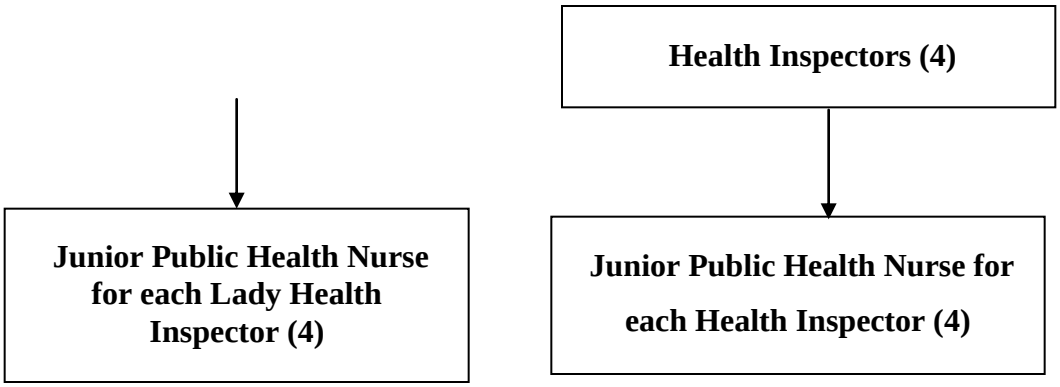
The programme gives priority to the development of Rural Health Services. The concept of Minimum Needs Programme was introduced during Fifth Five Year Plan. The establishment of Sub-Center, Primary Health Center, up gradation of Primary Health Centers and construction of building of Primary Health Center / Sub-Center and staff quarters are included in the programme. Institutions of various kinds were established in the state to achieve the following health care needs of the society. The needs envisaged to be achieved through these institutions are one sub-center for one health worker (male and female) for every 5000 population (3000 in Tribal and Hilly area); one primary health center for every 30,000 population (20,000 population in Tribal and Hilly area) and one community health center / upgraded primary health center for every 80,000 – 1.20 lakh population with 30 beds (with specified service in medicine, surgery, pediatrics, gynecology and obstetrics and public health).

The health team at primary health center consists of two / three physicians known as Medical Officers including one in overall charge of the primary health center, one male health assistant, one female assistant both of whom are multipurpose personnel providing the link between the health workers at the sub center or the village level and the physicians; a block extension educator, a number of female health workers – usually ten - giving nursing care to outpatients and in patients, a laboratory technicians, a computer operator and statistician, driver for primary health center transport, store keeper and other

ancillary staff and attendants. The primary health center has a network of sub centers and one male and female multipurpose worker mans these sub centers. The female health worker (ANM) provides maternal and child health services and family planning services to women. They register women for antenatal and post natal care distribution of iron and folic acid, deliveries, advice on nutrition and diet, immunization of infants and treatment of minor ailments. The male health worker is expected to prepare and maintain register of vital events and of eligible couples, offer family planning advice, distribute Nirodh among men and to undertake house to house malaria surveillance, immunization etc. Primary health center is a referral point for emergencies and complications. As stated earlier, apart from community health centers, primary health centers and rural dispensaries, hospital facilities for the rural population are available at the Taluk / district / general hospitals and special facilities are available at the post graduate medical institutions. [cxi]

Chart 4: Organization Structure of Primary Health Centers.





Peripheral Institutions

At the end of March 2004, there were 1274 Government Medical institutions in the state with total bed strength of 38943. Of these 150 are Hospitals (including Medical College Hospitals), 950 are Primary Health Centers, 113 are Community Health Centers, 5094 sub-centers and 52 are Dispensaries, besides 21 Tuberculosis Center / Clinic and 15 Leprosy Control Unit.[cxii]

Table No: 3.1: The current status of rural health care centers under the DHS Kerala

Institutions	*Number*	*Average Rural Population Covered*
Sub Center	5094	4476
Primary Health Center	950	23850
Community Health Center	113	3.6 lakhs

Source: Health Information Cell, Directorate of Health Services, Kerala, 2004

Table No: 3.2: Medical Institutions in the State of Kerala

Institutions / Beds			
	Allopathy	***Ayurveda***	***Homeopathy***
Hospitals	1281	113	31
Beds	41462	2604	970

Source: Health Information Cell, Directorate of Health Services, Kerala, 2004

Table No: 3.3 - Institutions and Beds under Directorate of Health Services

Institutions	**Number**	**Beds**
(a). Hospitals*	143	31933
(b). Community Health Center	105	4415
(c). Primary Health Center	943	5215
(d). Dispensaries	54	176
(e). T.B.Centres / Clinics	21	240
(f). Leprosy Control Units	15	-
(g). ESI Hospital / Dispensaries	134	676

* Includes Medical College Hospitals and specialized institutions. Source: Health Information Cell, Directorate of Health Services, Kerala, 2004

Table No.: 3.4: GENERAL SOCIO ECONOMIC INDICATORS OF KERALA

1	Area (Sq.K.M.)	38, 863
	Rural	35, 611
	Urban	3, 252
2	Districts	14
3	Taluks	63
4	Villages	1, 452
5	C.D.Blocks	152
6	Panchayats	991
7	Municipalities	53
8	Townships	1
9	Municipal Corporation	5
10	No. of Medical Colleges	11
	Government	5
	Private	4
	Co-operative	2
11	No. of General Hospitals	6
12	No. of Women & Children Hospitals	5
13	No. of District Hospitals	11
14	No. of Government Hospitals	132
15	No. of Community Health Centers	115
16	No. of Primary Health Centers	816
17	No. of Block PHCs	115
18	No. of Leprosy Hospitals	3
19	No. of TB Hospitals	3
20	No. of Mental Hospitals	3
21	No. of Government Dispensaries	59

22	No. of Sub Centers	5, 094
23	Total Population (2001 Census)	3, 18, 41, 374
24	Male Population	1, 54, 68, 614
25	Female Population	1, 63, 72, 760
26	Density of population (per Sq.K.M.)	819

Table No: 3.4 - GENERAL SOCIO ECONOMIC INDICATORS OF KERALA (Contd...)

27	Effective literacy	90.86
28	Male literacy	94.24
29	Female Literacy	87.72
30	House hold size	4.70
31	*Other Indicators*	
	No. of non workers	215.59 Lakhs
	Percentage of workers to total population	32.29

Source: Government of Kerala: Department of Economics and Statistics, Thiruvananthapuram.

Quantitative Dimension:

Development of health services in Kerala, especially its spatial spread and relatively high ratios in terms of area and population have been a noted fact (UN: 1975[cxiii], Panicker and Soman: 1985[cxiv]). Usually the data related to health care institutions and manpower under the government sector are published annually but not of the private sector. During 1986, the statistics of Government of Kerala conducted a health care survey on health care institutions of both private and public sector.[cxv]

The table no 3.5 indicates the progress of the development of the health care delivery system over last 20 years during different plan periods. The increase in the total number of allopathic centers is more than three and a half times. Till the nineties the increase in institutions has been largely contributed by the increase in dispensaries and Primary Health Centers. While the total number of institutions has not increased significantly – possibly due to high spatial coverage – evidence suggesting significant qualitative

changes. This relates to the conversion of a large number of dispensaries into Primary Health Centers[cxvi]

Resources are the quintessential factor needed to meet the vast health needs of the community. An assessment of the available resources in terms of health manpower and money; their proper allocation and utilization are important considerations for providing efficient health care.

Table No 3.5: Kerala: Progress of Establishment

HEALTH-CENTRE PLAN PERIOD	Primary Health Center	Community Health Center	Sub-Center
Sixth-Plan (1981-1985)	199	4	2270
Seventh Plan (1985-1990)	908	54	5094
Eighth Plan (1992-1997)	938	18	5094
Ninth Plan (1997-2002)	944	105	5094
Tenth Plan (2002-2004)	950	113	5094

Source: Governrnent of India, Planning Division, 2002 & Directorate General of Health Services.

It is not enough to examine the number of institutions as an indicator of the spread of health care system. Much more crucial indicators are the ratios of the beds, doctors and paramedical staffs to the number of patients need to be examined.[cxvii]

Health manpower requirements are subject to change, as new programmes and projects are introduced into the health system. A multipurpose strategy has been developed in recent years in view of the Health for All policy. National health programmes needed more trained workers and technicians, thus over the past decade, new categories of health man power like health guides, multipurpose workers, technicians, ophthalmic assistants etc are all part of the rural health scheme.[cxviii]

The study reveals the fact that the number of beds in the government sector grew from 36, 000 to 46, 000 in a twenty-year period i.e., 1985 to 2002. At the same time, during the same period, beds in the private sector grew from 31, 000 to 67, 500 during the same period. This amounts to nearly forty percent growth in the private sector in a period of ten years as against 5.5 %in the government sector.[cxix] More significantly private sector has far outpaced the government facilities in the provision of sophisticated modalities of therapies such as CT, MRI and availability of super specialty services.

Table No 3.6: Health manpower indicators in Allopathy

Bed Population Ratio	Government Private	1:785 1:461
Doctor Population Ratio	Government Private	1:5319 1:2955
Nurse Doctor Ratio	Government Private	1:2.15 1:1.6

Source: Government of India: Health Statistics of India, Director General of Health Services, New Delhi 2002.

Table No. 3.7: Paramedical manpower indicators in Allopathy (requirement)

Health Worker Male & Female	1 per 5000 population
Trained Dai	1 for each village
Health Assistant Male & Female*	1 per 30,000 population.
Pharmacist	1 per 10,000
Lab technicians	1 per 10,000

They provide supportive supervision to six health workers – male and female.

Source: Health Information Cell, Directorate of Health Services, Kerala, 2004

Table 3.8: Comparative Status on Health Care In Private Sector

		Modern Medicine	Ayurveda	Homeopathy
Institutions	A	3565	1925	1366
	B	10930	1925	1366
Doctors	A	6345	2039	1460
	B	11810	4113	3168
Beds	A	65658	1643	434
	B	119376	3386	1127
Paramedical Staff	A	21402	976	365
	B	66490	10256	5450

According to the study conducted in 1986 = A and B is the rough figures produced by the DHS in 2002 in association with the Department of Economics and Statistics, Government of Kerala

From the Table No 3.6, it can see that the average density of beds in the private sector is almost twice that in the public sector. Private facilities are now more numerous than government facilities providing more beds and employing more staff than the government facilities. The rural health scheme has paramedical staff that formed the connecting link between the doctor and the patients in far-flung areas. The guidelines for health personnel in the rural health sector as follows.

Table No. 3.9: Allied medical manpower indicators in Allopathy

(requirement)

Health Worker Male & Female	1 per 5000 population
Trained Dai	1 for each village
Health Assistant Male & Female*	1 per 30,000 population.

Pharmacist	1 per 10,000
Lab technicians	1 per 10,000

They provide supportive supervision to six health workers – male and female.

Source: Health Information Cell, Directorate of Health Services, Kerala, 2004

Table No. 3.10: Total allied medical personnel serving the rural health machinery by 2002

Health Guides	24,904
Trained Dais	16,996
Training of Female Health Workers	4680
Training of Male Health Workers	3871
Training of Local Health Volunteers	2214
Training for Health Assistants	12,854
Training for Laboratory Technicians	971

Source: Health Information Cell, Directorate of Health Services, Kerala, 2004

In a mixed economy as far as India's, private practice of medicine provides a large share of the health services available. There has been a rapid expansion in the number of qualified allopathic physicians, more so since 1980s. From the 12,028 registered practitioners in 1980s it has reached 42,123 in 2004. The general practitioners constitute 65% of the medical profession today. They provide mainly curative services to those who can afford.[cxx] The private sector of health services is to be yet organized. Statutory bodies like the Medical Council of India, Kerala Medical Council and Indian Medical Association regulate some of the functions of private registered medical practitioners.

Corporate Hospitals

A new trend found in the private health care delivery system today is the participation of corporate hospitals. During the last one and half decades the growth of corporate hospitals has been notably fast. In 1983, the first corporate hospital in India was set up in Madras. It was established by Apollo Hospitals Enterprise Ltd. (AHEL), which recorded

a turnover of $ 3.2 millions and a net profit of $ 0.30 in 1988. These hospitals cater to only the rich and the cost of treatment is far beyond the reach of the common people. Several large firms have diversified into the field of health in addition to their regular business. This is due to the realization that health could also be transformed into an industry with such desirable features as: a large and available market of illness, access to a ready qualified and trained labour and the new miraculous state of the art medical technology. They also boast of the latest diagnostic and therapeutic facilities. For example as of today Bombay has thirteen whole body scanners, Delhi has eleven, Madras has eight, Calcutta has three, Hyderabad has two, Pune has three and Ahmedabad got three. (Jesani. A & Ananthraman S. 2001)[cxxi]. Suffice to say that with the rise of the corporate sector, the cycle in health care does not start with a trained medical person and a sick person in search of each other, but with an investor in search of profitable investment (Phadke A, 1993)[cxxii]. As far as the private sector is concerned, it still remains unorganized with no real data except for the study in 1986 and later in 1995 by the Department of Economics and Statistics, Government of Kerala survey. While the number of institutions are easy to account for, the number of doctors, beds and paramedical staff is found to be difficult to account for.[cxxiii] The private health care sector has been expanding rapidly since 1980s. The study explains the share of the different medical systems under the government and private sector and their crucial indicators like doctors, beds and paramedical staff.

The different systems of medicine worked on similar trend in Kerala. Since the 8th five-year plan special allocation is being provided for the indigenous systems of Medicine. It is to be noted with pride that the advances in the field of Ayurveda to a large extend is the contribution of people of State of Kerala. Under the indigenous system of medicine we have tried to compare statistics between 1986 and 2001. (Table 3.11)

Total patients treated by the three systems put together comes to 19.36 lakh in-patients and 809 lakh out patients during 2002 – 03 as against 17.64 lakh in-patients and 798.47 lakh out patient during 2000-01. Total patients treated thus increased by 12.25 lakhs (1.5%) in 2003. During 2001-02, 76% patients were treated in allopathy, 5% in Ayurveda

and 19% in homeopathy. But during 2002-03 share of outpatients in allopathy decreased to 48% whereas the share of ayurveda increased to 22% and that of homeopathy to 30%.[cxxiv]

The department of Ayurveda functions under the control of a Director for overall administration and programme implementation. Every district has a district hospital, the latest being at Pathanamthitta. In addition there are six specialized hospitals, two for visha vaidyam (treatment for snake bite), one each for psychiatric maladies, nature cure, panchakarma and marma chikistsa. The last eight years seen a sudden spurt in the number of ayurvedic centers due to the interest shown by non-keralites and also through the tourism department. There are currently hundred and seventy-two ayurvedic hospitals along with five hundred and ninety eight dispensaries. In addition, Government gives grant in aids to 215 private ayurvedic hospitals known as vaidyasalas.

Table-No. 3.11: Health care Institutions in the Government Sector for Indigenous System of Medicine

Year	Ayurveda*	Visha Vaidya	Siddha	Grant – in –Aid Institutions
1986-87	203	7	Nil	304
1988-89	298	7	3	271
1990-90	435	6	2	228
1992-93	517	6	4	228
1994-95	607	6	6	208
1996-97	785	6	7	206
1998-99	924	6	7	215
2000-01	996	6	8	215
2002-03	1025	6	9	215

- * This includes ayurvedic medical colleges, dispensaries and hospitals.
- ^ This involves only dispensaries.

Source: Health Information Cell, Directorate of Health Services, Kerala, 2004

The then Government of Travancore recognized the homeopathic system of medicine in 1947 but it was only in 1958, government institutions came into existence. In 1973, a

separate department for homeopathy was created under a separate Director. Now there are thirty-one hospitals and 392 dispensaries, where the later has only outpatient facilities.

After examining the manpower side of the resources, the money resource for providing health services is to be looked into. Scarcity of money affects all parts of health care delivery system. In India health sector reforms are taking place under the broad umbrella of Structural Adjustment Programs (SAP), which is termed as the New Economic Policy (NEP). The two major aspects of the SAP are privatization and liberalization.[cxxv]

Table No. 3.12: Health care institutions in the Government Sector for Homeopathy

Year	Hospitals	Dispensaries	Total
1986-87	24	225	249
1988-89	24	227	251
1990-91	26	255	281
1992-93	26	283	309
1994-95	28	298	326
1996-97	28	317	345
1998-99	29	323	352
2000-01	31	378	409
2002-03	31	392	423

Source: Health Information Cell, Directorate of Health Services, Kerala, 2004

The major problem historically and more so presently under New Economic Policy is the issue of under-funding of health services. The investment by the government in health care has been inadequate to meet the demands of the people. The government has over the years committed not more than 3.5% of its resources to the health sector. The budgeted expenditure for 1994-95 was 2.63% of total or $ 2 per capita, which is the lowest ever. (Duggal, Nandraj & Vadair 1995)[cxxvi]**.** As a percentage to Gross Domestic Product (GDP) it has been around 1 %, woefully short of the World Health Organization's recommendation of 5%. Due to the SAP there has been further compression in Government spending in an effort to bring down the fiscal deficit. The grants from central government to the state governments declined drastically from 19.9% in 1974-82 to 3.3% in 1992-93. Central programs or centrally sponsored programs are the most severely affected. The Share of central grants for public health declined from 28% in 1984-85 to 17% in 2002-03 and for diseases control programs from 41% in 1984-85 to

18% in 2002-03 (NIPFP, 2002).[cxxvii] Financing for health needs is to be substantially strengthened because ultimately it is these provisions that become the foundation for improvement in the quality of life. To achieve, Health for All, WHO has set a goal i.e., the expenditure of 5% of each countries GNP is to be spend on health care. At present our country is spending about three percent of its GNP on health and family welfare development[cxxviii]. Health department is a service department with no commercial intentions. Monetary resources for the state are through the budgetary allocation of the Central Government with each state having an approved outlay; all this is in consultation with the State and the Center with planning commission.

Allocation of Health Expenditure

It has been clearly shown time and again by various studies that the rural-urban disparities in terms of health infrastructure are very wide. Analysis of total state expenditures on health reveals that between 70% to 80% of the investment and expenditure reaches 30% of the population in urban areas. For instance, in 1991 of all hospitals and beds in the country only 32% and 20% respectively were in the rural areas i.e., 20 beds per 1,00,000 population in rural areas as compared to 238 beds per 100,000 population in urban areas. (CBHI, 2002)[cxxix]. An emerging trend that is becoming evident is that the public health system in Kerala is becoming less important and only 30% of the people are seeking medical care from government hospitals.[cxxx]

In the case of rural population there is very little provision of state funded curative care though these services are most demanded. Studies conducted (ICMR 1991[cxxxi], Gupta JP et.al 1992[cxxxii], Ghosh B 1991)[cxxxiii]reveal the fact that primary health centers are grossly under-utilized primarily because they have inadequate resources namely staff, medicine, equipment, transport etc and because the entire focus of the health program is in completing family planning target. The loss of faith in the public health sector has provided the private health sector an opportunity to thrive and make its presence felt as the sole provider of curative care in the rural areas. With the ninth five-year plan, steps were taken to restore the faith in the private sector. The Panchayat Raj (local self

government system) now provides an opportunity for the people to demand the resources to operate a health service in which the people themselves will play the dominant role and of which they will be the chief beneficiaries. All the primary and secondary level health care institutions in the state have been transferred to the local bodies. In addition to this, the people's campaign for decentralized planning has earmarked some of the States' developmental planned fund for the local bodies, which has opened up tremendous scope for facing any challenges to Kerala Model of Health.[cxxxiv]

The private health sector in state is the most dominant sector in terms of financing and utilization of health services. There has been a tremendous amount of growth in physical size, investments, expenditures and utilization. Recent studies reveal that 50% of people utilize private inpatient health facilities, figure that goes up to 80% for ambulatory care (NSSO 2001:[cxxxv] Duggal and Amin, 1999[cxxxvi]: Kannan et. al; 1999[cxxxvii], NCAER, 2001[cxxxviii]: George et al 1993[cxxxix]). The share of the private health sector is around 4% of the Gross Domestic Product as compared to the government spending which is around 1%. The share of the private health sector at today's prices works out to between 4,571 million and 5,714 million dollars per year (Duggal, Nandraj 1991)[cxl.] Instead of increasing the outlay on the health sector the government is adopting alternative means of financing through various methods under the policy prescriptions of the SAP. Traditionally the finances of the health sector were being met from the revenues collected by the government to a smaller extent as aid from bilateral and multilateral sources. The present policy is to take loans from the World Bank and other international agencies to upgrade and run the health programs in the country. Another method of financing of health services favored by the government is through the levy of user charges. This brings out the fact that the government is abdicating its role of providing free health services, especially those with the greatest need. In the present socio economic conditions the poor would be the most affected.[cxli] The public expenditure on health care in Kerala registered a significant and steady increase over the years. The State government expenditure on health also has grown over the years as seen in Table No.3.13. However, the percentage of outlay on health to total plan outlay from the fifth to ninth five-year plan ranged between from 2.19 to 1.4. Revenue expenditure on health as percentage of total government expenditure, infact decreased from 10.41 in 1966. In the primary level

healthcare almost 77% of the total revenue expenditure on curative services in been spend on salaries and this percentage is 96% at the taluk and district hospitals. Even though the state was going through a period of fiscal crisis, share in expenditure on health has not gone down much but how ever, introduction of qualitative advancement in health care services has come down[cxlii]. It is in this situation the private sector has expanded to such a large extend in the health scenario of the state.

Table No: 3.13 - Pattern of Investment on Health; Family Welfare and Indian System of Medicine and Homeopathy during different Plan Periods. ***(Rupees in Crores)***

Sl. No	Period	Total Plan Investment	Health	Family Welfare	ISM & H	Sub Total
1	First Plan (1951 – 56)	1960	65.2	0.1		65.3
2	Second Plan (1956 –61)	4672	140.8	5		145.8
3	Third Plan (1961 –66)	8576.5	225.9	24.9		250.8
4	Annual Plan (1966-69)	6625.4	140.2	7.4		210.6
5	Forth Plan (1969-74)	15778.8	335.5	278		613.5
6	Fifth Plan (1974 - 79)	39426.2	760.8	491.8		1252.6
7	Annual Plan (1979 – 80)	12176.5	223.1	118.5		341.6
8	Sixth Plan (1980 – 85)	109291.7	2025.2	1387.0		3412.2
9	Seventh Plan (1985 – 90)	218729.6	3688.6	3120.8		6809.4
10	Annual Plan (1990 – 91)	61518.1	960.9	784.9		1745.8
11	Annual Plan (1991 – 92)	65855.8	1042.2	856.6		1898.8
12	Eight Plan (1992 – 97)	434100	7494.2	6500	108	14102.2
13	Ninth Plan (1997 – 02)	859200	19818.4	15120.2	266.3	35204.95

14	Tenth Plan (2002 – 07)	1484131.3	31020.3	27125	775	58920.3

Source- Government of India: Planning Commission report-Health Information India. New Delhi 2003

Table No: 3.14 - Budgetary Allocation for the State of Kerala under Health Sector over the last ten years. (Eight Plan, Ninth Plan and Tenth Plan)

Sl.No.	Year	Amount	Amount Spent
1	Approved Out Lay – 8th Plan 1992 – 97	12,000.00	
2	1992 – 93		2,200.00
3	1993 – 94		2,450.00
4	1994 – 95		3,100.00
5	1995 – 96		6,126.26
6	1996 – 97		3,900.00
7	Approved Out Lay – 9th Plan 1997 – 02	30,940.00	
8	1997 – 98		6096.00
9	1998 – 99		6200.00
10	1999 – 00		6400.00
11	2000 – 01		6335.00
12	2001 – 02		5553.00
13	Approved Out Lay – 10th Plan 2002 – 07	40,840.00	
14	2002 – 03		7135.00
15	2003 – 04		9748.00

Source: Government of India: Planning Commission report-Health Information India New Delhi 2003

The recent trend in the health care system is that the Panchayath Raj (local self government system) now provides an opportunity for the people to demand the resources to operate a health service in which the people themselves will play the dominant role of chief beneficiaries. All the primary and secondary level health care institutions in the state have been transferred to the local bodies. In addition to this, the people's campaign for decentralized planning has earmarked some of the States' developmental planned fund for the local bodies, which has opened up tremendous scope for facing any challenges to Kerala Model of Health.

Medicine has evolved through the ages in all cultures. In developing health services for certain limited purposes, the patronage was shifted from the Indian System of Medicine to the western system. The decision to make the shift was amply indicated by the spectacular advances in the different fields of modern medicine in the 19th and the 20th centuries as a result of which the indigenous systems got caught in this vicious circle and

remained stagnant for a very long time. The public health sector played an important role in the lives of the people through the years after independence but the 1980's saw the emergence of the private sector. An emerging trend that is seen is that though Kerala has better health care facilities for its rural population as compared to other states in India, it is not entirely due to the contribution of the Government sector especially the dominant sector of allopathy. The private sector has expanded and it is a reflection of the strategy of the private health care sector to tap the vast health care market in rural Kerala, which is endowed with a reasonable degree of social and economic infrastructure.

Table No.3.15- Plan and Non Plan Expenditure on Medical and Public Health Excluding Family Welfare Programme in Kerala

Year	Plan	Non – Plan	Total
1977 – 78	306.96	2867.83	3174.79
1978 – 79	525.66	3051.48	3577.14
1979 – 80	422.51	3647.19	4119.70
1980 – 81	651.38	4229.27	4880.65
1981 – 82	905.97	4936.88	5844.85
1982 – 83	880.10	5058.12	5938.22
1983 – 84	1044.41	5135.00	6979.43
1984 – 85	1074.00	6354.81	7428.81
1985 – 86	1102.50	8754.37	9856.87
1986 – 87	1799.34	9576.09	11375.43
1987 – 88	1532.08	10207.12	11739.20

1988 – 89	1802.43	11408.10	13210.53
1989 – 90	2040.33	12910.55	14950.88
1990 – 91	1529.53	16587.77	18117.30
1991 – 92	1786.23	17445.10	19231.33
1992 – 93	1775.18	18331.75	20106.93
1993 – 94	2438.25	22425.78	24864.03
1994 – 95	3113.42	26597.61	29211.03
1995 – 96	5767.27	29889.88	35657.15
1996– 97	6008.67	39786.69	38766.55
1997 – 98	6762.09	47445.50	46548.78
1998 – 99	7429.16	42104.52	49534.48
1999 – 00	9071.83	58722.13	67893.96
2000 – 01	7189.00	56736.40	63925.40

Source: Government of India: Planning Commission report-Health Information India New Delhi 2003

Therefore the government might have played a historical role in the development of health services in Kerala but the emerging scenario is one where the private sector accounts for a substantial share of health services in Kerala which is reflected by the utilization. Private institutions are better spread and compete effectively with government institutions thus indicating the positive contribution to the sector. Corporate hospitals have come up in a big way catering to the needs of the people with advanced diagnostics and curative techniques and at the same time being patient friendly, the use of management skills like in any other business is becoming a focus in the medical system. Though most of the hospitals were charitable institutions, philanthropic contributions have seen a decline over the last few years thus paving a way for consumerism in the medical system. With the rising technology, the cost of health care is also bound to increase burdening the economically weaker section. In general it is to be asserted that the government through various state and central schemes by way of provision of five-

year plans has been concentrating on health care services with increase in budget provision for health centers, various other health care programmes and manpower development. The enquiry has been able to bring out that the peoples utilization of the various health programmes and their present trends are the result of the recent management process evident in the system.

❖ ❖ ❖

Health Care Programmes in Kerala

Kerala is reputed for its high quality health care infrastructure and renowned medical personnel, alongside the modern medical facilities are equally reputed facilities for Homoeopathy and Aired (An age-old Indian system of medicine based on herbs, oils and other natural ingredients). Several factors have contributed to the later development of health care services and its implementation in Kerala. New policies and programmes in tune with the contribution of WHO, UNICEF and similar national and international organizations were launched from time to time by respective State Governments in collaboration with the policies of the Union Government. The concept of planned development emerged in India since independence was also an agent of change in public health sector particularly in its polices and programmes. Here contributions of the

planned schemes and regular non-planned schemes have also been instrumental in the new developments.

In Kerala, many new programmes emerged in the various sectors of health services both institutional and non-institutional. Consequently there were increases in the number of personal in the medical, paramedical and public health areas of services. It is in this context the emergence of various commission reports like the Bhore Committee, Pai Committee and related bodies have added to the effective maintenance of health machinery in Kerala. This concept of rural medical care, family medical care, extension services etc emerged in the society for the development of health status of the community. Along with this, the role of technology and its aid in the propagation and acceleration of the health service activities tremendously influenced the system in positive manner. Moreover the realization and participation of the voluntary spirits of service and the emergence of voluntary sectors into the health service was another instance of development in Kerala. The major programmes of health service system offered to and availed by the masses are health education and awareness, school health, rehabilitation and related programmes. Thus the physical environment in most parts of Kerala is conducive to health. The state has made commendable achievements in health standards. The factors contributing to such unique situation was a wide network of health infrastructure, manpower, policies of State Government etc and other social factors like women's education, general health awareness and clean health habits of the people.

Of the different factors governing the health status, spread of education, especially female education and of medical care facilities have emerged as the most important. The role of the State government as the principal agent in the promotion of education, universal literacy, and expansion of medical care facilities aimed at 'health for all', was duly acknowledged. The high rate of prevalence of acute communicable diseases and non-communicable diseases despite the advances in health care is a cause for concern. Historically, the princely rulers of the state made the beginning to provide the basis of the infrastructure facilities for a primary health care system. After the reorganization of the state, it has reached a fairly high level of standard and soundness. The health services department performs the functions of health care in a wholesome manner. The activities

are mainly centered on the programmes oriented towards preventive, promotive, curative and rehabilitative aspects of public health. The major health programmes promoted for the welfare of the people after the formation of the State of Kerala is briefly elaborated in the following paragraphs.

School health and health education:

School health[cxliii] programme was introduced in Kerala in 1980-81. This programme was formulated for providing comprehensive physical examination and medical care to the entire school going children of the state. The main aims of the school health programme are to reduce the morbidity among school children through school health services as well as to prepare children for adopting healthy life styles and health practices through health education. As part of achieving the goal of "Health for All by 2000 AD" School Health Education was and is still being given prime importance. It is easy and useful to instill the desired health behavior regarding different aspects of health education in the formative age group of 5-15 years through the syllabus, class lessons, group discussions, education, competition etc.

The school health programme aims for the comprehensive physical examination and medical test of the school going children in the state. Due to shortage of personnel and funds, the physical examinations of students were limited to one standard each in the primary, upper primary and high schools. Those who were found defective in health were referred to suitable government medical institutions for treatment, which was free from all charges. The number of students covered under the scheme has gradually increased. In 1986-1987, 2.84 lakh students were covered .By the year 2001-2002, 4, 90,749 students were physically examined under the scheme[cxliv]. A total of two lakh school health cards were further printed at the Health and Family Welfare press for distribution[cxlv]. A pilot project on Adolescent Health Care for IX Standard girls was introduced with the primary aim of prevention of anemia by introducing iron and folic acid to the students.

Health Education:

The State Health Education Bureau[cxlvi] was created with the aim of creating awareness on the preventive and curative measures for disease as well as the facilities made available to the public, during the second five-year plan[cxlvii]. The Media division of the Health Education Bureau is concerned with planning of activities of the Bureau and purchase and distribution of materials and audio-visual items. The Social Science wing of the Bureau took up a new project viz. *"Health Education-A People's Movement"* The project envisaged organization of at least one health club in every P.H.C. Health journal – 'SUSTHITHI'[cxlviii] was released for health education of the public. The Health Education Bureau in the state and districts gave leadership to educate personnel throughout the state to organize seminars, exhibitions, group discussions etc, giving emphasis on public health particularly for programmes like polio eradication, AIDS control and reproductive health services.

The audio-visual unit attached to the bureau conducted film shows and exhibitions and gave assistance to conferences and seminars. The arts section prepares materials like drawings, title heads, column pictures, posters, banners, display boards and other educational aids. Besides these activities, the state health education bureau conducted special awareness activities in connection with the observance of important days – World Health Day on April 7th, Anti tobacco day on May 31st, World Population Day on July 31st, Eye Donation fortnight on August 25th to September 8th, World AIDS Day on December 1st etc.

The year 2001 – 2002 saw a manifold increase in the activities of the State Health Education bureau and there is a lot of emphasis on the health awareness programmes to create a society where Health for All is the goal.[cxlix]

Nutrition Programmes:

The nutrition wing under the overall control of the Directorate of Health Services is concerned with activities connected with the applied nutrition programme[cl] and national nutrition-monitoring bureau, Kerala Unit[cli]. The directorate conducts health education programmes and awareness camps to improve the nutritional status of the community especially vulnerable groups and segments of the society. This includes distribution of

not less than ten thousand pamphlets, leaflets, book lets and books describing the ill effects of the under nutrition on the various age groups. The activities include teaching and training, demonstration on preparation of low cost nutritious diet, service of nutritional status, deficiency problems, radio and television broadcasts etc. Knowledge of the science of nutrition to adolescence was imparted through these programmes. The government planned allotment summed up to 4.8 lakhs in the year 1986. The year 2002 saw an increase in the allotment by an amount of rupees fifteen lakhs.

NATIONAL PROGRAMMES

National Malaria Eradication Programme:

Kerala entered the maintenance phase of National Malaria Eradication Programme[clii] in 1965 and later during 1995, modified plan of operations were launched under the auspices of the Government of India.

The Malaria Eradication programme has been intensified over the years and malaria control activities were aggressively pursued. All remedial measures like thermal fogging, pyrethrum space spray, introduction of fishes for vector control and better treatment facilities were implemented in the problem areas.

Table 4.1: Statistics on Malaria Eradication Programme:

Year	Blood smears Examined	Positive cases	Treatment given
1986-87	9.02 lakhs	3437	3348
88-89	10.98 lakhs	4847	5313
90-91	11.13 lakhs	5356	4982
92-93	11.98 lakhs	5674	5564
94-95	12.03 lakhs	6913	6745
96-97	13.65 lakhs	10506	9872
98-99	14.86 lakhs	7251	7161
00-01	20.89 lakhs	3211	7109
02-03	32.14 lakhs	2908	2897

Source: Administration Report of the Health Services Department, Ministry of Health and Family Welfare Department, Government of Kerala.

National Filaria Control Programme (NFCP)

Filariasis is prevalent in the entire coastal belt and in some pockets of Kerala. About 6.3 million people are exposed to the risk of filarisis and 2.8 million people are protected by NFCP[cliii]. The programme was launched in the State during 1955-56. Now it is implemented through sixteen NFCP units, two filarial survey units and the filaria control works at Cherthala. Attached to the Filaria Units, eleven Filaria clinics are functioning. The Filaria Survey Unit at Thrissur was shifted to Thiruvananthapuram in May 95 and continues to function as main central unit at Valiyathura in Thiruvananthapuram. Activities carried out through the unit are Control – Mosquito larvicidal spraying operation, pistia removal and anti parasitic treatment and Assessment – Entomological and parasitological Filaria survey

Monitoring Agency: The State Headquarters Bureau of Filariasis under the Assistant Director (Filaria) attached to the Directorate of Health Services is monitoring and assessing the work at the State level.

Table 4.2: Statistics on Filaria Control Programme.

Year	Cases Screened	Positive Cases
1986-87	88,757	1, 850
88-89	1.01 lakhs	3, 062
90-91	1.48 lakhs	2, 783
92-93	1.40 lakhs	1, 786
94-95	95, 916	2, 029
96-97	93, 811	1, 019
98-99	1.15 lakhs	1, 326
00-01	1.10 lakhs	1, 215

02-03	1.28 lakhs	1, 498

Source: Administration Report of the Health Services Department, Ministry of Health and Family Welfare Department, Government of Kerala. 2002.

National Programme for Control of Blindness[cliv]

The Programme envisages comprehensive eye health care services to rural and urban people by adopting eye camp approach and eye care services at various levels and intensification of eye care education including eye donation awareness programme. The various measures undertaken through the programme include:

Mobile Ophthalmic units: at present there are fifteen mobile units of which thirteen units are attached to district hospitals and two are central mobile units attached to Medical Colleges at Kottayam and Kozhikode.

District Eye Care Centers: There are fourteen district level eye units one in each district hospital, where the services of one ophthalmic surgeon and one ophthalmic assistant each are available. The fourteen hospitals are already strengthened with additional eye units.

Primary Health Centers care services to rural people. Among the primary health centers 214 have been provided with ophthalmic equipment and one ophthalmic assistant to deliver primary eye care services to rural people. Ophthalmic departments have been upgraded in five Medical Colleges and have been provided with equipments and additional teaching staff for better eye care and for the manpower training.

Eye Banks: There are twelve eye banks in the Government sector, five in government medical colleges, five in district hospitals and one each at Thodupuzha and Kollam Taluk hospitals. The Mobile units usually conduct surgical camps organized by various voluntary organizations and grants are given to them through the concerned District Blindness Control Societies[clv]. For effective decentralization and speedy implementation of various activities at the district level, District Blindness Control Societies were constituted in all districts as per Government of India guidelines[clvi] with District Collector as Chairman.

To deliver modern treatment and to impart training and research activities, Regional Institute of Ophthalmology was started in Government Ophthalmic Hospital,

Thiruvananthapuram during 1994. A State level co-coordinating cell has been established in the Directorate under the control of Deputy Director of Health Services (Ophthalmology). The state ophthalmic cell[clvii] is implementing the programme in accordance with the guidelines of Government of India.

Kerala was the first state to launch a school eye-screening programme called "Sunethra" for early detection of visual defects among school children and giving them glasses, in 1974. Kerala is the first state to provide Eye Bank / Eye collection center in every district. Village Blind registry was prepared in 8 districts namely Trivandrum, Kollam, Kottayam, Ernakulam, Thrissur, Palakkad, Malappuram and Kozhikode. The details of all bilaterally blind people in the districts have been registered and action plan have been prepared for surgical or medical intervention for all of them. Counselor is posted in Medical College Hospital, Thiruvanahtapuram to promote hospital eye retrieval programme as part of eye banking in Regional Institute of Ophthalmology. This programme is proposed for implementation in all major hospitals.

National Leprosy Eradication Programme (NLEP)

The National Leprosy Eradication Programme[clviii] was started in 1959. The main strategy of the programme was continuous case detection of leprosy and its treatment with dapsone and also health education of the patient family and the community. The system was later had its drawbacks, because of the enormous number of defaulters due to the prolonged nature of treatment and also the emergence of Dapsone resistant leprosy. In view of the high incidence of resistant leprosy, the Government of India constituted a committee in 1981 and in pursuance of the suggestions in the report the National Leprosy Control Programme was redesignated as National Leprosy Eradication Programme[clix]. With a view to wiping out leprosy from India by 2000 AD, it was brought under a 20-point programme and was subsequently made 100 % centrally sponsored scheme.

Table 4.3: Institutions under National Leprosy Eradication Programme

1	District Leprosy Unit	10
2	Leprosy Control Unit	15
3	Modified Leprosy Control Unit	35
4	SET centers	162
5	Urban Leprosy Center	52

6	Surgery Unit	1
7	Leprosy Training Center	1
8	Leprosy Hospitals	3
9	Voluntary Organizations working in Leprosy like Lepra INDIA, Bharat Kusht Nivaran Sangh etc.	17

Source: Administration Report of the Health Services Department, Ministry of Health and Family Welfare Department, Government of Kerala.

Table 4.4: Year wise distribution of Leprosy Cases reported in the State: -

Year	Cases detected	Cases treated
1986-87	9, 385	8, 064
1988-89	8, 836	7, 270
1990-91	8, 986	7, 395
1992-93	7, 271	6,242
1994-95	7, 056	6, 186
1996-97	5, 765	5, 720
1998-99	5, 305	5, 302
2000-01	4, 965	4, 873
2002-03	2, 512	2, 510

Source: Administration Report of the Health Services Department, Ministry of Health and Family Welfare Department, Government of Kerala.

The Leprosy eradication programme has seen lot of progress and as is evident from the table 4.3. The effectiveness of the programme shows decrease in the total number of cases but more importantly it is a fact that improved health awareness is motivating the positive cases to go for treatment unlike the earlier years when ignorance prevailed.

National TB Control Programme

The National TB Control Programme[clx] is a comprehensive socially acceptable and economically feasible programme evolved with the objective of controlling the problem of Tuberculosis in the country. According to health studies 0.2% of the population in India is suffering from TB. It is estimated that there are 60000 patients in Kerala[clxi]. The National Tuberculosis Institute, Bangalore, formulated the National TB Control in 1959. The Institute provides training to medical and paramedical personnel and also conducts research work in the field of TB. The entire programme is operated on the guidelines and direction of National Tuberculosis Institute. The National TB Control Programme was started in 1962 as 50% centrally sponsored scheme with central share in kind i.e. in the form of anti TB Drugs, X-ray films, X-ray machines with camera etc for detection of cases through sputum examination, X-ray testing and supply of anti TB drugs and laboratory chemicals. Under the programme short course chemotherapy was implemented in seven districts in the State of Kerala in a phased manner.

There are District TB Centers in all the fourteen districts besides seven TB clinics and two Sanatoria for tuberculosis patients. There are forty-five exclusive TB wards attached to Government Hospitals. A total number of 1983 TB beds area available in the state.

Revised National TB Control Programme

This programme is implemented through 100 % World Bank assistance and was first implemented in Pathanamthitta district in the State of Kerala during 1994[clxii]. The prime aim is to achieve 85% cure rate. Now the programme is being extended to eight more districts. Treatment organizers are appointed for the supervision and laboratory technicians for cross checking the results in microscopic camera. With the resurgence of

resistant strains of tuberculosis and tuberculosis being part of the AIDS complex aggressive methods are being followed for the control of tuberculosis.

Table 4.5: Year wise distribution of Reported Tuberculosis cases in State of Kerala.

Year	Sputum Examined	Positive cases
1986-87	1,52,340	38,937
1988-89	1,65,000	39,131
1990-91	1,85,365	52,759
1992-93	1,56,349	40795
1994-95	1,07,520	32312
1996-97	1,01,400	33800
1998-99	1,27,560	37894
2000-01	1,34,250	41,100
2002-03	3,45,675	56,750

Source: Administration Report of the Health Services Department, Ministry of Health and Family Welfare Department, Government of Kerala.

National Iodine Deficiency Disorder Control Programme

This is a centrally sponsored scheme with 100 % central assistance. Under the programme a Goiter cell was sanctioned[clxiii] in the Directorate of Health Services in 1988 and was fully established in 1990. The programme envisages imparting health education regarding goiter, conduct of goiter prevalence surveys and awareness creation for the use of iodized salts instead of common salt. Various publicity activities such as the preparation of folders, posters, cinema slides, stickers, exhibition sets on Iodine Deficiency Disorder (IDD) and slides on IDD were done under the Directorate of Health Services. A series of seminars, workshops, operational training and state level meetings on IDD also were conducted. The activities are organized by various voluntary organizations, women's associations, youth clubs, civil supplies officers, representatives from Social Welfare Department & medical officers of Primary Health Centers. The IDD cell started iodine-monitoring system on iodized salt by distributing MBF

kits to District Medical Officers supplied by UNICEF. From 1989-94, the IDD cell conducted thirty Goiter prevalence surveys in fourteen districts of Kerala and found out that prevalence rate is 4.7 to 20 %. Government of Kerala has not issued notification for banning the sale of non-iodized salt.

Mahila Swasthya Sangh

India's commitment to the twin goal of "Health for All" and 'Net Reproduction Rate of Unity" brought out various initiatives. These goals are recognized to be intimately intertwined and further their achievements were contributing to the improvement of the condition of women and children. It was realized that a major component of Family Welfare Programme is related to health problems of women and children and these groups are vulnerable to health disorders and diseases. In order to mobilize community participation and to create a viable support structure within the community to sensitize rural women and to increase demand for integrated Health and Family Welfare Services, the scheme of Mahila Swasthya Sangh was launched in 1990-91 in selected districts of Kerala[clxiv].

Swasthya Mela

In remote and difficult areas, provision of health services particularly to the vulnerable groups has been very difficult. To fill the gaps in delivery of health services created by inadequate infrastructure and to increase accessibility of health services to the community relating to prevention of diseases and their cure, as well as for promotion of a healthy way of life, a Mela approach was introduced. Wide publicity is required for ensuring a large turnout for seeking health services during these Swasthya Melas. Counseling is one area taken up in the melas. Counseling has a distinct advantage in leading to informed choice in contraception, assisting individuals in acting upon health information received by them, increasing access to give points of service delivery and in promoting good relation between service providers and clients.

Pulse Polio Immunization Campaign (PPI)

Pulse Polio Immunization campaigns[clxv] are carried out in December and January. Intensive social mobilization campaign and media announcements are a unique feature in all Pulse Polio Immunization campaigns. Awareness is created through IEC efforts on the benefits of Pulse Polio Immunization and the need of fully immunized children also to receive oral polio vaccine during this campaign.

National AIDS Control Programme

Considering the gravity of increasing prevalence of HIV / AIDS, State Government intensified and started a control programme[clxvi]. An AIDS surveillance center was established in 1986 at Medical College, Thiruvananthapuram. Here screening of blood donors and blood products are carried out.

National AIDS Control Programme was implemented in the state from September 1993. The AIDS cell was created under an Additional Director of Health Services. There is also a State AIDS Committee and State Technical Advisory Committee to oversee the programme implementation of prevention and control of HIV / AIDS. The main activities are surveillance, modernization of blood banks, establishment of zonal blood testing centers, component separation unit and incineration, strengthening and establishment of STD clinics, training of staff, IEC activities including adolescent education.

The reports from hospitals, blood banks and laboratories in the state indicate that the incidence of HIV infection in the state is steadily increasing. The incidence shows that even though there is a fair degree of awareness among the public it has not lead to the desired behavioral changes.

The IEC activities are conducted on a moderate way using print media, electronic media and other art forms. Awareness programme for the public is done through All India Radio and Doordarshan. The Government of Kerala appointed a communication agency of IEC consultant to give target specific IEC activities to the public. Both Government and private doctors were trained in HIV / AIDS. Training is also regularly given to staff nurses and other paramedical staff as well as general public like the high school teachers and people from different walks of life. The agency undertook training for blood bank

staff and technicians, workshop on syndromic management of sexually transmitted diseases for medical officers were conducted, counseling and training for HIV / AIDS were also organized. The twenty-three licensed blood banks in Government sector were modernized. Now there are eighty-three modernized and licensed blood banks including those in private, autonomous and central Government institutions. The three component separation units attached to blood banks in the Medical Colleges are nearing completion. A large incinerator was installed in the Medical College campus of Thiruvananthapuram.

Since the surveillance center in Medical College alone is inadequate, steps have been taken to start five more centers. Kerala State AIDS cell conducted three workshops for doctors, educationalists, social workers etc. Policies were framed in consultation with the Director of Public Instructions, Director of Collegiate Education, Head Masters and Principals of colleges for evolving a strategy to give sexual health education to high school students from 8th standard onwards. A module named Family Life Education for training the teachers of high schools to impart training for their students was prepared, printed and supplied by UNICEF. The new AIDS – II project funded by the World Bank and Government of India through National AIDS Control Organization (NACO) came into force from 1999 and extended till 2004. NACO reports that the total population in India is around eight million. The HIV population in Kerala is 45,000[clxvii].

Even though there is a fair degree of awareness among the public, the present statistics show that it there is no desired behavioral change in population. Infection has now moved from the high-risk group to the general population and this arouses grave concern. In order to streamline the work of different Non Governmental Organizations (NGOs) the State AIDS Cell is conducting regular meetings and discussions viz. AIDS Circle Meet. Representatives from important NGOs in other states, nominees send by WHO, NACO, UNAID and DFID also are participating in this meet.

For the IEC activities, the media utilized for awareness generation include the print media and electronic media. These media carry advertisements with specific messages for the control of HIV / AIDS and articles to make the people aware of the basic facts about HIV, its transmission, measures to be adopted for control of prevention and transmission, proper use of condoms and the effective management of STDs.

State Mental Health Programme

The State has a Mental Health Programme of its own and the first District Psychiatry unit was opened in 1970 attached to District Hospital, Ernakulam. Initially psychiatric services were provided through the three Mental Hospitals. Stress in now on domiciliary care and secondary prevention of major mental disorders. Drug de-addition programme is also incorporated into it. There are three Mental Health Centers, five psychiatric units and district psychiatric units (in teaching hospitals) in the public sector, besides hospital / wards / rehabilitation centers in private hospitals and voluntary organizations. They provide OP and IP care and give training to medical students and nurses. A suicide prevention clinic is started in General Hospital, Vanchiyoor, Thiruvananthapuram. The doctors and paramedical staff of Taluk Hospitals and Primary Health Centers are provided training and are proposed to distribute the Psychiatric drugs through selected primary health centers. A project viz. "The Need Assessment of Severe Mental Morbidity of Kerala State"[clxviii] has been launched and an office of the State Mental Health Authority was opened in public health laboratory campus on 29-7-1997. Facilities are available in the three Mental Health Centers to the relatives of the patients for staying with them if they desire so. The Social Welfare Department is running a rehabilitation center for ex-female mental patients of Mental Health Center.

Physical Medicine and Rehabilitation

The physical medicine and rehabilitation departments were started with the main objective of providing maximum care to the physically disabled for the treatment of disability producing diseases and rehabilitation of the disabled. The first Department of Physical medicine and Rehabilitation[clxix] in Kerala was established in the Medical College, Thiruvananthapuram in 1968. A state level advisory committee on Medical Rehabilitation Science to advise the Government in the implementation of Physical Medicine and Rehabilitation in the state was constituted in 1975. The Deputy Director of Health Services (PM&R) was also included as member of the committee. Under the Department of Health Services, eleven Physical Medicine and Rehabilitation units are

functioning in major hospitals in all districts except Pathanamthitta, Idukki and Kasargod[clxx].

Three limb-fitting centers are functioning in General Hospital, Ernakulam, District Hospitals at Kollam and Kannur. Fourth one is being set up at District Hospital, Palakkad. The Welfare Society for the Locomotor Disabled has been formed for the rehabilitation of locomotor disabled. The society augmented Government activities in the field of medical rehabilitation by conducting medical camps for the locomotor disabled and supplying sufficient artificial appliances to the selected.

Family Welfare Programme

The Family Planning Programme was officially implemented in India in 1952. During the first and second plan periods (1951-61) the programme was taken up in a very modest way. It was reorganized in the third plan period and it gathered momentum with the starting of full-fledged department in 1966 and was redesignated as the Family welfare programme[clxxi]. During the fourth plan period, it was implemented as a target-oriented, time-bound, incentive-based programme. During the fifth plan period it was integrated with maternal health and child care and nutrition and was implemented as a package programme, which includes health, family planning, maternal and child health and nutrition.

The beginning of the programme in Kerala in 1955 was with eleven clinics attached to Medical institutions at the district and community center hospitals for the exclusive implementation of family planning methods. But over the years, the state has evolved innovative strategies like mass camps, which were later adopted in other parts of the country. The course of development falls into three distinct phases. First a period of slow growth during 1955-64, second a period of reorganization and establishment of State Family Planning Centers during 1964-70 and lastly a period of intensified maternal and child health services from mid 70's onwards. During the period 1956-61 of the first phase seventy family planning clinics were opened in the state with facilities for sterilization in fifty-three institutions. During the next four years, which was a period of slow growth, fifty more clinics were started and family planning clinics were opened in ninety-three

panchayats. Subsequently more infrastructure facilities were provided and incentives for promoters and doctors were introduced to boost up the programme. At various levels, committees were constituted to promote the activities of Family Planning clinics. In 1964 on the basis of the recommendation of the Mukharjee Committee, a network of service units was established and it was a period of reorganization till 1970. From 1970-1973 conduct of mass sterilization camps was the hallmark of the programme. Since 1970 the state has stepped up the pace and reached several milestones in the implementation of the various family welfare programmes.

Delivery of various family planning services are undertaken through sub centers, primary health centers, taluk hospitals and district hospitals. People's participation is always invited through local self-government organizations including voluntary organizations and opinion leaders at various levels. Utilization of mass media and inter personal communication highlight the benefit of small family norm and removal of socio-cultural barriers for adoption of family limitation programme.

The Junior Public Health Nurses (JPHN) located at the sub-center along with Junior Health Inspectors (JHI) are the front line workers providing services in the community. For skill up-gradation of medical and paramedical personnel at the subcentre, primary health centers and community health centers, two Health and Family Welfare Training Centers are functioning in the state - one at Kozhikode and the other at Thiruvananthapuram.

In the mid 1970's, maternal and child health services were integrated with family planning and the programme was renamed Health and Family Welfare Programme. Since then Kerala has made rapid strides in the implementation of Family Welfare Programmes. The programme seeks to promote responsible and Planned Parenthood through voluntary and choice of methods best suited to individual acceptors.

In Kerala from 1957 to 1973 as in other states the number of vasectomies out numbered tubectomies, accounting for as much as seventy-six percent of the total sterilization conducted by the state. But since then there was a reversal of the trend, tubectomies outnumbered vasectomies in all the years except in 1976. Male sterilization declined

from fourteen percent in 1980-81 to about two percent in 1990-91 and to as low as 0.3 % in 2000-01. In the case of IUD insertions, a decreasing trend was noticed indicating clearly that the people of Kerala prefer permanent methods for family planning.

Table 4.6 Decline in Male Sterilisation in Kerala

Year	Male sterilisation (%)
1970-71	76
1980-81	14
1990-91	2
2000-01	0.3

One redeeming feature of the implementation of the Family Welfare Programme (FWP) in Kerala[clxxii] was that since 1980-81 it was able to maintain consistently an achievement of over ninety percent of the target under sterilization and could even excel the targets consistently for the years 1980-81 and 1981-82. This was repeated in 1984-85 and again from 1988-89 to 1994-95 except to 1990-91. For the creditable performance, during 1986-87 the state secured the second prize of an award of Rupees one crore among group A states and first prize during 1987-88 for a cash award of Rupees 2.5 crores. In 1997, Population Foundation of India has adjudged State of Kerala as the best performing state in India in terms of population and reproductive health programmes for a cash award of Rs. 10 lakhs and a running trophy. Similarly Palakkad district was adjusted as the best performing district for a cash of Rupees two lakhs.

One of the important tools to assess the impact of the performance of the Family Welfare Programme on birth rate is the couple protection rate. In Kerala the percentage of effectively protected couples is higher than the All India average. According to the Government of India estimates the couple protection rate as on 31-3-1994 is 51.5 % for Kerala, while the all India rate is 45.4 %.

In fact the true measure of effectiveness of the Family Welfare Programme is neither the number of sterilization conducted nor that of IUDs inserted or oral pill

or contraceptive users but the demographic impact to the extend that the birth rate is reduced. The birth rate registered a decline from 23.2% in 1985 to 17.7% in 2003. As a result of the fall in birth rates the Total Fertility Rate (TFR) declined from 2.3 in 1986 to 1.8 in 2002 and Gross Reproductive Rate (GRR) from 1.1 to 0.9.

The long-term demographic goals, as laid down in the National Health Policy (1983) was to achieve the net reproduction rate of unit by the year 2000 AD. The state has achieved this goal ahead of the targeted year. Kerala's achievements in the Family Welfare front have been impressive in terms of major indicators viz. birth rate, death rate, neonatal mortality rate, infant mortality rate, couple protection rate etc.

The social factors such as high female literacy, higher age at marriage of girls, status of women, effective role played by non governmental organizations and the general socio-economic consciousness of the people have contributed to this unique position.

Table 4.7: Statistics related to Family Planning Programmes in Kerala.

Year	Sterilization	Other Methods	Total
1986-1987	204615	277607	482222
1988-1989	207457	391921	599378
1990-1991	190547	466286	656833
1992-1993	159823	468446	628269
1994-1995	133054	425963	559017
1996-1997	125126	333497	458623
1998-1999	140285	297564	437849
2000-2001	157632	419876	577508
2002-2003	178933	472185	651118

Source: Administration Report of the Health Services Department, Ministry of Health and Family Welfare Department, Government of Kerala.

Target Free Approach in Family Welfare

Communication programmes aim at generating demand and better utilization of health and family welfare services in the community and empower people to take

care of their health. Now it is being realized that the Information and Education Council (IEC) programmes have to be area specific and addressed to the problems of the area. This warrants decentralized planning approach in designing IEC programme. Another important dimension of the IEC programme is based on needs of the area. The proposed IEC strategies were to identify the communication needs to plan IEC activities, involve community and NGOs through unified messages, the effective use of mass media for back up and Strengthening inter-personnel communication.

Moving from Family Welfare to Reproductive Health

New direction in the Family Welfare Programme towards a client – oriented reproductive health approach has major implications for IEC. As is evident from the services identifying components of an essential reproductive health packages, the range of activities which IEC must now take-up are considerably broader in scope than before. In addition to prevention of unwanted pregnancies and the promotion of childhood immunization, IEC strategies are concerned with safe abortion (Medical Termination of Pregnancy) safe motherhood, prevention and management of reproductive tract infection (RTI) / sexually transmitted infection (STI), sexuality and gender information education and counseling. The goals require a strategic approach to IEC in identifying meaningful segments of the target audience, promoting a number of new behaviors that are closely linked but complex, identifying messages and in using a mix of communication channels to effectively reach various audience segments.

Thrust areas have been identified for Family Welfare Programme, for which audience-specific message and use of suitable media were to be discussed and finalized from individual, group and mass approach point of view. The situation analysis reveals the following thrust area for designing IEC Programmes. The areas are reproductive health of adolescent girls, counseling of adolescents entering the reproductive age group for family life, women's education, higher age at marriage, early ante-natal registration and care, Nutrition during pregnancy and lactation, institutional delivery, vaccine preventable diseases, protected water supply, diarrhea and acute respiratory illness management, low birth weight, birth interval and birth spacing, medical termination of pregnancy, childhood disability and breast-feeding.

Maternal and Child Health Programme

Right through the ages, care for mother and children has been one of the causes to which Indian policy has remained committed. Since independence, the human resource development programmes focused on maternal and child health. The immunization programme is one of the most cost effective public health measures and is an important component of the primary health care services. Recognizing the need for immunization, Government of India launched the Expanded Programme of Immunization (EPI) of United Nations during 1978, with the objective of increasing the average levels of various antigens.

Immunization Programme

Immunization plays a vital role in the control of infectious diseases by building up immunity among immunized persons against some specific vaccine preventable diseases and by helping to decrease the transmission of diseases from one person to another. In Kerala the Expanded Programme of Immunization (EPI) started in 1978 as a phased programme to cover thirty-three NES blocks every year. Tetanus Toxoide (T.T) immunization to pregnant women started in 1975-76 was integrated with EPI in 1978 itself. Polio and typhoid vaccinations were included in 1979-80 and T.T immunization for school children in 1980-81. BCG vaccination was brought under the purview of EPI during 19981-82. Measles vaccination was initiated only in 1985-86. By the year 1982 all the then 151 NES blocks in the state were covered under the EPI and from 1983 onwards it became a permanent ongoing programme.

Universal Immunization Programme

With a view to improving vaccine coverage and quality of service, a major shift in emphasis and strategy was adopted by the Government of India in 1985. The Universal Immunization Programme was thus launched under National Immunization Mission. The main objective of the programme is immunization of all children below one year of age (infants) against six vaccine preventable diseases and 100 % coverage of pregnant women against T.T, maintenance of universal prophylaxis against anemia in women and

children and also better management of diarrhoeal diseases. In Kerala UIP was launched in 1985. Through this programme infants below one year are immunized against six killer diseases viz. diphtheria, whooping cough, tetanus, child hood TB, poliomyelitis and measles.

Central Planning and Monitoring and Statistical Unit: -

The main work attended by the unit during the year where the collection and compilation of progress report on planned schemes – monthly, quarterly and annual reports were prepared and send to the government besides progress reports on centrally sponsored schemes.

In brief it can be seen that the availability of facilities for primary health care, accessibility, very high degree of awareness and acceptability among the people has made the Kerala model an almost perfect one. What is needed at present is to sustain these, by the personnel involved with the active participation and co-operation of the people. Though the task seems to be a challenge, with the effective involvement of the private sector that plays a major role in the health sector and with the effects of voluntary organizations this task is attainable.

From the pre-independence phase, the health care machinery of the state underwent tremendous changes. The princely states of Travancore, Cochin and Malabar had a specific health sector pattern, which was merged when the State of Kerala formed. Since independence and the formation of the State, Government of Kerala considered health as governmental right and evolved health care machinery in the State to develop health care policies based on the people's need with strict controlling and monitoring measures. The health care department developed policies for the development of health status of the state in adherence to the national and international guidelines. The present status of health care of the state is the careful implementation of these programmes and the strict evaluation of the programmes based on the guidelines. The level of achievements attained in the implementation of the various national programmes for control and eradication of diseases and also for family welfare programme including universal immunization programme and maternal and child health activities helped the state to

reduce the mortality rates and improve the health status of the people. The mortality rate and life expectancy especially that of females has enhanced to over seventy three years. Today the infant mortality rate is as low as sixteen and the maternal mortality is below one, which is comparable to that of certain developed countries. In 1995 the crude death rate was as low as six and the per school child mortality rate was also quite low. In 1991 the general fertility rate was 64.4 and in 1995 the birth rates have reduced to 17.7. The total fertility rate was as low as 1.8 in Kerala by 1992 itself, which is the lowest among all the major states in the country. Under all major indicators, the state has almost achieved what the country had targeted for achieving "Health for all by 2000 AD".

On analyzing the various programmes introduced by the health department of the state government, it can be seen that the evolution of the policies were in lines with the present day needs of the health status of the people. Thus the Government machinery had its purpose when introducing the programmes and was able to evolve a Kerala Model Health Care as an example for other nations to follow.

***

Health Care Beneficiaries

"The secret of national health lies in the homes of the people". Much has been discussed in the emerging scenario of healthcare. Modern medicine is often considered for its preoccupation with the study of disease. Health can never be adequately protected by health services without the active understanding and involvement of communities. The current motto is health care by the people. Community participation has become an aphorism that is still awaiting genuine realization in many countries. Health is not a commodity to be acquired nor is it a service that can be purchased. Health promotion and disease prevention have been kept important for long by the members in society. According to Lothan[clxxiii] (1975) the system was designed for the west and its blind adaptation in the developing countries is an unqualified disaster. It is pronounced that an over emphasis on doctors and their specialized services on an individual and hospital based medical care is a determinant of the frontline healthcare of the masses; curative services to the neglect of preventive services and urban orientation to the neglect of the rural majority. These factors were responsible for draining away our limited resources while providing expensive specific care to a small segment of the population. "As a general rule, the most successful man in life is a man who has the best information". This is more so in matters relating to the needs of man and the remedial measures for the same. Issues and problems relating to those of food, health, residence etc all belongs to this kind. Health awareness is the concern not only of an individual but also of the society at large[clxxiv]. Unless the society is not aware about health and it's benefits it may be difficult for an individual to lead a normal life in the society. Here the main question is how exactly these problems are solved or rather managed by the system.

Very often, management is the purposeful and effective use of resources – manpower, materials and finances – for fulfilling a pre-determined objective but management of health and healthcare systems requires a kind of professional approach[clxxv]. There arises the matter of identifying the need for healthcare and its management programmes. It is in this context that people develop awareness about the various programmes; their level of acceptance of any particular programme as well as their participation in specific programmes assumes greater importance. People should be benefited from participating in the health care programmes as the motto demands. This can be achieved by providing

the knowledge about health and making them to participate actively in health care programmes. Most of the programmes are organized for the benefit of a particular locality or community. The people of the community who is benefited turn out to be the real beneficiaries. Involvement of the people in these health care programmes comes through their awareness, which generates an interest and ultimately leads to practice. Hence awareness of health care facilities forms a prominent part of this discussion. Members of the society depend on various sources for obtaining information. The knowledge or information of any kind on health care programmes reaches the participants through different channels. These channels of information differ with respect to various factors like the type of the programme, nature of the programme, the beneficiaries of a particular programme, the location of the programme, circumstances etc. Generally men and women show differences in their interests towards various issues, particularly those relating to the participation in health care programmes. It is quite likely that the actual acquisition of awareness or even participation in the health care programme largely depends on the nature of individuals, particularly the difference of sex of the respondents or beneficiaries. Health care programmes always generate interest in people when it has got any kind of message for better living or means for the solutions of the health problems at hand. People are generally motivated to attend these programmes mainly due to the felt need for service and the availability of the same through appropriate sources like doctors, institutions and similar centers. The actual success of the programme is achieved when people's active involvement is there in the organization of the programmes (Meera Chaterjee: 1988)[clxxvi]. The involvement of the people is generally visible either as an organizer or as a beneficiary. Involuntary participation of members arise most likely out of job compulsion or social obligations of the individual at that point of time. People are generally attentive to various kinds of programmes, so also the health care programmes. Much of the involvement of the people depends upon the level of education of the people. Education earned from the academic institutions or through professional experience and their exposure to the system provides insight into the various areas of activity. Similarly media plays an important role in creating awareness about various programmes among people. Usually the media includes the audio-visual media like television and radio; print media includes newspapers, journals, magazines etc and the transit advertising media. The various media are well utilized by the executive

machinery to educate people about the health care programmes. More emphasis to these kinds of programmes is carried out through the camps and meetings organized at various levels. Public meetings on these issues are generally a kind of lecture where the masses get a chance only to acquire information related to the health care programmes. At the same time the health check up camps are generally clinical with medical administration, which involves mutual discussions, debates, deliberation and functional involvement of participants or beneficiaries.

Health care programmes including camps, meetings, mass media publicity etc are generally the means to create awareness to the general public in this field. To develop an insight into a particular programme, the participant should have real interest in that particular programme which arises out of real need. Moreover people must also have certain amount of motivation towards a particular programme to take part in it. Generally health care benefits are extended to the masses through the programmes of health education and awareness; school health programmes, rehabilitation programmes, health care camps, health care meetings and related programmes. These programmes enable the active participation and involvement of the community in various health related issues of the community thus promoting various health care trends in the state. Rehabilitation programmes like counseling, training and school health programmes give the members an idea regarding maintenance of health in the society and the standards to be adopted for it's general well being.

According to studies conducted by John Cullis and Peter West[clxxvii] which states that everywhere, patterns of illness vary in relation to a variety of socio-demographic indicators including age, sex, socio-economic factors residential and geographic conditions. Anderson[clxxviii] and associates are also of the view that health care utilizations are a consequence of predisposing, enabling and illness variables. Predisposing variables include demographic indicators (age, sex and marital status), socio-structural variables (race, education, religion and ethnicity) and knowledge of health care.

The major hypothesis for the study is that the real process of developing awareness may not be the same among all sections of the society. The awareness of people on health care programmes depends on the difference of sex among the beneficiaries. Men develop

more awareness on health issues. Nature of people's participation in health care programmes varies with respect to the sex difference of beneficiaries. Women participate more frequently in health care programmes. Participation of beneficiaries in health care depends on the type of programme to which they respond. These propositions are examined in the study on the following lines.

Development of awareness on any phenomena among people assumes various patterns among different types of individuals in the society. The nature of the individual, previous acquaintance of the individual to the programme, vested interests, variations in intellectual capacities, sex difference, ageing or similar conditions are important factors in this regard. Very commonly and possibly men and women manifest significant variations in their responses towards awareness on any subject.

When the phenomenon on the awareness of the respondents regarding health programmes was examined (Table No. 5.1) in our sample it was found that majority (77.86%) of the members were aware about the existing health programmes in the state. Only less than one-fourth (22.13%) of women were aware. On a detailed analysis of this phenomenon on the variation among men and women in getting awareness awareness, it was found that as large as 82.46% of the male members have gained awareness on health programmes. At the same time only 68.29% of the female population could gather awareness in this aspect. It can also be seen from the analysis that among the respondents who gained awareness on health care programmes, a good majority i.e. 71.57% members were men. Thus it is evident that men are more inclined towards developing awareness on health programmes in the sample. The chi square value in this situation also brings out that awareness of respondents on health care programmes vary significantly among the sex groups.

Table: 5.1: Awareness on Health Programmes and Sex of beneficiaries.

AWARENESS / **SEX**	*Aware of Health Programmes*	*Not Aware of Health Programmes*	***Total***

Male	141 (82.46 %) (71.57 %)	30 (17.54 %) (53.57 %)	171
Female	56 (68.29 %) (28.42%)	26 (31.70 %) (46.42 %)	82
Total	197 (77.86 %)	56 (22.13 %)	253

Chi square value: 6.443 Degree of freedom: 1 Table value: 3.85

When examining the level of awareness related to health care programmes among people, it is also important to look into the awareness various fields of health care like rehabilitation programmes for the mentally and physically disabled, school health programmes and health education measures.

Disability impairment is always considered as a disadvantage in the society. It is only during recent times that people have been more concerned on matters of handicap of any form. Rehabilitation programmes are one of the major health care programmes organized in the state. Rehabilitation may be referred to as "the combined and coordinated use of medical, social, educational and vocational measures for training and retraining the individual to the highest possible level of the person's functional ability". It includes all measures aimed at reducing the impact of disabling and handicapping conditions and at enabling the disabled and the handicapped to achieve social integration which will help these individuals to actively participate in main stream of community life. Rehabilitation medicine has emerged in recent years as a medical specialty. It involves disciplines such as physical medicine or physiotherapy, occupational therapy, speech therapy, Audiology, psychology, education, social work, vocational guidance and placement services. The areas of concern in rehabilitation programmes are medical rehabilitation, vocational

rehabilitation, social rehabilitation and psychological rehabilitation. The purpose of rehabilitation is to make productive people out of non-productive people. Rehabilitation is no longer looked upon as an extra curricular activity of the treating physician. The current view is that the responsibility of the doctor does not end when the temperature touches the normal or when the stitches are removed. The patient must be restored and retrained to live and work with in the limits of the disability and to his maximum capacity. Examples of rehabilitation programmes are arranging provision of aid of the crippled, establishing schools for the blind, reconstructive surgeries for the handicapped, muscle retraining and graded exercises in neurological disorders like polio, shift in profession to a more suitable one and modification of life in general in the case of tuberculosis, cardiac and other patients. Health for All aims at providing rehabilitation for all. It is now recognized that rehabilitation is a difficult and demanding task that needs enthusiastic involvement of people from different segments of society as well as expertise, equipment and funds. The present analysis is mainly targeted on the extent of awareness among population with regards to rehabilitation programmes conducted in the State.

Development of awareness on rehabilitation programmes among people depends primarily on the need of the people, their level of intellectual understanding, social conditions and the nature of the individual. Men more commonly, due to their type of profession and social attributes tend to be more aware of these rehabilitation programmes than women. Thus the awareness of men and women regarding the rehabilitation programmes were examined in our study.

The analysis of Table No. 5.2 in this regard revealed that majority of the respondents i.e., 78.65% of the sample was aware about rehabilitation programmes of various kinds functioning in the State. It was also seen that one-fourth of the respondents i.e., 21.34% were ignorant of rehabilitation programmes. On a detailed analysis to examine the real differences among men and women in acquiring awareness, it was found that a major part (84.21%) of men in the sample were aware of such programmes. It was also noted that 67.07% of women in the sample were aware of the programmes. It is also seen that among those who are aware of rehabilitation programmes a major part (72.36%) were

men. The Chi square testing also supported that awareness on rehabilitation programme differs with sex of respondents and male men are more aware about the programmes available.

Table 5.2: Awareness among respondents on Rehabilitation Programmes and Sex of Beneficiaries

AWARENESS / SEX	Aware of Rehabilitation Programmes	Not Aware of Rehabilitation Programmes	Total
Male	144 (84.21 %) (72.36 %)	27 (15.78 %) (50 %)	171
Female	55 (67.07 %) (27.63 %)	27 (32.92 %) (50 %)	82
Total	199 (78.65 %)	54 (21.34 %)	253

Chi square value: 9.696 Degree of Freedom: 1 Table Value: 3.84

It is essential to develop awareness on matters of health care at all levels of the community and more so at an earlier age so that there may be a sound base for the community in this aspect. Considering this phenomenon aspect it is important to look into the awareness of the respondents on the importance of school health programmes, as this is a programme initiated at the beginning stage of the life of an individual. School health is an important branch of community health. According to modern concepts (McGinnis[clxxix] 1990, Roger Detals[clxxx] 1997) School health service is an economical and powerful means of raising community health of the present and future generations. The school health service is a personal health service and developed during the last seventy-five years from the narrower concept of medical examination of the children to the present day concept of comprehensive health care and well being of children throughout adolescence.

School health programmes occupy an important position in the health care and academic sector in the present days. Most programmes are organized by the institutions to make

students aware of latest health care programmes and provide better health education. The school health programmes are generally organized to make children aware of the health

issues and to develop an idea about healthy living from the childhood days. The school authorities and parent teacher association with the support of governmental or non-governmental agencies usually organize the programmes. Parents form a significant group in school health programmes. Further any discussion on School Health services must be based on local health problems, the culture of the community, the available resources in terms of money, material and manpower but most importantly the motivation of the family members to accept and avail these programmes provided to their children in the said community. Very commonly men and women have significant difference in their responses towards acquiring awareness on any matter. This phenomenon was examined in the case of awareness of School health programmes in the study in Table No. 5.3.

Table: 5. 3 Awareness of respondents on School Health Programmes and Sex of beneficiaries

AWARENESS / SEX	Aware of School Health Programmes	Not Aware of School Health Programmes	Total
Male	149 (87.13 %) (68.98 %)	22 (12.86 %) (59.45 %)	171
Female	67 (81.7 %) (31.01 %)	15 (18.29 %) (40.54 %)	82
Total	216 (85.37 %)	37 (14.62 %)	253

It was found from the analysis of Table No.5.3 that a good majority of respondents (85.37%) are aware of school health programmes as people priority to education and health status of children. Only 14.62% of the respondents were unaware of the school health programmes. On a detailed analysis among men and women on awareness of school health programmes, it is seen that a large majority (87.13%) accounted for the

male population. In the case of female respondents 81.70% were aware. The population who expressed unawareness (14.62%) may not have school going children. It can be seen on further analysis that from among the respondents who are aware of the school health programmes, a sizeable majority were men (68.98%).

Among the various health care programmes, the most common ones are health camps. Camps usually provide medical and therapeutic explanation of various diseases. Health camps are an extension of health care programmes and are an expression of concern for fellow human being to provide multitude of services to individuals, families or communities by the agents of health services for the purpose of promoting, maintaining, monitoring and restoring community health. Camps form a platform for mutual discussion and create a situation for demonstration or administration of medicine and technology to people. This always makes people much aware of the health care developments. The programmes are organized by governmental machinery as well as by voluntary agencies. Thus analysis of respondents' awareness with regard to camps was made on the basis of sex as criteria.

Table: 5. 4: Awareness among Respondents on Health Camps and sex of respondents.

AWARENESS / SEX	Aware of Health Camps	Not aware of Health Camps	*Total*
Male	156 (91.22 %) (70.27 %)	15 (8.77 %) (48.38 %)	171
Female	54 (65.85 %) (24.32 %)	16 (19.51 %) (51.61 %)	82
Total	222 (87.74 %)	31 (12.25 %)	253

Development of awareness on the health programmes sponsored by the state or private agencies depends on various factors like the publicity provided, the reach of these

programmes, the facilities arranged, the benefits offered and more importantly the individual's interest to avail these programmes. Men are usually more receptive to these kinds of programmes and avail the facilities offered. The analysis of data (table 5.4) regarding camps reveals that majority (87.74 %) of respondents are aware of health care camps. The attitude and interest to acquire awareness about the health camps may not be similar among men and women. As a matter of concern, the issue of awareness of camps among men and women were analyzed. A good majority (91.22%) of male members are aware of health checkup camps. The analysis further shows that 65.85 % of the female

respondents are also aware of the health checkup camps. In the case of the respondents who are aware of the programmes, 70.27 % were male members. Further it was seen that only 24.32 % female respondents were aware. Thus Table No. 5.4 explains that though men and women are aware about camps, it is men who are more aware of the camps.

Meetings are organized at all levels of activities namely the local level, district level, state level or the national level. The meetings organized in the medical sector are usually a lecture or a public speech on issues of current importance or need to the society. This is usually done to inform the community about the availability or need of a particular policy or programme. The meetings when set for a larger unit, cannot always provide a discussion or demonstration platform but always helps to provide information to a larger group of people. These programmes are conducted to disseminate information related to the latest advancement in all emerging fields of science and technology. Health care sector is also of no difference. Thus as a matter of concern, the awareness regarding the health care meetings was examined among the respondents.

Table: 5.5: Awareness among respondents on Healthcare Meetings and Sex of Respondents.

AWARENESS / **SEX**	**Aware of Health care meetings**	**Not Aware of Health care meetings**	***Total***

Male	153 (89.47 %) (68.91 %)	18 (10.52 %) (58.06 %)	171
Female	69 (84.14 %) (31.08 %)	13 (15.85 %) (41.93 %)	82
Total	222 (87.74 %)	31 (12.25 %)	253

The analysis (Table No.5.5) in this regard explained the following details. It was seen that 87.74% of the total respondents are aware of the health care meetings. The study in this regard further explained that 68.91% of male respondents were aware of the health care meetings. Out of the female respondents 31.08% were aware of health care meetings. Thus it is seen that male respondents are more aware of health care meetings.

Health education is an integral part of national health system. It is a basic tool of management and the key input for the progress of any society. The primary objective of all source of health information is to provide reliable, relevant, up to date, adequate, timely and complete information on health and also to provide at periodic intervals data on the general performance on the health services and also to assist planners in studying their current functioning and trends and demand. Unfortunately, it is still very difficult to get information where it matters the most i.e., at the community level. The concept is now receiving a lot of attention after the World Health assembly stressed the need for effective health information services. Health education is not just health propaganda; it is more than mere information and the idea is to cause or facilitate learning. Awareness of any kind of health care programmes is made through various channels of communication. Various publicity media like print and audio-visual media, public address system all cater to promotion of health care, which leads to dissemination of ideas and schemes on health care management and programmes.

Health education informs, motivates and helps people to adopt and maintain healthy practices and life styles, advocates environmental changes as needed to facilitate this goal

and conducts professional training and research to the same end. Health education cannot be "given" from one person to another. The acquisition of information from various sources with reference to health care programmes among people assumes various patterns depending on the nature of the individual, vested interests, previous acquaintance, age, sex difference and educational capacity of the individual to comprehend the importance of the knowledge available.

Publicity media for health care or any such programmes includes the audio-visual media like the television or the radio, print media like the journals, magazines and other publications. Transit media like the hoardings, banners; posters also form another kind of media. Personal contact is another usual method to popularize these programmes. People will participate in the health programmes only if they are confident of the programme and the organizers. So it is a regular practice to participate in programmes after enquiry about the quality and organizers of the programmes. So personal contact also plays a prominent part in the publicity of health care programmes. Thus it can be seen that source of information regarding the programmes plays an important part in participating in the programmes. Responses or reactions may not be alike among men and women. Thus the various sources people depend for information was examined as part of the enquiry, which is detained in Table No.5.6.

When the details were analyzed, it was found that 48.22% respondents gathered information regarding health care management programmes through print media. Of these respondents more than half (75.40%) were male members. Visual media as a source of information was depended upon by only 16.60% of the respondents among the sample. Among those who depended on visual media men accounted for only 47.61% of the population. At the same time female respondents making to 52.38% acquired awareness on health care programmes through the visual media.

Table: 5.6: Sources of Information on Health Care Programmes and Sex of Beneficiaries

Source Of	Print	Visual	Public	Personal	Total

Information / Sex	Media	Media	Address System	Contact	
Male	92(53.80%) (75.40%)	20(11.69%) (47.61%)	41(23.97 %) (78.84 %)	18 (10.52%) (48.64 %)	171
Female	30 (67.07%) (24.59 %)	22 (10.97 %) (52.38 %)	11 (12.19%) (21.15 %)	19 (9.7%) (51.35 %)	82
Total	122 (48.2%)	42 (16.60%)	52 (20.55%)	37 (14.62%)	253

Chi square value: 20.07 Degree of Freedom: 3 Table Value: 7.81

With respect to public address system, 20.55% respondents gathered information from this, of which a sizeable majority (78.84%) was men. Women coming upto 21.15% depended on public address system as a source of information on health care programmes. When personal contact as a source of information on health care programmes was considered, meager 14.62% respondents were found depended on it. Among these respondents, women (51.35%) accounted for the maximum response. In case of male respondents only 48.64% acquired knowledge

on health care programmes through personal contacts. Among the total male respondents, 53.80% depended on print media and 23.97% on public address systems.

In short, it is statistically significant that men and women in the sample show differential kind of responses towards various sources of information on health issues. (Table 5.6).

Media was favored by 70% of the male respondents. From among the female respondents only 28.5% depended on personal contact. This shows that there is a considerable difference among men and women in depending to various source of information for the publicity of health programmes.

Rehabilitation programmes are an important dimension of managerial strategy in healthcare. It is now recognized that rehabilitation is a difficult and demanding task that

needs enthusiastic participation of the population from different segments of society as well as expertise, equipment and funds. Information on rehabilitation programmes is available from various sources. Availing this information by the population depends largely on the place of origin of information, its effectiveness in delivering the message and the need of the respondents. Acquiring information on rehabilitation programmes among people depends on various factors like the type of individual, his or her nature, and previous familiarity with these programmes, their personal need and aptitude. Very commonly, men and women have significant variations in their opinion on any subject. Similar phenomenon was observed in our study too as can be observed from the detailed analysis. This phenomenon was looked into in our study on the following lines.

On analyzing the source of information related to rehabilitation programmes (Table No.5.7) it was found that maximum respondents (41.1%) gathered information through print media. Male respondents (70.19%) maximum depended on the print media. Visual media as a channel of information was depended by 17.78% of the respondents of which men accounted to 68.88%. From the female respondents, 31.1% acquired awareness on rehabilitation programmes through visual media. Through the public address system, 24.11% gathered information, of which 63.93% were men. Women (36.06%) depended on the public address system as a source of information on rehabilitation programmes.

Table: 5.7 Sources of Information on Rehabilitation Programmes and Sex of Respondents

Source Of Information / Sex	Print Media	Visual Media	Public Address System	Personal Contact	Total
Male	73 (42.69 %) (70.19 %)	31(18.12 %) (68.88 %)	39(22.8 %) (63.93 %)	28(16.37%) (65.11 %)	171
Female	31(37.8 %) (29.80 %)	14 (17 %) (31.11 %)	22(26.82%) (36.06 %)	15(18.29%) (34.88 %)	82
Total	104	45	61	43	253

	(41.1 %)	(17.78 %)	(24.11 %)	(16.99 %)	

As far as personal contact as a source of information on rehabilitation programmes was considered, a meager 16.99% of the respondents acquired information. Among these respondents, 65.11% of the respondents were men. In case of women as respondents 34.88% agreed to acquiring information on rehabilitation programmes through personal contacts. It is seen that there is a varying difference among men and women with respect to utilization of various sources of information.

It is already seen that people are aware of all kinds of health care programmes and in particular about school health programmes. School health services are a personal health service and its task is manifold and varies according to local priorities. The objectives of the school health programmes are promotion of positive health, prevention of diseases, early diagnosis, treatment and follow-up of defects, awakening health consciousness in children and provision of healthful environment. School health services are not aimed at children alone but the community at large. It was analyzed in detail about the various sources of information depended by people to gather details regarding the school health programmes. The media considered for the analysis included print media, visual

media, public address system and personal contacts. In order to examine the response among men and women on the various sources of information related to school health programmes, our study was carried out in the following lines. School Health programmes are based on local health problems, the culture of the community, the available resources in terms of money, material and manpower but most importantly the presence of school going children at home and motivation of the family members to accept and avail these programmes provided to their children in the said community. It is quite natural that men and women have significant difference in their responses towards acquiring awareness on matters related to health care issues. The usual practice is that women mainly attend these programmes as mothers spend more time in looking after the health of the children. This factor was looked into in this particular study to find out the viewpoint of the various respondents with regard to school health programmes. The phenomenon was examined in

the case of Source of information on School health programmes in the study. (Table No. 5.8)

Table: 5.8 Sources of Information on School Health Programmes and Sex of Beneficiaries

SOURCE OF INFORMATION / SEX	Print Media	Visual Media	Public Address System	Personal Contact	Total
Male	91(53.21 %) (62.32 %)	21(12.28%) (70 %)	39(22.8 %) (79.59 %)	20(11.69%) (71.42 %)	171
Female	55(67.07%) (37.67 %)	9 (10.97 %) (30 %)	10 (12.19%) (20.4 %)	8 (9.7%) (28.57 %)	82
Total	146 (57.7 %)	30 (11.85%)	49 (19.36%)	28(11.06%)	253

The data analysis reveals that more than half of the respondents i.e., 57.7% have gathered information on school health programmes through print media. Of these respondents men are more depending on (62.32%) this media. Among the female population, 37.67% gathered information through printed sources.

Among the 11.85% respondents who relied on visual media as a source of information, men accounted for a maximum of 70%. Of the female respondents,

30% acquired awareness on school health programmes through visual media. It is seen that 19.36% respondents depended on public address system, of which a sizable majority 79.39% were men. Only 20.4% women depended on the public address system as a source of information on school health programmes. As far as personal contact as a source of information on school health programmes was considered, a meager 11.06% of the respondents acquired information. Among these respondents, a good majority, i.e., 71.42% of the respondents were men. In case of women as respondents 28.57% agreed to acquiring information on programmes school health through personal contacts. Among these female respondents felt that personal contact through school officials and parent teacher association generally contributes to publicity in these programmes.

The factors regarding the awareness related to health care management programmes, the sources and the media related to information dissemination of the health care management sector were examined. Now as part of the study it needs to look into the factors like participation in the health care programmes on an individual and institutional basis and also in terms of encouragements received for each programmes.

The attitude of the people to health care programmes differs depending on the lifestyle, living environments, social obligations, cultural background, mode of living etc. The family outlook and educational status also determine the attitude of the people. Usually for health care programmes there will be people's co-operation either as an organizer or a participant. This usually brings in real participation in health care programmes. The health care delivery programme is essential to the community at large. A major part of the population are now of the view that these programmes are essential for their overall existence. In this context of awareness of the masses, the extent of utilization or participation is very important. It appears that there are instances of voluntary participation, compulsory and induced participation. The induced participation is many a time through various forms of encouragement, which needs to be looked into. To participate in any kind of programmes, it is highly essential to receive encouragement for the same. The kind of encouragement given and received differs according to people and the programmes based on living conditions, society, health standards etc. The encouragement expected also differs according to the programmes and the organizers.

The methods of encouragement may be professional or personal policies as decided by management or by the individuals. These policies of encouragement motivate people to participate or attend various health care management programmes. So the respondents reaction towards external encouragement to participate in these programmes were analyzed as part of the enquiry in Table No.5.9

The encouragement to people to participate in various programmes is received from different sources. The encouragement were received in terms of more advanced knowledge, a common platform to discuss health related issues, collective activity programmes as well as monitory and fringe benefits in many cases. The study in this regard, when examined showed that 78.26% of respondents are receiving some kind of encouragement either through independent sources or by the influence of other sources to attend health care programmes.

Table: 5. 9 External Encouragements for Participation in Health Care Programmes and Sex of Respondents

ENCOURAGEMENT / SEX	Got Encouragement	No Encouragement	Total
Male	134 (78.36 %) (67.67%)	37 (21.63 %) (67.27%)	171
Female	64 (78.04 %) (32.32%)	18 (21.95 %) (32.72%)	82
Total	198 (78.26 %)	55 (21.73 %)	253

The influence can be either on the individual need based requirement or a generated one based on the guidance of other people. This may not be the same among all men and women. Among the male respondents, 67.67% were getting either an individual or collective encouragement to participate in health care programmes. In the case of female respondents, 32.32% agreed that they have received some encouragement. It needs to be further examined whether the

encouragement received was effective. As it is seen from the Table No.5.9, 78.26% of respondents participate mostly due to the encouragement.

People are always selective in attending the health care programmes even if they are encouraged or entertained. Majority of people may try to find out the benefits of the programme before deciding on attending any particular programme. Thus as part of the study, it was analyzed to find out the health care programmes people prefer to attend on receiving encouragement from individuals or institutions. The participation in the programme usually differs among men and women too. Even if the people are encouraged, certain

men and women prefer to keep away from the programmes. Thus the difference among men and women in participating in the programmes even if encouraged was also examined as part of the study.

Table: 5.10: External encouragement to Participate in different health care programmes and Sex of Respondents

Encouragement / SEX	Health Awareness Programmes	Health Education Programmes	School Health Programmes	Rehab. Programmes	Health Camps	Total
Male	15 (11.19 %) (78.94%)	20(14.92%) (71.42%)	33 (24.62 %) (67.34%)	47(35.07%) (66.19%)	19(14.17%) (61.29%)	134
Female	4 (6.25 %) (21.05%)	8 (12.5 %) (28.57%)	16 (25 %) (32.65%)	24 (37.5 %) (33.8%)	12(18.15%) (38.7 %)	64
Total	19 (9.59 %)	28 (14.14 %)	49(24.74 %)	71(35.85 %)	31(15.65 %)	198

The analysis reveals that 35.85% of respondents got encouragement to participate in rehabilitation programmes of which 66.19 % of them were men. It is seen that 33.8% women participated in rehabilitation programmes even after compelled by other persons. External encouragement was received for 24.78% respondents to participate in School

health programmes. Among these, 67.34% were men while women accounted for 32.65 % of the total respondents. Only 14.14% respondents

obtained encouragement of participate in health education programmes. Of these majority (71.42%) were men who responded to various kinds of encouragements. On close examined of the encouragement for health awareness programmes it is seen that only a mere 9.59 % respondents were encouraged to attend health awareness programmes of which majority were men (78.94 %) and women constituted to 21.05%. Thus it is quite evident here that as in other cases, it is male members responded much to external encouragements received with regards to health matters.

When considering the external encouragement received and the encouragement given to other people to participate in the health education programmes, it is very much relevant to consider the duration of association an individual has with various health care programmes. If the interest in participation increases, the level of association with the programmes also is bound to increase thus making the programme acceptable to a wider section of the community. The duration of association with health care programmes plays a decisive role. This will usually increase or decrease with age and level of interest of the participant. The participation is based on the motivation of the respondents. People continue their association with any programme and more so with health care programmes when they obtain good benefit for themselves as well as for their families. Men and women have diversified interests in associating with the programme for a longer duration. Thus the matter duration of association with health care programmes among men and women were examined as part of the study.

Table: 5.11 Duration of Previous Association with Health Care Programmes and Sex of Respondents

DURATION / SEX	Up to Ten Years	More than ten years	Total
Male	38 (22.22 %) (55.88 %)	133 (77.77%) (71.89 %)	171
Female	30 (36.58 %) (44.11%)	52 (63.41%) (28.10%)	82
Total	68 (26.87 %)	185 (73.12 %)	253

Chi square value: 5.86 Degree of Freedom: 1 Table Value: 3.84

Duration of previous association of members with health care programmes usually depends on the health benefits, the nature of the people associated with the programmes, their aptitude, need, age and sex difference. When the data on these lines were examined, it was found that 26.87% of respondents have less than ten years of association with health care programmes. Of this more than half i.e., 55.88% were men. Among the female respondents 44.11% of the sample was associated with the programmes for less than ten years. A good majority of the respondents i.e., 73.12% were associated with health care programmes for more than ten years, of these men constituted the major part accounting for 71.89%. Only 28.10% women were associated with the health care programmes for more than ten years. Thus the analysis shows that maximum respondents have more than ten years of association with healthcare management programmes and the association was greater among the men in the sample. It was statistically found that individuals' previous association with health care programmes and difference of sex were significantly related in the study.

The duration of association with health care programmes depended on the choice of programmes and its effectiveness. Health care has many characteristics; they include appropriateness, comprehensiveness, adequacy, availability, accessibility, affordability and most importantly feasibility. Apart from this the duration of association with health care depends on the nature of the individual, their educational background, age and sex. As there are different health care programmes, it is found that interest in associating with the programmes bound to differ among men and women. Thus the type of health care programmes people were interested to associate with was examined on the basis of sex of respondents as criteria, which is explained in the Table No. 5.12.

Table: 5.12: Association with different Health Care Programmes and Sex of Respondents

Health Care Programmes / SEX	Health Awareness Programmes	Health Education Programmes	School Health Programmes	Rehabilitation Programmes	Health Camps	Total
Male	32(18.71%) (69.56 %)	26 (15.2%) (72.22 %)	51(29.8%) (68.91%)	22(12.86%) (57.89%)	40(23.39%) (67.79%)	171
Female	14(17.07%) (30.43 %)	10(12.2%) (27.77%)	23(28%) (31.08%)	16(19.51 %) (42.1 %)	19 (23.17) (32.2 %)	82

Total	46(18.18%)	36 (14.2%)	74(29.2%)	38(15.01 %)	59 (23.32%)	253

The analysis of the data on Table No.5.12 reveals that 29.24% respondents were attracted towards school health programmes for a longer duration. Among these respondents majority i.e., 68.91% were men while women accounted only for 31.08%. At the same time 23.32 % of the respondents were interested to associate with health care camps for a longer time. The details in this regard revealed that 67.79% men were interested in associating with health care camps. Only 14.22 % respondents were interested in associating with health education programmes for a longer duration and it was seen that 72.22% respondents who showed interest in associating with the programmes were men.

In the health care sector all kinds of health care programmes are organized to make people aware of health standards and to help them participate in these programmes. The programmes are organized according to the need and of some kind of use to the community. The purpose of health care programmes is to solve health problems and to improve the health status of the population. In the light of Health for All, the goals set are mortality and morbidity reduction, increase in expectation of life, decrease in the population growth rate, improvement in nutrition status, provision of basic sanitation, health man power requirements and certain other parameters such as literacy rate, reduced levels of poverty etc. The scope of health programmes vary from community to community and influenced by general and changing national, state and local health needs, means and attitudes as well as the availability of resources to provide the services. The health care programmes are usually organized at the institutional level. The various governmental and non-governmental agencies take active interest in organizing the programmes.

The study so far analyzed various factors related to health care programmes and its organization in the state. Aspects like awareness; source of information, institutional

participation, encouragement received from each and every programme under various organizing institutions were also examined. As these factors tend to change among men and women, the analysis was carried out with sex as criteria. Interested persons will actively participate in programmes at any region. It is not only the interest of certain like-minded persons but also active involvement of the society that generally promotes active participation to the programmes. Now it needs to be assessed whether people are interested in participating in programmes organized at their place of activity as well as at different places. Some people may be interested in participating in programmes organized at their own locality due to convenience in travel or proximity to their region. At the same time few people are interested in participating in programmes organized elsewhere. The nature of approach to the programmes organized at their own area as well as distant area can differ very much among men and women. This interest shown by men and women was examined in the following parts as part of the analysis.

Table: 5.13: Participation of respondents in health care programmes in native area and sex of Respondents.

PARTICIPATION OF RESPONDENTS / SEX	Participation in native area	No Participation in native area	Total
Male	124 (72.51 %) (72.09 %)	47 (27.48 %) (58.02 %)	171
Female	48 (62.19 %) (27.90 %)	34 (41.46 %) (41.97 %)	82
Total	172 (67.98 %)	81 (32.01%)	253

Chi square value: 4.977 Degree of Freedom: 1 Table Value: 3.84

The analysis of the data (Table No.5.13) reveals the participation of respondents in health care programmes in their native area. It is seen that majority (67.98%) of the respondents

showed keen in participating in healthcare programmes in their own areas of living. As the active participation is likely to differ among men and women, this aspect was also examined. Male respondents (72.09%) were more keen to participate in their own area. Women respondents accounted for 27.90% showed interest in participating in the programmes in their own area of activity. People who were not interested in participating in health care programmes in their own areas accounted to 32.01%. Here too male respondents (58.02%) formed the dominant majority. Chi square test reveals that difference in sex of respondents and their participation in health care programmes in their native area are significantly related.

People with genuine interest in health care programmes either participate or organize programmes at any place of activity. The interest in organizing or attending the programmes will be with service in mind as primary aim or a social commitment towards people or society. As seen in Table No.5.13, participation in programmes depends on many factors and the location of the programme is one prime factor. There can be good difference among men and women in participating in health care programmes organized elsewhere. Analysis was made to find out the interest of the respondents in participating in health care programmes organized in distant areas based on the sex difference of the respondents.

Table: 5.14: Participation in health care programmes in distant areas and sex of respondents.

PARTICIPATION OF RESPONDENTS / SEX	Participate	No Participation	Total
MALE	109 (63.74 %) (64.88 %)	62 (36.25 %) (72.94 %)	171
FEMALE	59 (71.95 %) (35.11 %)	23 (28.04 %) (27.05 %)	82
TOTAL	168 (66.4 %)	85 (33.59 %)	253

The Table No.5.14 on analysis reveals that 66.4% of respondents are interested in participating health care programmes even if organized at distant places. Here majority of the respondents who committed to participate in the programme if organized elsewhere were men (64.88%). At the same time 35.11% women (35.11 %) seemed to be keen to avail the benefits of the programmes conducted at distant places. It can thus be seen that there is significant difference among men and women in their attitude towards participation in these programmes based on the location of the programmes. Men are

more interested in participating in programmes held anywhere despite the location. The reasons for women to prefer

in participating in health care programmes at distant places may because they get much importance or significance.

In a world of continuous changes new concepts emerged based on new patterns of thought. Health has evolved over the centuries as a concept from an individual concern to worldwide social goals and encompasses the quality of life. Traditionally health was viewed as absence of disease and implies relative absence of pain and discomfort and a continuous adaptation and adjustment to the environment to ensure optimal function. Health in the broad sense doesn't mean the absence of disease with provision for diagnosis or curative and preventive services. It also includes, as embodied in the WHO definition as a state of physical, mental and social well-being.

The management of health care system, awareness about the same; the needs and importance of the healthcare system to the people, the channels or the sources through which awareness is spread to the people and their participation in the various systems of healthcare were the factors of observation in this study.

Men and women are likely to express varying degrees of interest in health care programmes, due to various personal and social commitments. The study revealed that people are aware about almost all kinds of health programmes but it was felt that still more work needs to be done at various levels to make it popular among various sections of the society. The scientific and modern technique of health care is the need of the society. People started accepting changes in the health care arena and adopted the best of the medical care available. This acceptance of change in health care system was closely examined. Men and women of the community at times showed varied interest in accepting the changes in the health care scenario. The matter was examined on the basis of the sex of the respondents.

The study revealed that 76.26% of respondents are aware of health care programmes of various kinds happening in the state. The respondents are aware of health education programmes, school health programmes, rehabilitation programmes and health camps. This shows that people are conscious about health care programmes and are regularly keeping in touch with additional knowledge about health care measures. Among the

various programmes, school health programmes seem popular, as many of the respondents have school going children. Majority of them also participate in camps as these are attended to by qualified professionals and experts to disseminate advanced information about latest developments in health care area to the general public. When the source of information related to health care programmes were examined, it was found that advertisements and notices provide maximum information to the general public. Encouragements were received for the programmes to a great extent, which indicates that respondents encourage more people's participation. School health programmes received better encouragement closely followed by encouragement for rehabilitation programmes, as the mentally and physically disabled people are becoming a challenge to the society. It was also seen that majority (71.93%) of the respondents have been associated with health care programmes for a period of more than ten years. Here too it was the school health programmes with which people have been associated for a longer period. Most of the respondents feel that health care programmes that are organized by governmental institutions were more effective as government have regular policies and schemes to implement these health care programmes. Private institutions though conduct these programmes in an excellent manner, were found to keen on popularizing their institutions and facilities.

In short, it can be seen that the health care programmes are totally accepted by the beneficiaries. They are attracted to health programmes based on their need and interest and their concern for health extended to the society. Though differences can be observed among the male and female groups in these matters, the concern for better health is common for all people. This is seen from the analysis of the awareness and participation of respondents in health care programmes. Thus our hypothesis stands verified.

***

Age In Health Care Management in Kerala

"Health is not mainly an issue of doctors, social services and hospitals. It is an issue of social justice."[clxxxi] Health is multifactorial. Health in a narrow sense means that there is no obvious evidence of disease and that a person is functioning normally, i.e., conforming within normal limits of variation to the standards of health criteria generally accepted for one's age, sex, community and geographic region. In recent years, health has acquired a new philosophy viz.; health is the essence of productive life, a fundamental human right, an integral part of development and is central to the concept of quality of life. Health involves individual, state and international responsibility.[clxxxii] Health development is a process of continuous progressive improvement of the health status of a population.

"Plan ahead – it was not raining when Noah built the ark"[clxxxiii]. Health planning and health management are relatively new subjects with a lot of emphasis. Planning is for tomorrow and management is for today. The increasing demand for medical and health care services for the community more so to the people who need it the most, in the phase of limited resources has brought out the need for careful planning and management of the health services. Health care management and the programmes associated with the same are always on a change. Changes in the formulation of health policies and the management of the same are subjected to serious modifications under the influence of various factors. These changes often influence the very approach towards health care provision as well as the availing of medical care by the members. Modern trends in the health care delivery system and the utilization of the same by beneficiaries depend on many factors. As the age of the people goes up, the exposure to any area of activity increases. It may influence the mental status of the individual particularly in creating awareness about any act or information related to any particular area of activity and in this case the concept of health and health behaviors on an individual or collective aspect. Asha[clxxxiv] (2001) explains that age is one basic character in determining the living conditions like housing, educational conditions and medical status of an individual. Different age group manifests different problems depending on their sex, social conditions, occupation or even environmental conditions. Occupational health and

environmental health along with geriatric medicine is now receiving a lot of attention. Among the children there could be problems ranging from biological, economical, cultural and nutritional problems, which interfere with their normal life while adults depending on the sex, have problems. Most of the problems for women are taken care by the M.C.H services. Men are more prone to develop occupational hazards in the case of the elderly. Ageing though a natural process, it is an incurable disease. We cannot heal old age diseases but can protect, promote and extend. (Nair P.S. and Santosh S: 1987)[clxxxv]. Keeping this in mind and based on the ability of a person to think and act at a particular situation, the age structure of various population are compared in terms of the three broad age groups which identifies person in the children under working age, working age and persons above working age (United Nations: 1992) [clxxxvi]. Further it is seen that Asha Bhande (2001) points out that sex and age are very important variables influencing the health behaviors of members in society. There are beneficiaries who at the upper age category depending on others for their regular maintenance and healthy livelihood.

The government while considering the health care programmes elaborates that health care providers have become more aware of increasing complexity of caring for older individuals. The health care needs of the elderly are quite different from those of the middle-aged persons. The mental and emotional status of the people changes, as they grow old. The older adults in society are much more likely to experience mental changes rather than physical symptoms than younger counterparts (Shaji: India Health: 2002) [clxxxvii]. So it is a matter of concern to examine the relevance of age and ageing on the management of health care service in the society.

The biological age of a person is not identical with his chronological age. It is said that (Nair P.S: 1992) nobody grows old merely by living certain number of years. The age of the person can demand different attitudes towards various programmes. This experience gives people knowledge about the health care programmes, particularly the awareness about programmes, sources of information related to health care programmes, essentiality of various programmes as well as the enjoyment or real participation of beneficiaries and

the factors that influence participation in various health care programmes available to the community.

The main question here is to look into role of the age of members and their actual involvement in various health care programmes. The utilization of health care techniques very often depends on the age and sex of the respondents. Elderly people may be aware of various health care programmes but quite likely they will be selective in attending to the health care programmes when compared to younger generation due various factors like the benefit from the programme, the area at which the programme is conducted and the feasibility of the programme and so on. People at different age groups may be having varying attitudes and interests in participating in health care programmes.

Demographic changes influence health, economic activity and social condition of people. As the age structure changes, demands on resources by different segments of population are expected to grow. Age is basic characteristic or the biological attribute of any group and affect not only in its demographic but also its social, economic and political structure, for they influence birth and death rate, mental status composition, man power planning regarding educational and medical services and housing etc.[clxxxviii] This chapter is mainly an analysis of various health care programmes and its impact on the public with age as criteria. The respondents of age group varying upto 55 years and above who have been associated with the health sector in one form or the other for a period ranging from five to twenty five years were made to associate with the study.

The main hypothesis maintained in this part of the analysis is that the age of the beneficiaries and their health care enjoyment are related. Development of awareness on health care facilities depends on the age structure of people. Younger members of the community tend to avail health care programmes. Youngsters gain more awareness on health care facilities in the community. Ageing among individuals influence their response to health education programmes. Health education is not just health propaganda; it is more than mere information and the idea is to cause or facilitate learning. Health education is an integral part of the national health system. It is a basic tool of management and the key input for the progress of any society[clxxxix]. The primary objective of any source of health information is to provide reliable, relevant, up to date,

adequate, timely and complete information on health. It also attempts to provide services at periodic intervals, data on the general performance on the health services and also to assist planners in studying their current functioning and trends and demand. Importance of health sector management programmes are always identified through the nature of acceptance by the community. The enjoyment or even participation in each programme depends on the nature of people but the trend in participation may differ among people. People of different age groups depend on various sources to gather information related to health care programmes. The persons concerned choose the source out of their need, interests and motivation. Awareness of any kind of programme is made through various channels of communication, which has to be carefully selected bearing in mind its ability to deliver the message. The social values, nature of the programme, their vested interest, their educational \ intellectual capacity and the type of activity or means in which they are engaged determine the source of such information. So it is a matter of concern to look into the various sources people depend on to gather information related to health care programmes.

Many a time it has been felt that younger members in society depend on advertisement while elder people depend mainly on personal contacts or similar channels. Media in this study includes both audio and visual media. The audio media includes radio or the public address system and the visual media includes the television .The print media like newspapers, journals and other publications function as other sources of information. The different age groups depend on various media to gather information related to any particular subject and so also health care. Advertisement includes published advertisements in journals, newspapers, transit advertisement, hoardings, and banners, which are displayed as per the need of the programme to promote information related to specific activity. Notices are always printed information leaflets distributed through newspapers and magazines or through shops and various other outlets for dissemination of information.

Personal contact is a usual method to explain and to popularize the various services particularly those on programmes on health. It is usually maintained that people are made aware of the programmes and steps taken to popularize them among the beneficiaries

through appropriate techniques. Personal contact plays a prominent part in the propagation of health care programmes among the masses.

Among the recipients of the message delivered by various sources of health care system, particularly on health education, it was assumed that information is more accessible to younger age group and the same question has been examined in Table No 6.1.

Health education informs, motivates and helps people to adopt and maintain healthy practices and life styles. It advocates environmental changes as needed to facilitate this goal and conducts professional training and research to attain the end. The acquisition of information from various sources with reference to health care programmes among people assumes various patterns depending on the nature of the respondent, previous acquaintance, age, sex difference and educational capacity of the individual to comprehend the importance of the knowledge available. Responses or reactions may not be alike among all the age groups. It is seen from the analysis of Table No 6.1 that nearly fifty percent of the respondents (48.22%) in the sample gathered information regarding health care management programmes through print media.

Among these, more than half (61.47%) the respondents belonged to the age group between 35-55 years. Among the respondents belonging to the age group between 25-35 years 20.50% of the sample depended on print media to get information. Only 9.01% of the elderly (55years and above) depended on advertisements and notices. Visual media as a source of information was accepted by 16.6% respondents. Out of this sample 71.42% belonged to an age group between 35-55 years.

Among the elderly of age group of 55 years and above, 14.28% respondents relied on the visual media, while the younger age group (25-35 years) relied on the same to the least (14.28%) to gather information on health care programmes. While considering public address system as a source it is seen that 20.55% respondents depended on this facility, of which sizeable majority i.e., 73.07% respondents belonged to the age group between 35 - 55 years. It is seen that 17.30% of the elderly depends on public address system. At

the same time youngsters (25-35 year group) depends much on print media (69.23%) for information related to health care programmes.

Table No. 6.1: Sources of Information on Health Care Programmes and Age of Respondents.

Source of Information / Age in Years	Print Media	Visual Media	Public Address System	Personal Contact	Total
25 – 35	36 (69.23 %) (29.50%)	6 (11.53%) (14.28%)	5 (9.61 %) (9.61%)	5 (9.61%) (13.51%)	52
35 – 55	75 (44.37%) (61.47%)	30 (17.75%) (71.42%)	38 (22.48%) (73.07%)	26 (15.38%) (70.27%)	169
55 and above	11 (34.37%) (9.01%)	6 (18.75%) (14.28%)	9 (28.12%) (17.30%)	6 (18.75%) (16.21%)	32
Total	122 (48.2 %)	42 (16.6%)	52 (20.55%)	37 (14.62%)	253

Chi square value: 15.35 Degree of Freedom: 6 Table Value: 12.59

As far as personal contact as a source of information on health care programmes was concerned, only a meager portion (14.62%) of the respondents has acquired information from this source. Among these respondents, the people belonging to the age group of 35 - 55 years formed a good majority (70.27%). This shows that there is a considerable difference among people of various age groups in responding to the source of information related to the publicity of health programmes. Thus it can be seen that people mainly depend on advertisements and notices to gather information related to health care programmes. People also depend on public address systems and the audio-visual media to gather information related to health care programmes. Younger age group of respondents depends mainly on print and visual media to get information related to the programmes while older people depend on print media and also visual media as well as personal contacts to gather information. Thus ageing is found to be an influencing factor on seeking source of information on health care issues among our beneficiaries. The chi square test also reveals that there is significant relationship between age of respondents and sources of information on health care facilities available.

The attention obtained for healthcare management programmes differs. This varies according to the interests of the people and the choice of the media for publicity. The interest developed makes people attend the programme. It is always sure that media plays a prominent role in the publicity of the programmes.

Rehabilitation medicine has emerged in recent years as a medical specialty. It includes all measures aimed at reducing the impact on people due to disabling and handicapping conditions and at enabling the disabled and handicapped to achieve social integration which will help the disabled people to actively participate in the main stream of community life. It involves disciplines such as physical medicine, physiotherapy, occupational therapy, speech therapy, Audiology, psychology, education, social work, vocational guidance and placement services. The following areas of concern in rehabilitation have been identified as medical rehabilitation which restores function, vocational rehabilitation which helps in restoring the capacity of the disabled to earn a livelihood, social rehabilitation and psychological rehabilitation which helps these disabled people to live with personal dignity and confidence[cxc]. Generally rehabilitation programmes include: provision of aids for the crippled, establishing schools for the blind, reconstructive surgeries for the handicapped, muscle retraining and graded exercises for the people with neurological disorders like polio, change of profession for a more suitable one and modification of life in general in the case of tuberculosis, cardiac patients and others. Rehabilitation of people with severe disability is a social obligation for the family and society and these people are often found living at the fringes of humanity as care even in small measure is found lacking in their cases. Mental health is another condition providing service to the needy in our society and it is now that people from various walks of life are coming forward to the mental rehabilitation centers. To make success of these rehabilitation programmes it was realized that it requires enthusiastic involvement of people from different segments of society as well as expertise, equipment and funds. The present study is to find out how people among the general population view the rehabilitation programmes conducted in the State and how many really avail this facility. Disability impairment is always considered as a disadvantage in the society. People of various age groups come under the rehabilitation programmes. Rehabilitation is no longer looked upon as an extra curricular activity of the treating physician. Rehabilitation

involves early diagnosis of the handicap, treatment (physiotherapy – the deformities are corrected and weakened muscles are given exercises, occupational therapy – the individual is taught according to his ability and taste, things like music, weaving, pottery etc; speech therapy and prosthetics), training and education were the individual is taught to work with what he has so that he is not a burden to others. The purpose of rehabilitation is to make productive and socially acceptable people out of the non-productive one. Health for All also includes rehabilitation for all.

Considering this importance of rehabilitation programmes in society, the availing of the programmes by various categories of the population was examined, particularly among the different age groups as part of the study, which is detailed in the following paragraphs.

Rehabilitation programmes for the mentally and physically retarded is always a social commitment. Individuals as well as many families depend on such socially committed activities. Information related to the various rehabilitation programmes are gathered by the people through various sources. The interest in gathering the information related to the programme differs among various age groups. The younger generation people may depend on advertisements and notices while older people depend mainly on personal contacts. It is on these grounds that the role played by various sources of information with regard to rehabilitation programmes was examined (Table No.: 6.2) with respect to the age of respondents. Information acquired with regard to rehabilitation programmes depends on the nature of the individual, past experience, social obligations, age, sex difference and educational background of the individual to comprehend the importance of the knowledge available. Responses or reactions may not be alike among people of the different age groups.

It is seen from the analysis (Table No 6.2) that 25.69% respondents depended on advertisements and notices to acquire information on rehabilitation programmes. Among this a vast majority (63.07%) of the respondents belonged to 35 – 55 years of age while 26.15 % of the respondents belong to the younger age i.e., 25 – 35 years. It was only a meager 16.92% of respondents who belonged to the elderly age group depended on advertisements and notices.

Table No. 6.2: Sources of Information on Rehabilitation Programmes and Age of Respondents

Source of Information / Age (Years)	Print Media	Visual Media	Public Address System	Personal Contact	Total
25 – 35	17(32.69 %) (26.15%)	13 (25 %) (19.11%)	5(9.61%) (14.70%)	17(32.69%) (19.76%)	52
35 – 55	41(24.26%) (63.07%)	49(28.99%) (72.05%)	18(10.65%) (52.94%)	61(36.09%) (70.93%)	169
55 and above	11(34.37 %) (16.92%)	6(18.75%) (8.82%)	7(21.87%) (20.58%)	8(25%) (9.30%)	32
Total	65(25.69%)	68(26.87%)	34(13.43%)	86(33.99%)	253

Media as a source of information was accepted by 26.87% of the respondents as a good source to acquire information. Among these respondents, the age group ranging between 35-55 years of age formed a sizable majority (72.05%). People belonged to 25 – 35 years age group accounted for 19.11% of the respondents. Among the elderly, only 8.82% of the respondents relied on media to gather information on rehabilitation programmes.

Among the respondents studied, 13.43% of the respondents depended on public address systems to gather information, of which more than half (52.94%) of the respondents belonged to the age group of 35-55 years. It was seen that 14.70% of respondents who depended on public address systems belonged to the age group of 25 – 35years. Among the elderly (55years and above) 20.58% of the respondents depended on the same.

Personal contact was found to be a source of information on rehabilitation programmes for 33.99% of the respondents. Among these people belonging to age group of 35-55 years formed a sizeable majority (70.93%). This showed that there is a considerable difference among the various age groups in responding to the information sources related to health care programmes and the rehabilitation programmes in particular.

It is seen that people also depended on personal contacts to gather information on rehabilitation programmes. People also depend on public address systems and the

audio-visual media to acquire information related to health care programmes in our society.

School health programmes are gaining importance in the present health care situation. School health services are an important part of the health system and its task is manifold and varies according to local priorities[cxci]. The objectives of the school health programmes are promotion of positive health, prevention of diseases, early diagnosis, treatment and follow-up of defects, awakening health consciousness among children and the provision of a healthy environment in the community. School health services are not aimed at children alone but the community at large. It needs to be analyzed in detail about the various sources of information depended by the respondents to gather details regarding the school health programmes. In this case advertisements and notices, audio-visual media, public address system and personal contacts are the usual means. On examining the response among men and women on the various sources of information on school health programmes, it was showed that health education played an important role in academic curriculum at schools. More specialized classes on health education are conducted at all private and public sector schools. Based on this, importance of health education at school levels was also analyzed with respect to the age of respondents as criteria.

Parents always welcome the School health programmes. School health programmes are based on local health problems, the culture of the community, the available resources in terms of money, material and manpower but most importantly the presence of school going children at home and motivation of the family members to accept and avail these programmes provided to their children in the said community. (Feldman, Jacob J)[cxcii]. It is quite natural that people of various age groups have significant difference in their responses towards acquiring awareness on matters related to health care issues. The usual practice is that the middle age (35-55 years) group mainly attends all programmes. This factor was looked into in the study to find out the viewpoint of the various respondents with regard to the source of information on school health programmes. This is elaborated in Table No.: 6.3.

Table No. 6.3: Sources of Information on School Health Programmes and Age of Respondents.

Source of Information / Age (Years)	Print Media	Visual Media	Public Address System	Personal Contact	Total
25 – 35	18(34.61 %) (25.71%)	7(13.46 %) (19.44%)	9(17.30 %) (25 %)	18(34.61 %) (16.21%)	52
35 – 55	43(25.44 %) (61.42%)	20(11.83 %) (55.55%)	24(14.20 %) (66.66%)	82(48.52 %) (73.87%)	169
55 and above	9(28.12 %) (12.85%)	9(28.12 %) (25%)	3(9.37 %) (8.33%)	11(34.37 %) (9.9%)	32
Total	70(27.66 %)	36(14.22 %)	36(14.22 %)	111(43.87 %)	253

The data analysis reveals that the largest share (43.87%) of respondents who acquired information on school health programmes were through personal contacts. The contact with parents and school authorities generates interest to participate the same. Majority (73.87%) of the respondents belonged to the 35 – 55 year age group. Among the youngsters 16.21% of the respondents favoured personal contacts, but only 9.9% of the elderly members (55 years and above) considered personal contact as a reliable source of information. Advertisements and notices were used as a source of information by 27.66% of the respondents. Of this majority (61.42%) of the respondents belonged to the 35 – 55 year age group. Advertisements and notices as a channel for information on school health were relied on by 25.71% of respondents who belonged to younger age group (25-35 years). At the same time only 12.85% respondents of 55 years and above depended on advertisements and notices. Media was a source of information on school health programmes among 14.22 % respondents, of which more than half (55.55%) belonged to the age between 35 – 55 years. Among the 25 – 35 year age group, 19.44% respondents favored media and 25% of the elder age group also supported this view. Public address system as a source of information was accepted by only 14.22% of respondents. Among this 66.66% of the respondents belonged to the 35-55 year age group and 25% respondents belonged to 25 – 35 year age group. Only 8.33% of elderly members agreed

that they gather information related to on school health programmes through public address system. Thus it can be seen that personal contact was relied on by a majority (43.87%) of the respondents to gather information on school health programmes .On examining the response among various age groups, it is seen that 35 – 55 year age group formed the dominant majority (73.87%) from among the respondents.

Health services department started the twenty-point programme under the national health policy in 1983, which aims at twin objectives of preventive and positive measures towards the improvement of the health conditions of the public. The single most goal was Health for All by 2000 A.D[cxciii]. The major twenty-point programme includes Family Welfare Programme and national programmes. The other health initiatives taken by the Government of India are the School Health programme, Health education programme, Nutritional programme, National Malaria Eradication Programme, National Filaria Control Programme, National Programme for Control of Blindness, National Leprosy Eradication Programme, National Tuberculosis Control Programme and National Goitre Control Programme. The current attention of the health services department extends to the control and prevention of AIDS in the state.

Health education is one of the most effective interventions in the health care system. Health Information is explained as a mode applied for the collection, processing and transmission of information required for organizing and operating health services and also for research and training. It is important that the source of information should be population based, problem oriented with adequate health resources. A large number of diseases could be prevented with little or no intervention if people were adequately informed about them. Every branch of community health has a health educational aspect. In the end, the community health is just health education and every community health worker is a health educator. The objective of health education "is to win friends and influence people"[cxciv].

Health education is one of the major health care service technique commonly followed by the health services agencies. The State Health Education Bureau under the Health Services Department started educating people about various diseases as well as the

preventive and curative measures that need to be undertaken. Acceptance of the various National and State health sector programmes by the community is a good indicator of the importance of health

care programmes, which goes a long way in health care planning and management. The enjoyment or even participation in each programme depends on the nature of the people. Such participation may not be the same among members. The old and the young people differ in their attitude or capacity or ability to get involved in these activities. Hence the nature of participation of members in various health care programmes was examined with respect to the different age structure of beneficiaries.

The social science wing of the Health Education Bureau started the 'Health Education – A People's Movement' with the primary aim of being an informative vehicle about the various healthcare programmes available in their community[cxcv]. The project envisaged at least one health club in every Primary Health Center.

Government of Kerala and various voluntary agencies involved in the field of health care conducted health education programmes to identify many major areas of health care management. People with interest in understanding more about the health care issues avail the opportunity to attend the programmes. Hence the response of the masses to this aspect of availing the available facilities by the beneficiaries was examined at the first instance (Table No.6. 4). Accordingly it was found that the health education programmes are availed by a good many i.e., three fourth (83.39%) of the respondents. The trend can vary across various age groups of respondents. On analysis of this aspect, it was seen that as large as 69.66% respondents of age group 35 – 55 years availed the benefits of the health education programmes.

Table No.: 6. 4: Availing of Health Education Programmes and Age of Respondents.

Availing / Age (Years)	Availed	Not Availed	Total

25 – 35	41 (78.84 %) (19.43%)	11 (21.15 %) (26.19%)	52
35 – 55	147 (86.98 %) (69.66%)	22 (13.01 %) (52.38%)	169
55 and above	23 (71.87 %) (10.9%)	9 (28.12 %) (21.42%)	32
Total	211 (83.39 %)	42 (16.60 %)	253

It was also found that only 19.43% of the respondents of age group of 25 – 35 years availed health education service and only 10.9% respondents of elder age (55 years and above) group availed health education facilities. Thus it was seen that the respondents of age group 35 – 55 years are more keen to avail health education programmes than people of other age segments. This observation indicates that middle-aged segment of the population is more interested in health education programmes.

It is also evident that the average age of individuals attending to health education programmes comes to 43.72 years in the sample.

Another health care initiative was taken up during 1996 – 97 by the Government. It was a special school health check programme launched by Government of India with the objectives of detection / screening of health related problems in the community occurring among school children, building of health awareness in the community and follow-up arrangements for detailed check-up and treatment[cxcvi]. The State Governments implement the scheme through the Department of Health and Family Welfare.

Thus School health programmes occupy a major part in the field of social health, especially among parents with school going children. According to modern concepts, school health services are an economical and powerful means of raising community health. Most important element of the School health programme is the health education. The main goal here is to bring about desirable changes in the field of knowledge relating to health issues including the importance of hygiene and public health. In developing countries, ill health is a major problem, "every school child is a health worker"[cxcvii]. Children bring back home the health instruction they receive from schools and even more important, when they become adults they apply this knowledge in their own families. School health programmes always provides information regarding personal cleanliness, hygiene, social and community participation and an overall idea about health habits that needs to be observed. Many major health programmes are organized at the school level. Any discussion of the School Health services is based on local health problems, the culture of the community, the available resources in terms of money, material and

manpower but most importantly the motivation of the family members to accept and avail these programmes provided to their children in the community. Parents too actively participate in selecting and organizing programmes of interest and importance. Considering this importance of School health programmes, the availing of the programme was examined in our study. (Table No. 6.5)

Table No. 6.5: Availing of School Health Programmes and Age of Respondents.

AVAILING / AGE (YEARS)	Availed	Not Availed	Total
25 – 35	41 (78.84 %) (19.06%)	11 (21.15 %) (28.94%)	52
35 – 55	153 (90.53 %) (71.16%)	16 (09.46 %) (42.1 %)	169
55 and above	21 (65.62 %) (9.76 %)	11(34.37 %) (28.94%)	32
Total	215 (84.98 %)	38 (15.01 %)	253

The analysis of Table No.6.5 reveals that majority (84.98%) of the respondents are aware of School Health programmes. Only 15.01% respondents seemed to be not aware about the programmes. When the data was further examined, it was seen that 71.16% respondents between 35 –55 years of age are more aware of these programmes. At the same time in the age category of 25 – 35 years only less than one-fourth respondents (19.06%) availed the benefits of the school health programme. In the higher age segment of above 55 years of age only 9.46 % respondents showed interest in availing school health programmes.

Development of awareness on rehabilitation programmes among people depends primarily on the need of the people, their level of intellectual understanding, social conditions, age, sex and the nature of the individual. Commonly, men, due to the type of work and social attributes tend to be more aware of rehabilitation programmes than women. The actual availing of rehabilitation programmes by the respondents was examined in our study as seen in Table No 6.6.

The Table No.6.6 on analysis reveals that 62.45 % of the respondents have availed the facilities of rehabilitation programmes. It is seen that only slightly over one-third (37.54 %) members in the sample kept away from availing the benefits. The availing of the rehabilitation programmes may not be the same among all age groups of the population. The rehabilitation of physically disabled is mainly required at the upper age. When the details in this regard were analyzed, it was noticed that 67.08% of the respondents between 35 and 55 years of age have utilized the facilities of the programmes.

Table No 6.6: Availing of Rehabilitation Programmes and Age of Respondents.

Availing / Age (Years)	Availed	Not Availed	Total
25 – 35	29 (55.76 %) (18.35%)	23 (44.23 %) (24.21%)	52
35 – 55	106 (62.72 %) (67.08%)	63 (37.27 %) (66.31%)	169
55 and above	23 (71.87 %) (14.55%)	9 (28.12 %) (9.47%)	32
Total	158 (62.45 %)	95 (37.54 %)	253

Among the 25 – 35 year old group, 18.35% of the respondents availed the facilities of rehabilitation programme. At the same time only 14.55% of the elderly (55 years and above) members availed the same. Thus we see that among the respondents more than half have availed the facility of rehabilitation programmes and it was the 35-55 year old who utilized the services to the maximum.

Health camps and meetings are an integral part in matters relating to the public health service of the society. These programmes are organized either at the local, national or international level to disseminate information related to the latest advancement in all emerging fields of life sciences, particularly the health care sector.

Usually many major health programmes are made available to the people in a particular locality through health camps. Camps form a platform for mutual

discussion and also creates situation for demonstration or administration of medicine and technology to people.[cxcviii] The programmes always make people much aware of the health care developments. The major limitation of health camps is that it is usually confined to a particular service or locality in society. Medical camps are organized with both clinics and therapeutics so that participants can avail the benefits of consulting experts free of cost.

Meetings are also organized at the local level, district level, state level or even the national level. This is usually done to inform the community consisting of a larger unit about the availability or need of a particular policy or programme. Such public meetings on health service, when set for a larger unit cannot always provide a discussion platform or demonstration platform but always helps to provide information to a larger group of people at one point of time.

Considering this opportunity, people of various academic and occupational backgrounds participate in these programmes. The programmes are organized by all governmental as well as voluntary agencies at regular intervals or when needed to update the masses with information regarding the advances in the health care sector. People who relatively have minimum opportunity otherwise to gather information related to health care tend to attend these kinds of programmes than younger generation. These inclinations of the people in attending health check up camps were examined as part of the study in Table No.6.7.

Table No.: 6.7: Attendance in Health Checkup Camps and Age of Respondents.

Attendance / Age (Years)	**Attended**	**Not attended**	**Total**
25 – 35	30 (57.69 %) (14.85%)	22 (42.30 %) (38.7%)	52
35 – 55	158 (93.49 %) (78.21%)	11 (6.50%) (21.56%)	169
55 and above	14 (43.75%) (6.93%)	18 (56.25%) (35.29%)	32
Total	202 (79.84 %)	51 (20.15 %)	253

Chi square value: 59.75 Degree of Freedom: 2 Table Value: 5.99

Attendance in health checkup camps depend on various factors like the publicity made for this camps, the effectiveness of the programmes offered by the camps, individual interests, the distance of venue of these camps, the respective residence of the members, the age and sex of the participants. It revealed that majority (79.84 %) of respondents attended health camps. A good majority (78.21%) of respondents belonging to the age group of 35 – 55 years attended the camps. It is further revealed that 14.85% respondents of age category 25 – 35 years utilized the benefits of camps. Moreover it is seen that only 6.93% people aged 55 years and above utilized the facilities at the medical camps. Thus Table No.: 6.7 show us that it is the 35 – 55 year old i.e., the middle-aged population participated more in the programmes than others.

The chi square test also reveals that there is significant relation between the age of respondents and the attendance in health checkup camps. In other words attendance to health checkup camps differs significantly among the older and the young. Different age groups of beneficiaries respond differentially to health checkup camps.

Health care meetings have become an integral part of the health care sector to educate the people on health care. Meetings organized in health sector are mainly lectures or public speeches on issues of current importance. Meetings, when set for a larger unit, can never provide a discussion platform or demonstration platform but always helps to provide information to a larger group of people. These programmes are conducted to disseminate information related to the latest advancement in all emerging fields of health services. In order to access the effectiveness of meetings conducted on various health issues, the attendance in these meetings was analyzed among the various age groups.

Attendance in meetings depends on various factors like the nature of the meeting, the attendance and provision of specialized services, the location of the meeting and vested interest of the individual, the educational capacity of the individual, interest in health care matter of the community, the sex and the age of the respondents etc.

Table No.: 6. 8: Attendance in Health care meetings and Age of

Respondents.

Attendance / Age (Years)	Attended	Not attended	Total
25 – 35	34 (65.38 %) (17.17%)	18 (34.61 %) (32.72 %)	52
35 – 55	143 (84.61 %) (72.22%)	26 (15.38 %) (47.27%)	169
55 and above	21 (65.62 %) (10.6%)	11 (34.37 %) (20 %)	32
Total	198 (78.26 %)	55 (21.73 %)	253

The analysis of Table No.: 6.8 show that most of the respondents (78.26 %) attend health care meetings. The importance of health care programmes can differ among the different age groups. A good majority (84.61%) of the respondents belonging to the age group of 35 – 55 years attended health care meetings. On detailed study it is seen that 17.17% respondents belonging to the age category 25 – 35 years has utilized the benefits of meetings. At the same time, 10.6% respondents belonging to age category of above 55 years responded to the programmes. Thus table No 6.8 shows that the majority of the middle-aged population attends health care meetings. It is clear here that the average age of individuals attending health care meetings is found to be 44.01.

In the medical and non-medical sector, health care programmes obtain maximum importance in the community when organized based on its needs. The younger generation will get actively involved in certain programmes and at the same time older generation develops interest in relatively different programmes. Thus with age as a criteria the importance or usefulness of health care programme were analyzed in Table No.: 6.8

Health care programmes are formulated to achieve the goal of complete health needs of the population. People, who want to avail these health care programmes, choose the

programmes, based on the nature of programme, the type of programme, the location of programme and benefits that can be derived out of the

programme. The study conducted on these lines revealed that 52.56% respondents support the view that health camps usually generate importance and usefulness to the community. Importance of health education programmes was supported by 18.97% of respondents. The analysis revealed that 16.99% respondents supported the school health programme. Rehabilitation programmes attracted interest of 11.46% respondents.

Table No. 6.9: Need of different Health care programmes and Age of Respondents.

Need / Age In Years	Health Camps	Health Education Programmes	School Health Programmes	Rehabilitation Programmes	Total
25 – 35	23(44.23%) (17.29%)	7(13.46 %) (14.58%)	15(28.84 %) (34.88%)	7 (13.46%) (24.13%)	52
35 – 55	93(55%) (69.92%)	36(21.30 %) (75 %)	22(13.01 %) (51.16 %)	18 (10.65%) (62.06%)	169
55 and above	17(53.12%) (12.78%)	5(15.62 %) (10.41%)	6(18.75 %) (13.95%)	4(12.50%) (13.79%)	32
Total	133 (52.56 %)	48(18.97 %)	43(16.99 %)	29(11.46 %)	253

When data was analyzed with age as criteria, 69.92 % respondents of age group 35 – 55 years and 12.78% respondents above 55 years of age expressed that health camps are needed for the people. The analysis showed that 17.29% respondents of younger age group felt the need of health check-up camps.

From among the age category of 35 – 55 years, 75 % respondents felt the need of health education programmes for the society. In case of school health programmes, 34.88% respondents from younger age group were in favor of the same. Thus the analysis of the data in regard to the need of various health care programmes, reveals that health camps are of much need for the people. Health education programmes are also found to be useful to some extent.

Participation in health care programmes is an ideal measure of effectiveness of health care programmes. Participation is a direct evidence of good health care management system through which the people realize the benefits of the programmes. People associate with health care programmes depending on the strength, specificity and consistency of the health care programmes[cxcix]. Participation not only benefits the people but also functions as an effective tool for feed back from the grass root level. This feedback helps to formulate better health policies and also to fill-up the lacunae in the existing health sector and make health services available for the entire population. The participation in programmes especially health care programmes depends on various factors. The awareness and source of information about the programmes determine the actual participation of beneficiaries. The interest in participating in matters of health and health services is not the similar among all age groups. People of younger generation show diversified interest than elderly in health care programmes. Considering the factors, the actual participation of people in various health care programmes was examined with respect to age.

The analysis of the data with regard to actual participation of respondents was made (Table No.:6.10) and it was found that 35.17 % of respondents participated in camps while in School health programmes 25.29% respondents participated. In Rehabilitation programmes 23.32% respondents participated while in case of health education, only 16.20% of the respondents participated. When the data was examined on these lines with age as criteria, it was found that 65.16% of respondents belonging to the age group of 35 - 55 years participated in camps. In the age category of 25 – 35 years, 20.22% of respondents participated in camps. At the same time 14.6% of the elderly members participated in camps.

A quarter (25.9%) of the total respondents participated in school health programmes. It can be seen from the analysis that there is a ranging difference in participation in health care programmes among respondents of various age groups. More beneficiaries are

interested in participating in camps. School health programmes also generated participation.

Table No.: 6.10 - Participation in Health care programmes and Age of Respondents.

Participation / Age (Years)	Health Education Programmes	School Health Programmes	Rehabilitation Programmes	Health Checkup Camps	Total
25 – 35	7(13.46 %) (17.07%)	25(13 %) (39.06%)	14(26.92 %) (23.72 %)	18(34.61 %) (20.22 %)	52
35 – 55	30(17.75 %) (73.17%)	43(25.44 %) (67.18%)	38(22.48 %) (64.4%)	58(34.31 %) (65.16%)	169
55 and above	4(12.50 %) (9.75%)	8(25 %) (12.5%)	7(21.87 %) (11.86%)	13(40.62 %) (14.6%)	32
Total	41(16.20 %)	64(25.29 %)	59(23.32 %)	89(35.17 %)	253

Health care is a public right and its responsibility of the government to provide this care to all people in equal measure. For better health care of the community, the needs of the larger segment of population must prevail over those of the few who are not in need of it. Health of the people is influenced by a number of factors such as adequate food, housing, basic sanitation, healthy life styles, protection against environmental health hazards and communicable diseases. Services provided to individuals or communities by agents of health services which may vary for the sole purpose of promoting, maintaining, monitoring or restoring health elicits different responses from different group of people. In India, health care is completely or largely a governmental function. The current criticism against health services is that they are predominantly urban oriented, mostly curative in nature and accessible mainly to a small part of the population.[cc] The present concern in both developed and developing countries is not only to reach the whole

population with adequate health care services but also to secure an acceptable level of health for all. Community participation is now recognized as a major component in the approach to the whole system of health care through treatment, promotion and prevention. An effective management makes purposeful use of resources to improve the health status of the people. In order to provide these services to the people there is more emphasis on a shift from medical care to

Programmes are organized under the management of either the government sector or private sector. The organizations execute the programmes as part of its commitment or to promote health. These institutions take key interest in activities so as to make people aware of any or all of the latest developments in disease and medicine. The respondents view on the type of organizations - government and private sector - which can execute better health care programmes, was examined in the study with age as criteria in Table No. 6.11.

Table No. 6.11: Respondents' Preference towards Government or Private Sector in Organising Health Care Programmes and Age of Respondents.

Type of Management / Age (Years)	Public / Government	Private Institution	Total
25 – 35	13 (25.00 %) (9.28%)	39 (75.00 %) (34.51%)	52
35 – 55	104 (61.53 %) (74.28%)	65 (38.46 %) (57.52%)	169
55 and above	23 (71.87 %) (16.42%)	9 (28.12 %) (7.96%)	32
Total	139 (55.33 %)	113 (44.66 %)	253

Chi square Value. 24.15 Degree of Freedom: 2 Table Value: 5.99

A major part of the respondents (55.33%) in the sample were in favor of health care programmes organized by public / government institutions. At the same time only 44.66 % of respondents favored programmes organized by private institutions / hospitals. People of different age groups have varying observations in this regard. It is clear from the analysis that while only 25% of younger age group preferred programmes organized

by public initiatives, 61.53% of the middle age groups have the same feeling. It is also clear that a still more large group (71.87%) of the older generation in the sample favored programmes run by government institutions. It is further seen that as the age of the respondents increases their preference to programmes organized by government institutions steadily increases. On the other hand while 75% of the younger generation

favoured programmes organized by private institutions, only 28.12% of the older generation have similar attitude. Thus ageing is found to be important criteria in responding to the programmes with respect to organizational style. This is fully supported by the finding of chi square testing also as the variables found to differ significantly.

People differ in their approach towards attending health care programmes. Interested persons will get involve in health care programmes irrespective of the location. The interest shown by the respondents differs with the age, sex, location of living, educational qualification etc. Participation in health care programmes in their own region relies on various factors like the nature of the meeting, the attendance and provision of specialized services, the location of the meeting and vested interests and the interest in health care matter of the community. The study was carried out to find out the involvement of people in various health care programmes in their own region of activity. So as a matter of interest, analysis (Table No.6.12) was carried out with regard to the involvement of the beneficiaries in health care programmes with age as criteria.

Table No.: 6.12: Participation in health care programmes in native area and Age of Respondents.

Participation / Age (Years)	**Participation in native area**	**No participation in native area**	**Total**
25 – 35	40 (76.92 %) (19.8%)	12 (26.07 %) (23.52%)	52
35 – 55	141 (83.43 %) (69.80%)	28 (16.56 %) (54.9%)	169
55 and above	21 (65.62 %) (10.39%)	10 (34.37 %) (21.56%)	32
Total	202 (79.84 %)	51 (20.15 %)	253

The analysis explains that more than three-forth of the respondents (79.84%) participate in health care

programmes in their own area of activity. Taking age as a criteria, it was seen that majority (69.80%) of the respondents belong to the age group of 35 –55 years showed interest in participating in health care programmes

in the own region of activity. It was also found that 19.8% of the respondents of the 25–35 year category showed interest in participating in health care programmes in their own region while 10.39% participated in the same. About 20.15% did not participate in health care programmes. The average age of individuals participate in health care programmes works out to 43.58%.

The observation of the study on age in health care management in the state is summarized in the following lines. A good majority of the respondents (83.39%) availed the health care programmes of which maximum participation was from the respondents of age category 35 to 55 year age group (69.66%). In case of rehabilitation programmes, 62.5% respondents availed benefits of the various programmes. Respondents (57.7%) largely commented that maximum information related to health care programmes were obtained through advertisements and notices. Camps were found to be the effective medium to deliver the details related to latest facilities available in the health care sector. This view was supported by 52.56% respondents. On analysis it was seen that 87.74% respondents took part in health checkup camps.

In short our analysis in this part revealed many aspects of health care management. Age has an important influence in the utilization pattern of health care programmes by the people. The middle aged and to some extend the elderly respondents are satisfied with the government health care sector. At the same time, younger age group of respondents seemed to be more inclined to enjoy the facilities offered by the private health care sector. Compared to people of other age groups, it was found that people aged 35 – 55 years were more aware of health care programmes. Advertisements and notices seemed to be the most important source of information on health care programmes among all the age groups particularly the younger age group. The elderly aged people relied more on media and public address system as source of information on health care programmes. The middle aged group and to a very small extend the elderly respondents relied on personal contact for matters related to health care programmes. School health programmes received a lot of attention from the middle-aged group primarily through personal contact, as these were parents of school going children. They observed that parents and school going authorities are better way of obtaining information on school

health programmes. Health education programmes were utilized mainly by the middle-aged group as an effective, preventive and curative tool for various health care issues. Majority of the respondents belonging to the middle-aged group availed rehabilitation programmes due to their own need and better understanding of the subject. Health check-up camps were utilized by all age groups and mostly by middle-aged group who wished to utilize the expertise of doctors and other health care facilities offered at these camps. The 25 – 35 year age group gave importance to health camps. The middle aged group of individuals were interested in health camps and health education programmes. The same was the case with elder aged group persons as they also showed interest in health camps. This indicates that health check-up camps were a popular health care programme among all the age group and these respondents preferred camps in their own area of activity. Thus our main question relating to the enquiry concerning the relationship between the age of the people and the enjoyment of health care programmes has been fully elaborated. The relationship between the sources of health care programmes sought for by the people and the utilization of these by them as per our hypothesis stands verified.

❖❖❖

Conclusion

In our discussion, we have attempted to bring forth various issues associated with the emerging trends of the health care service in Kerala. Our study was initiated with the assumption that the health care programmes are part and parcel of the society and people are aware about the health care facilities and utilized the same to the extent possible. Health care programmes were mainly organized in the government and the non-government sectors. Here peoples' awareness about the programmes, their source of information, actual participation of members in these programmes, the age and sex differences of the beneficiaries, the educational background and the general social status of the members and related factors have played a significant role in the real availing of health care facilities available to them.

An enquiry into these mechanisms and their development and an assessment of the real utilization of programmes by the people were carried out. On the basis of the available literature and the evidences, certain hypotheses for empirical verification were formulated. The main assumption for the thesis was associated to the relationship between the emerging trends of the health management system in the context of providing and utilizing the awareness among the masses and the variation of influences of such awareness, participation and utilization of the health programmes extended to them. The theoretical foundations for these assumptions were fully developed in the work. Summary of the major points of our analysis and findings are explained in the following paragraphs.

All available evidences underlines that the rulers of erstwhile Travancore and Malabar regions had given every importance to the health of the common man. The then rulers invited doctors from Britain as well as people in the state were trained to practice medicine. This was the beginning of the present day system of medical practices in the State. In the earlier periods, hospitals were considered as a center for the treatment of illness alone. Today, the hospitals whether it is private or public is designed to provide all mental and physical well being. As such, modern hospitals or the health care institutions may it be the primary health center, community health center, taluk or district hospitals or even the corporate institutions is viewed as the most appropriate institution for the

scientific diagnosis and treatment of the mental and physical imbalances among individuals. Although the need of the people in regard to health care facilities would be closely related to the demand for the service, the severity of the condition and the complexity of the issue, the decision to seek health care depend on a variety of socio-cultural characteristics of people, availability and accessibility of various types of services and other related factors. It is seen very clearly that health care needs vary among individuals, depending upon the various socio-demographic condition of the members like age of the individual, sex difference among the members, educational achievement, experience they have in the profession and even the community influence operating on them.

In a society, active participation of members in health care programmes is the essential keys to the general health of every community. Various studies (Hanlon John J[cci] 1990, McGinnis 1990[ccii], Mechanic David 1972[cciii]) conducted in this area on the utilization of health care facilities underlines that social well being of any developed community mainly constitutes on the health and well being of the individuals in that society. (Advani Mohan; 1980)[cciv]. On analyzing these conditions based on the available factors it is seen that the utilization of health care facilities in Kerala mainly depends on the awareness of the programme in the minds of the people and the interest in participating in the same. Berman P. and Khan M.E[ccv] (1993) consider that the factors of utilization of the health care facilities differ among various age groups.

The present study on the emerging trends in health care management system in Kerala has thus attempted to assess the basic elements of the health care management as well as the utilization pattern of the system of health care by the people. Generally the awareness of the people about these programmes, source of information and level of participation in various health care programmes are of serious concern from the viewpoint of the new trends of health care management. These have been examined in detail in our study.

Emerging trends in Health services: -

Health care scenario in the State has been on a transition. The study explained that the history of the coordinated efforts of health care administration started during the British

rule in India. The rulers of the princely state of then Travancore, Cochin and Malabar had real insight into the needs of health care for the benefit of the society and the people. There were court physicians and durbar physicians during that time to take care of the health needs of the rulers. This was started by the appointment of court physician in 1813 during the rule of Rani Gowri Lakshmibai. The activities of the physicians were extended to the common public by opening up of service clinics at various parts of the state. The care of the health of the people was a concern for the rulers of the state. They appointed Durbar Physician and started health clinics. The history reveals that due to the emergence of further needs of the population in medical care, during 1845, the then ruler of Travancore opened the first Civil Hospital at Vanchiyoor, Thiruvananthapuram, which later became the first General Hospital in Travancore region and the ruler of the time King Aayalyam Thirunal Rama Varma Varma stated that 'Health is not an individual subject but it is the responsibility of the State'.

Subsequently the need for training of medical personnel became a necessity to meet the growing demand in the various areas of health care and during 1869; first medical school was set-up to train people to provide primary health services. A Sanitary Commissioner was appointed during 1895 and started State Sanitary Programmes. Durbar Physicians had both administrative and clinical duties and started maintaining the Birth and Death Register of the people of the State stood as another milestone in the health care sector of the then state of Travancore. Further, the trained personnel under the supervision of the Sanitary Commissioner and the Durbar Physician started the State Vaccination programme. By 1915, there were twenty-seven hospitals and twenty-six dispensaries functioning throughout the Travancore region. By the year 1928 health care machinery of the state was further streamlined with the appointment of Surgeon General to look after the functions of the health care machinery. From 1928 onwards a Chief Medical Officer was given the charge to prepare and publish the administrative reports of the Travancore and Cochin regions. As per the request of the then Maharaja of the State and with the effective guidance of the Rock Feller Foundation and other similar sources, the Department of Public Health was established in the state during 1929. In the year 1933 the Sanitary Department was merged with Public Health Department and the Deputy

Director of Public Health was appointed during 1934 to take up the responsibility of health services.

As part of the Education reforms committee, School Health programmes were started in various schools in the State during 1937. The post of Durbar physician was no more required and was changed to Surgeon General from 1938, which continued till the formation of the State of Kerala in 1956. After the formation of the State of Kerala by merging the erstwhile states of Travancore, Cochin and the Malabar district, which was under the former Madras Presidency, the Department of Health was established to carry out the health needs of the State as a whole. Later, the department was redesigned as the Department of Health and Family Welfare in 1983 to take-up not only the health needs of the community but also the family welfare measures.

Health service machinery of the state witnessed a substantial progress during the plan periods adding cumulative increase in the number of primary health centers, community health centers with their sub centers in the respective areas extending the services to the rural and urban masses.

Health Care Programmes: -

Directorate of Health Services was established after the formation of the State of Kerala with a view to co-ordinate the health services activities in the State. The Director of Health Services at the top of the administration of the health care activities in the state extended and supervised the health services in all the districts of the State through the District Medical Officers and the respective subordinates.

School Health programmes, sanitary programmes, vaccination programmes, rural health services existed even before the independence in the country was also brought under the functional authority of the Directorate of Health Services. Family Planning programme, which was started during the initial periods of the formation of the state, was later renamed as family welfare programmes after introducing welfare measures as part of the life of the people.

The national programmes functional in the State were National Family Planning Programme (1951), National Malaria Control Programme (1953), National Malaria Eradication Programme (1958), National Leprosy Eradication Programme (1955), National Nutrition Programme (1962), National Control Programme for Blindness, and the National Tuberculosis Control Programme. The other programmes that were introduced by the directorate during the sixth plan period included National Filaria Control Programme, Family Welfare Programmes, Health Education Programmes, Nutrition programmes, Government Medical Stores Programme and Health Transport organization.

The molecular laboratory[ccvi], which was opened in the General Hospital, Thiruvananthapuram during 1913, was later transformed into bacteriology laboratory during 1920. Considering the need of a common laboratory set-up, the four laboratory set-ups functioning as separate units like Bacteriology laboratory under medical department, vaccine depot under sanitary department, Entomology Laboratory under the health services and Chemical examination laboratory directly under the government were brought under one establishment namely the Public Health Laboratory which was established in 1937 at Thiruvananthapuram which is functioning under the Director appointed by the Government. The Public Health Laboratory has its regional centers at Eranakulam and Kozhikode well manned and functions under Regional Directors.

During the year 1987 the directorate introduced new programmes like India population project, Multi purpose health worker scheme and the Universal Immunization programme as part of the emerging needs of the people of the state in various areas.

It was during the year 1990 - 91, the directorate identified AIDS as one major alarming disease and with a view to educate people to equip themselves against this disease, the organization started the National AIDS control programme in the State as part of its activities.

Family Welfare schemes emerged with new dimensions during the year 1994 - 95. Many new programmes were added to the family welfare programmes during the year like the

baby friendly programmes, first referral units, polio eradication programmes, neonatal tetanus clinics and the child survival and safe motherhood programme. Thus the family welfare programmes started covering a wider section and activities of the community. In order to protect the rights and privileges of the sick as a consumer, government introduced "Concern for consumer" programme to protect he patients' rights and privileges.

Nutritional programmes were there in existence since independence and from the time of formation of the state and health department. During the year 1996 - 97 the services of the programme were extended by including One-day nutrition education programme cum medical check-up camps in prematric and tribal hostels as well as one day nutrition camps for scheduled castes and scheduled tribes.

Latest development in the health care sector of the State of Kerala took place during the year 2002 - 03 by starting the histopathology and cytopathology sector in the public health system. During the year the Directorate of Health Services established the Reproductive and Child health department by combining the activities of the Maternal and Child health department and the Child survival and safe motherhood programme. Special care for adolescent girls was also introduced as part of the activities of the Reproductive and Child Health department.

Awareness about the Programmes: -

The awareness about the various healthcare programmes was found to be different among various age group as well as men and women in the study. It was seen that a major section of the sample (76.28%) are fully aware of the health care programmes of which only 31.6% are women. This shows that the health care machinery was unable to reach women community in an accountable manner. While considering the rehabilitation programmes also, majority (73.12%) of respondents are found to be aware of the programmes. Among them only 31.89% cases were there from among women folk. In this case too only 26.87% of the respondents are found to be not aware of the programmes. In the case of school health programmes, a larger section of the members (85.37%) are found to be aware of the programmes. A good majority (87.74%) of

respondents have acknowledged that they are aware of the health checkup camps as well as health care meetings. The study further revealed that respondents at large (87.74%) have attended the health check-up camps of which 71.17% individuals belonged to the middle-aged group of 35 - 55 years.

In the case of health care meetings too, a good majority (78.26%) of members have attended such camps. The maximum (72.22%) of attendance was also found from among the middle-aged population. Mostly the tendency noted here from the study was that middle-aged male members are more aware of health care programmes carried out in the various parts of the State.

Our analysis with regard to the various sources of information reaching the beneficiaries of the health care programmes revealed that individuals mainly concentrate on one particular source. It was found that more than half of (57.7%) the råspondents depended on advertisements and notices for getting information related to health care. Public address system was also depended upon by few (19.36%) respondents for gathering information. The persons who depended more on advertisements and notices were male respondents who account for 62.32%. Majority (56.84%) of individuals who depended on the advertisements and notices belonged to middle-aged group. Thus it is seen that people are inclined towards advertisements and notices than any other source to gather information related to health care programmes. In the case of rehabilitation programmes, only about one-third of the sample of the population (33.99%) depended on personal contacts. Rehabilitation medicine has emerged during the recent years as a medical specialty. The objective of rehabilitation is to make productive and socially acceptable people in society. The major programmes of rehabilitation recently developed in the health sector include medical rehabilitation, vocational rehabilitation, social rehabilitation and psychological rehabilitation. Considering the requirement of the society, the government operates in the State of Kerala through five major schemes of assistance to voluntary organizations providing services to disabled persons. The schemes include assistance to the voluntary organizations for the disabled (NGOs), assistance for aids and appliances, assistance for rehabilitation of leprosy cured persons, development in the field of cerebral palsy and mental retardation and for establishment of special schools.

Health for all includes rehabilitation for all .So people need to know much about the facilities available at these centers in detail. So people depended on personal contacts in case of rehabilitation programmes.

School health services has developed during the last seventy five years from the narrower concept of medical examination of children to the present day concept of comprehensive care and well being of the child through its school going years. The aspects of school health services are appraisal of the health of the school children and personnel with remedial measures and follow up, prevent communicable diseases, provide nutritional services, dental, mental and eye health services, education of handicapped children and most importantly health education. The case with the school health programmes is also the same. Personal contact with parents and teachers is the most important factor for the effective carrying out of school health programmes. The view that personal contact was a good source of information was supported by 43.87% respondents out of which the majority (73.87%) was from middle-aged group of 35 - 55 years age. Dependence of the people on sources of information varies according to the type of the programme. The respondents admitted during field study that in many cases information does not reach all the corners of the state at the appropriate time.

People of various age groups express varying degrees of interest in health care programmes. It has been revealed that more than three forth of the sample (76.26%) of respondents are aware of health care programmes of various kinds happening in the state. They are aware of health education programmes, school health programmes, rehabilitation programmes and associated services. This explained that people are becoming conscious about health care programmes and are familiar with latest health care measures. Among the various programmes, school health programmes seem popular. Majority of the respondents participate in health care camps. On examining the source of information related to health care programmes, it was found that advertisements and notices provide maximum information to the general public. School health programmes got greater encouragement from respondents and also for rehabilitation programmes for the mentally and physically disabled people. It is also seen that majority (71.93%) of the respondents have been associated with health care programmes for a period more than ten

years. Respondents felt that health care programmes organized by governmental institutions are more effective as they have got regular policies and schemes to implement these health care programmes. Though private institutions conduct these programmes, they are always oriented towards the benefit of the institution in their effort to popularize the institution, as revealed in the enquiry.

Our analysis of the influence of ageing on the utilization of the various health care programmes by the people revealed many aspects; the elderly respondents as well as those belonging to middle aged groups were found to be happy with government health care sector programmes, but the younger age group of respondents in the sample were found to enjoy the facilities offered by the private health care sector in this aspect. People of 35 – 55 years of age were more aware of health care programmes and gathered more information from advertisements and notices. The elderly members relied more on media and public address system as a source of information on health care programmes. Personal contact was depended on by middle-aged group of people. School health programmes received a lot of attention among people of the middle-aged group through personal contact. Health education programmes were utilized mainly by the members of the middle-aged group. Majority of the respondents belonging to the middle-aged group have availed rehabilitation programmes like vocational rehabilitation, mental, social and medical rehabilitation compared to the other age groups. Health check-up facility was utilized mostly by the middle-aged group in the study. Comparing the importance given to the various health care programmes by the various age groups; rehabilitation programmes were found to gather more attraction and that too from among members of the middle-aged section. Thus the relationship between the aging of the members and the enjoyment of health care programmes has been fully elaborated. The relationship between the sources of health care programmes sort for by the people and the utilization of these were also verified.

Participation in health care programmes: -

Our study has revealed that even if the people are aware of health care programmes and gather information from various reliable sources their actual participation in the health care programmes occurs only in limited cases. It is only natural that may people

participate in programmes or activities on acute necessity or interest or importance of any kind as far as they are concerned. Thus importance is one factor, which determines their presence to the programme either at the same place or at distant areas of activity. Here it was revealed that a good number (79.84%) of respondents have participated in health care programmes in their own areas of activity, where as only 66.4% respondents have shown interest in participating in health care programmes conducted else where. Even here, from among the women folk in the sample only 35.11% respondents showed interest in participating in health care programmes conducted away from their respective localities. Among the respondents who felt happy to participate in health care programmes, majority of cases (69.80%) were among the middle-aged population. Thus it can be seen that though maximum participation of people in health activities occurred from male respondents, women are also interested though in a weaker share in participating in the programmes. Here also a good majority of members who participated in the programmes belonged to the middle-aged group.

An overall assessment of the present trends of health care management system is found to be a result of the interplay of several factors. Influence of tradition, changes in the policies and changing economic trends, new trends of developmental approaches in the state, technological changes including the new lines of medical technology have seriously brought out positive changes in development in the process of the management of the health system. Periodical and cumulative approaches in the medical care and its administration with new emphasis on environmental health, family health and rural health have developed an actual health care delivery system. Consequently new kinds of institutional, non-institutional, formal and informal types of approaches to the real management of health care in the state are the new avenues of health care management. The study has brought out that there has been a radical modification from the conventional medical care management system reflected through emergence of new branches of practical and participatory styles of medical care enjoyment by the masses. The emphasis on social and individualistic approaches towards the healing system is an important phenomena precipitating in the observations of research.

In short, people as a whole have actively shown the tendency for the real acceptance of these kinds of health care programmes. Though differences of various natures can be observed among the beneficiaries, the concern for better health is common for all people. This is seen from the analysis of the awareness and participation of respondents in health care programmes in the study. Thus it is quite evident that the variables like age, sex, awareness about the programmes, the sources of information, participation in the programmes are associated to the real utilization and enjoyment of health and the issues of health care among the people. Several studies (Gladstone Iago[ccvii], Hanlon John. J[ccviii], Asha. A. Bhande[ccix]) have also brought out significance of these factors under different settings. Our study also throws more light on the real process and active trends in the emergence of health care in the State of Kerala.

❖❖❖

[i] Dinesh Varma M., Genesis of a Medical College – A Write-Up; the Hindu daily December 9, 1996. p 3
[ii] World Health Organization; World Health Report 2000-Health systems: Improving Performance, Geneva; 2000. p 61

[iv] Banarjee.D: Population Planning In India – National and Foreign Priorities, CSMCH, JNU. New Delhi 1973. p 14
[v] World Health Organization; World Health Report 2000 - Health systems: Improving Performance, Geneva; 2000. p 42
[vi] Hanlon John. J. Public Health – Administration and Practice. Times Mirror / Mosby College Publishing 1990. P 2, 8, 42, 244, 261
[vii] Schonic W and Price W: Reorganizations of Health Agencies by local government in American Urban centers: What do they portend for public health? Milbank Q 55:233, Spring 1977. p 127 - 132
[viii] Smith, Bryan C: Community Healthy: An Epidemiological Approach; Macmillan Publishing Company, Inc, New York 1979. p 198
[ix] Mackintosh.J.M. Topics in Public Health; E & S Livingstone Limited; London; 1965. p 146 - 148
[x] Hanlon John. J. Public Health – Administration and Practice. Times Mirror / Mosby College Publishing 1990. P 2, 8, 42, 244, 261
[xi] Madan.T.N. Doctors and Society. Vikas Publishing House Pvt Limited, New Delhi; 1980. p 73
[xii] Curran William, Hyg SM (1989), "The Constitutional Right to Health Care", The New England Journal of Medicine, 1989. p 91 - 96
[xiii] Rao R.N : "Some Challenges In Health Administration": Background Documents. 1996. p 23, 31
[xiv] Jesani Amer, 'Laws Of Health Care Providers', Mumbai Cehat (140) 1996.p 117
[xv] Koontz Harold, Weihrich Heinz: "Essentials of Management": McGraw Hill Publishing Company, New York, 1990. p 4, 5, 65, 88, 100, 110, 111, 261, 282.
[xvi] Katz, Alfred.H. And Jean Spencer Felton: Health and Community: The Free Press; New York; 1965. p 239.
[xvii] Feldman, Jacob J: The Dissemination of Health Information. A Case Study In Adult Learning; Aldine; Chicago; 1966. p 149
[xviii] John Evans, James A.H., Health Promotion and Obstacles: Hethrew, 1994. p 98
[xix] Koontz Harold, Weihrich Heinz: "Essentials of Management": McGraw Hill Publishing Company, New York, 1990. p 4, 5, 65, 88, 100, 110, 111, 261, 282.
[xx] Koontz Harold, Weihrich Heinz: "Essentials of Management": McGraw Hill Publishing Company, New York, 1990. p 4, 5, 65, 88, 100, 110, 111, 261, 282.
[xxi] Takulia.H.S: The Health Center Doctor In India: The John Hopkins Monographs In International Health;
John Hopkins Press; NY, 1967. p 321
[xxii] Hanlon John. J. Public Health – Administration and Practice. Times Mirror / Mosby College Publishing, NJ 1990. P 2, 8, 42, 244, 261
[xxiii] Chatterjee, Debashis. Human Values And Management Of Change: An Indian Perspective, Managing Transition, Association of Indian Management Schools, New Delhi 1994. p 107
[xxiv] Lothan, Community Medicine, Appleton Century Crofts, CA, 1975. p 2
[xxv] Mossley W.H., Jamison D.T., and Henderson D.A. The health Sector in the developing countries: Problems for the 1990s and beyond. Annual Review of Public Health, 1990. p 134 - 136
[xxvi] NCAER: Household Survey of Medical Care, National Council for Applied Economics, New Delhi. 1991. p 53
[xxvii] Goel S.L., "Health Care Administration": Sterling Publishers (P) Ltd, New Delhi. 1983. p 78 - 81
[xxviii] Evans JR, Hall KL, and Warford J: Shattuck lecture – Health care in the developing world: Problems of
Scarcity and Choice, New English J Med 305:1117, Nov 5 1981. p 216
[xxix] Field, Minna: Patients Are People: A Medical Social Approach To Prolonged Illness; Columbia University Press; New York; 1967 p 171 - 172
[xxx] Gupta, Giriraj (Ed): The Social And Cultural Context Of Medicine In India; Vikas Publishing House Limited, New Delhi; 1981. p 84

[xxxi] Levey S And Loomba N.P: Health Care Administration: A Managerial Perspective, Ed 2, Philadelphia, 18984, Jb Lippincott Co. p 234 - 236
[xxxii] Johann P.F., Health Studies in Community – Study Paper: Council of Medical Education, 1986. p 23
[xxxiii] Hanlon John. J. Public Health – Administration And Practice., Times Mirror / Mosby College Publishing
1990. P 2, 8, 42, 244, 261
[xxxiv] Grostick, Sara M. Health Information: Management of a Strategic Resource. Saunders Company, 1996. p 208
[xxxv] Duncan CJ, Today's Health Tomorrow's Hope, Tropical Inc., 1989. p 71
[xxxvi] Schonic W and Price W: Reorganizations of Health Agencies by local government in American Urban Centers: What do they portend for public health? Milbank Q 55:233, Spring 1977. p 231 - 232
[xxxvii] Smith, Bryan C: Community Healthy: An Epidemiological Approach; Macmillan Publishing Company,
Inc, New York 1979. p 201
[xxxviii] Berg, Per-olof: "Organizational Change as a Symbolic Transformation Process", in Organization Culture,
California, Sage Publications Inc., 1985, pp 281-299. p 143
[xxxix] Gardner, N.B., Effective Executive Practices, McDonald, Geneva 1965. p 188
[xl] Drucker. P: Technology, Management and Society, Heinemann, 1970. p 423 - 425
[xli] Mayes CL and Allen H: Today's' Manager and his Challenges, SB Publications, London 1998 p 271
[xlii] Mintzberg H: The Structuring of Organizations: A Synthesis of Research, Englewood Cliffs, Prentice Hall, Inc. NJ, 1979, p 198 - 201.
[xliii] John Evans, James A.H., Health Promotion and Obstacles: Hethrew, 1994. p 144
[xliv] Duncan WJ, Ginter PM, Swayne LE: Strategic Management for Health care Organizations, Blackwell, Cambridge 1994. p 202 - 205
[xlv] Hanlon John. J. Public Health – Administration And Practice., Times Mirror / Mosby College Publishing, NJ 1990. P 2, 8, 42, 244, 261
[xlvi] Morita A, Reingold EM, Shimomura M: Made in Japan: Akio Morita and Sony, Dutton Publishers, New York 1986
[xlvii] Pareek Udai, "Beyond Management", Oxford and IBH Publishing Co., Delhi. 1994 p 347
[xlviii] Mintzberg H: The Structuring of Organizations: A Synthesis of research, Englewood Cliffs, Prentice Hall, Inc. NJ, 1979. p 308
[xlix] McGinnis, J.M. Setting Objectives for Public Health in the 1990s: Experience and Prospects, Annual Review of Public Health. Colombia, 1990. p 61-63
[l] Pickett George, Hanlon J. John: Public Health Administration And Practice: Times Mirror / Mosby College Publishing, St Louis, 1990. p 368 - 369
[li] Kirkpatric, Joanna: The Sociology of an Indian Hospital Ward. Firmaklm Private Limited, Calcutta; 1979. p 93
[lii] Lyon, Grant and Green. "Fayol on Administration" As Illustrated In Brodie, M.B 1967. p 183 - 184
[liii] Fahey Arshad and Narayanan.M.K, Management Methods, New Land Publications. 1997. p 156
[liv] Berman P. and Kutzin J.; Public Hospitals in Developing Countries – Resource Use, Cost & Financing; World Bank; Washington; 1993. p 29 - 30
[lv] Hanlon John. J. Public Health – Administration And Practice., Times Mirror / Mosby College Publishing 1990.
[lvi] Max Weber: "The Methodology of the Social Sciences", North West Publications, Germany. 1977.
[lvii] Kothari, Ranjini: "The Yawning Vacuum: A World Without Alternatives", The Economic And Political Weekly, Jodhpur. 28 (22): 1100-1107, 29th May 1993 p 42
[lviii] Rokeach. M.: The Nature of Human Values. New York, the Free Press, 1973. p 127
[lix] Garg Pulin K and Parikh Indira J: "Organizational Change and Adaptation, Organization Identity, Change and Adaptation": Proc. Of the International Conference. Ahmedabad, ISISD, 1991 Vol. 3 pp 111-117
[lx] Bannister. D And Mair, J.M.M., The Evaluation Of Personal Constructs, Academic Press 1968.p 58
[lxi] Banerji D., Population Planning In India – National and Foreign Priorities, CSMCH, J.N.U, New Delhi. 1973. p 14
[lxii] Honey. P., Solving People-Problems, McGraw Hill 1980.p 158
[lxiii] Hanlon John. J. Public Health – Administration And Practice, Times Mirror / Mosby College Publishing

1990.
[lxiv] Roger Detels, Walter W. Holland Et Al – Oxford Textbook Of Public Health – Vol 1 – Scope of Public Health. Oxford University Press. 1997. p 643, 648
[lxv] Roger Detels, Walter W. Holland Et Al – Oxford Textbook Of Public Health – Vol 2 – The Methods of Public Health, Oxford University Press. 1997. p 541, 562
[lxvi] Breslow, L And Breslow N. Health Practices And Disability: Some Evidences From County, Preventive Medicine, New York 1993. p 209
[lxvii] Parsons, Talcott: The Social System: The Free Press: New York, 1964 p 181, 193
[lxviii] Hanlon John. J. Public Health – Administration And Practice., Times Mirror / Mosby College Publishing
1990.
[lxix] Russell M.Elezabeth: Choice and Change in Health Care in Britain. Social Science and Medicine. Vol: 18, No.1, 1984. p 137
[lxx] Cockerham C William: Medical Sociology: Prentice-Hall; Inc; Englewood Cliffs; New Jersey; 1978. p 233, 236
[lxxi] Asha S. Bhande. Health of the Population. – A Study Paper – Health for Millions. Calcutta. 1999 p 162.
[lxxii] Drake.R. and Smith.P. Behavioral Science in Industry, McGrew-Hill, 1973 Chapter One. p 107
[lxxiii] Webster C, Orlon S., L., Health in the Millennium, City World Publications, Geneva. 1998 p 89, 94
[lxxiv] G. Austin: Hospitals And Health Systems – Global Perspective: Medicine And Health, 1992. p 23
[lxxv] Mossley W.H., Jamison D.T., and Henderson D.A. The health sector in the developing countries: Problems for the 1990s and beyond. Annual Review of Public Health, 1990. p 63, 67
[lxxvi] Sudha S., Healthy Living in Community, New Hamilton, NJ. 1994 p 127
[lxxvii] Satya Raju R., A Parthasarathy: Indian Health Scenario – Deepika Publications, Kottayam 2000. p 68
[lxxviii] Erhardt, Carl L And Joyce E. Berlin (Ed): Mortality And Morbidity In The United States; Harvard University Press, Cambridge; 1974. p 156
[lxxix] Anderson, James G And David E.Bartkus: Choice Of Medical Care; A Behavioral Model Of Health And
Illness Behavior: Journal Of Health And Social Behavior: Vol. 14, University Press, London 1973. p 98.
[lxxx] Freeman, Howard G. Sol Levine And Leo G Reeder (Ed): Handbook Of Medical Sociology; Prentice-Hall, Inc, Englewood Cliffs, NJ, 1963. p 94, 131, 157
[lxxxi] Tessler, Richard, David Mechanic And Margaret Diamond: The Effect Of Psychological Distress On Physician Utilization. A Prospective Study; Journal Of Health And Social Behavior; Vol: 17, University Press, London, December 1976. p 79, 82.
[lxxxii] Mechanic, David: Medical Sociology: Second Edition; Free Press New York, 1968. p 223
[lxxxiii] Mehtha S.R, "Society and Health – A Sociological Perspective": Vikas Publishing House, New Delhi, 1992.
[lxxxiv] Dubos R.J., Man, Medicine and Environment, New American Library, New York. 1969 p 88, 102
[lxxxv] Siegerist Henry, "A History of Medicine – Vol 1, Oxford University Press, London, 1951.p 131, 146
[lxxxvi] Kutumbiah P., Indian Journal of the History of Medicine, 1956. p.2-6
[lxxxvii] Bhatia, S.L. Indian Journal of the History of Medicine, 1956. p.56 – 70.
[lxxxviii] Guthrie Douglas, "A History of Medicine" Thomas Nelson and Sons, London 1947. p 92, 131
[lxxxix] Norton Allen " The New Dimensions of Medicine – 20th Century Studies, London. Hodder and Stoughton, 1969.
p 128, 172
[xc] Jaggi O.P., Indian System of Medicine, Atma Ram and Sons, 1973 p 47, 69, 127, 136.
[xci] Vinay Chandran, History of Evolution of Medicine in Kerala, Current Books, 2000. pp 46, 58, 67, 81, 132
[xcii] Vinay Chandran, History of Evolution of Medicine in Kerala, Current Books, 2000.
[xciii] Rao.K.N.Government of India, Report of the Health Survey and Development Committee, Government of India
Press, Simla. 1998. P 91 - 94
[xciv] Bhorkar.G, Health in Independent India, Ministry of Health, New Delhi. p 46 - 58
[xcv] Patnaik K.C., Health in India Souvenir, Indian Public Health Association, Culcutta. 1994. p 23
[xcvi] Mukharjee.B, Report on Reorganisation on Family Planning Services, Administration and Basic Health Services. Ministry of Health, Government of India 1956. p 87 - 94

[xcvii] Government of India, Planning Commission – Draft of Five Year Plans, Controller of Publications, Delhi 1966
[xcviii] Government of India, Planning Commission – Draft of Five Year Plans, Controller of Publications, New Delhi,
1972
[xcix] Government of India, Planning Commission – Report of Five Year Plans, Controller of Publications, New Delhi,
1975
[c] Government of India, Planning Commission – Report of Five Year Plans, Controller of Publications, New Delhi,
1980
[ci] Government of India: Ministry of Health and Family Welfare: Annual Report: 1987
[cii] Book Hives: 8th Five-Year Plan (1992-97) E. Chnadran – Issues of Current Interest Series 4, 1997.
[ciii] Government of India: Ministry of Health and Family Welfare Annual Report: 1997.

[civ] Government of India, Health Information of India, Ministry of Health and Family Welfare, New Delhi.1998.
[cv] Government of India, Health Information of India, Central Bureau of Health Intelligence, 2003.
[cvi] Ashish Bose: Practicing Health For All, David Morley et al, Oxford University Press, 1984

[cvii] Paul Zukin. NIHAE Bulletin.1993

[cviii] Mukharjee.B, Report on Reorganization on Family Planning Services, Administration and Basic Health Services.
Ministry of Health, Government of India 1968
[cix] World Health Organization - Modern Management Methods and the Organization of Health Services,

Public Health Papers 65. 1988

[cx] Government of India: Report of the Working Group on Health For All by 2000, Ministry of Health, Delhi, 1981
[cxi] Government Of India, Bulletin on Rural health Statistics in India, Directorate General of Health Services, 1993
[cxii] Government of India, Health Information of India, Ministry of Health and Family Welfare, New Delhi. 2003.
[cxiii] United Nations: Population Studies: Study Paper 85. 1999.
[cxiv] Panicker P.G.K & Soman: Health Care System in India – Economic and Political Weelky Volume No. 11,
No.22, 1985
[cxv] Government of Kerala: Report on the Survey of Medical Institutions, Directorate of Economics and Statistics, 1986.
[cxvi] Kannan, K.P., Raman Kutty V and Aravindan K P: Health and Development in Rural Kerala, Thiruvananthapuram. 1991
[cxvii] Bossert J. Thomas, David A. Parker: The Political And Administrative Context Of Primary Health Care In The
Third World. Social Science and Medicine: Vol. 18, No.8, 1984.
[cxviii] Ghosh B.,: Time Utilization and Productivity of Health Human power, A case study of P.H.Cs, IIM, Bangalore. 1991.
[cxix] Jesani. A, Ananthraman S: Private Sector and Privatization in the Health Care Services, FRCH, Bombay. 1993.
[cxx] Ashokan R.V., Dr. Indian Medical Association – Annual Report – Kerala State Branch 1999 – 2000, Thiruvanantapuram. 2000.

[cxxi] Jesani. A, Ananthraman S : Private Sector and Privatization in the Health Care Services, FRCH, Bombay. 1993.

[cxxii] Phadke A : Private Health Sector, FRCH, Bombay. 1993

[cxxiii] Government of Kerala: Report on the Survey of Private and government Medical Institutions, Directorate of Economics and Statistics, 1995.

[cxxiv] Government of Kerala, Health Information Cell, Directorate of Health Services, Kerala, 2004

[cxxv] Government of Kerala, Department of Finance, Civil Budget Estimates 2002-03, Major Head-cum-Dept Summary of Expenditure and Public Accounts, TVM. 2003

[cxxvi] Duggal R and Nandraj S, Vadair A, Special Statistics on Health Expenditure Across States. Economic & Political Weekly, Bombay Vol XXX No 15 & 16 April 15th and 22nd; 2002.

[cxxvii] National Institute of Public Finance and Policy (NIPFP), (Draft report) April, Structural Adjustment Programme- its impact on the Health Sector, New Delhi.2002

[cxxviii] Berman P and Kutzin J.; Public Hospitals in Developing Countries: Resource use, Cost, Financing; Washington; World Bank; 1993.

[cxxix] Government of India. Central Bureau of Health Intelligence, New Delhi, 2002

[cxxx] Government of Kerala: Report on the Survey of Private and Government Medical Institutions, Directorate of Economics and Statistics, 2002

[cxxxi] ICMR: Evaluation of Quality of Family Welfare Services of Primary Health Center Level, New Delhi.1991.

[cxxxii] Gupta, JP, Gupta RS, Mehara P., et.al, Evaluation of the functioning of Area development project in Health sector in India for improving the health care system, NIHFW, New Delhi. 1992

[cxxxiii] Ghosh B., Time Utilization and Productivity of Health Human power - A case study of Primary Health Centers, IIM, Bangalore. 1991

[cxxxiv] Expert Committee on Public Health Systems, MHFW, Government of India, New Delhi, 2002

[cxxxv] National Sample Survey Organization (NSSO), Morbidity and Utilization of Medical Services, 47th Round, June Report No 364, Dept of Statistics, GOI, New Delhi 2001

[cxxxvi] Duggal, R., Amin, S.Cost of Health Care, Survey of an Indian District, FRCH, Bombay, 1999

[cxxxvii] Kannan, K.P. and Aravindan K P, Health and Development in Rural Kerala, Thiruvananthapuram, 1999

[cxxxviii] National Council of Applied Economic Research, Household Survey of Medical Care, NCAER, New Delhi, , 2001

[cxxxix] George, A, Shah, I. Nandraj, S., A Study of Household Health Expenditure in Madhya Pradesh, FRCH, Bombay, 1993

[cxl] Duggal R, Nandraj S. Regulating the Private Health Sector, Medico Friend Circle Bulletin No 173-174, July /August, Nasik, 1991

[cxli] Fahey Arshad and Narayanan.M.K, Management Methods, New Land Publications. 1997.

[cxlii] WHO, SEARO, Health Planning and Management Glossary (state of Kerala), Health Papers, New Delhi, 2003.

[cxliii] Government of Kerala: Administrative Reports, Directorate of Health Services, Thiruvananthapuram.

1980
[cxliv] Central Health Education Bureau – Report on Seminar on School Health Services, N.Delhi, 1965.
[cxlv] Government of Kerala: Health Profile Kerala, Department of Health and Family Welfare, Thiruvananthapuram, 1985
[cxlvi] Government of Kerala: Health Education Policies and Programmes, Directorate of Health Services, Thiruvananthapuram, 1992.
[cxlvii] Government of India, Planning Commission – Draft of Five Year Plans, Controller of Publications, New Delhi, 2001
[cxlviii] Health Information of India, Ministry of Health, Government of India, 2003
[cxlix] Health Information of India, Ministry of Health, Government of India, 2003
[cl] W.H.O, Measuring Changes in Nutrition Status, Geneva 1994.
[cli] Government of Kerala: Report of the Activities of State level Nutrition Programme, Directorate of Health Services, Thiruvananthapuram. 2001
[clii] Government of Kerala: A Report on National Health Programmes in Kerala Directorate of Health Services, Thiruvananthapuram. 2000

[cliii] Government of Kerala: A Report on National Health Programmes in Kerala Directorate of Health Services, Thiruvananthapuram. 2000

[cliv] Government of Kerala: A Report on National Health Programmes in Kerala Directorate of Health Services, Thiruvananthapuram. 2000
[clv] Government of Kerala: Health Profile of Kerala, Directorate of Health Services, Thiruvanathapuram 1985.
[clvi] Government of India: Health Information of India, Ministry of Health, New Delhi 2003
[clvii] Government of Kerala: Health Profile of Kerala, Directorate of Health Services, Thiruvanathapuram 2000.
[clviii] Government of India: Health Information of India, Ministry of Health and Family Welfare, New Delhi 2003
[clix] Government of India: Health Information of India, Ministry of Health and Family Welfare, New Delhi. 1985.

[clx] Government of India: Health Information of India, Ministry of H and F W, New Delhi. 1998.
[clxi] Government of Kerala: A Report on National Health Programmes in Kerala. Directorate of Health Services, Thiruvananthapuram. 2000
[clxii] Government of Kerala: A Report on National Health Programmes in Kerala. Directorate of Health Services, Thiruvananthapuram. 2000
[clxiii] Government of Kerala: A Report on National Health Programmes in Kerala. Directorate of Health Services, Thiruvananthapuram. 2000
[clxiv] Government Of Kerala: Health Information Cell: Directorate of Health Services, Thiruvananthapuram, 2004.
[clxv] Government of India: Health Information of India, Ministry of Health and FW, New Delhi. 1998.
[clxvi] Government Of Kerala: Health Profile Kerala: Department Of Health And Family Welfare; Thiruvananthapuram, 1999.
[clxvii] Government Of Kerala: Health Profile Kerala: Department Of Health And Family Welfare; Thiruvananthapuram, 1999.
[clxviii] Government Of Kerala: Health Profile Kerala: Department Of Health And Family Welfare; Thiruvananthapuram, 1999.
[clxix] Government Of Kerala: Health Profile Kerala: Department Of Health And Family Welfare; Thiruvananthapuram, 1989.
[clxx] Government Of Kerala: Health Profile Kerala: Department Of Health And Family Welfare; Thiruvananthapuram, 1989.
[clxxi] Government of Kerala: A Report on National Health Programmes in Kerala. Directorate of Health Services, Thiruvananthapuram. 2000
[clxxii] Government of Kerala: A Report on National Health Programmes in Kerala. Directorate of Health

Services, Thiruvananthapuram. 2000
[clxxiii] Lothan, Community Medicine, Appleton Century Crofts, 1975. p 2
[clxxiv] Hannes, James D: The Measurement Of Health; Medical Care Review: Vol. 29, December; NY, 1972.
[clxxv] Rao R.N: "Some Challenges in Health Administration"; Background Documents, Mumbai, 1996.
[clxxvi] Chatterjee Meera: Implementing Health Policy; Manohar Publications, New Delhi, 1988.
[clxxvii] Cullis, G John and Peter A West: The Economics of Health- An Introduction; Martin Robertson, G. Britain, 1979.
[clxxviii] Anderson. C.L: Health Principles and Practice- Sixth Edition; C.V.Mosby Company, U.S.A., 1970.
[clxxix] McGinnis, J.M. Setting Objectives for Public Health in the 1990s: Experience and Prospects, Annual Review of Public Health. 1990
[clxxx] Roger Detels, Walter W. Holland Et Al – Oxford Textbook Of Public Health – Vol 1 – Scope Of Public Health. Oxford University Press. 1997.Public Health; Vol: 1
[clxxxi] Blum, Richard H: The Management of Doctor Patient Relationship; Mc Graw Hill; 1980
[clxxxii] Sidel W.Victor & Ruth Sidel (ed): Reforming Medicine; Pantheon Books; New York 1984
[clxxxiii] Donabedin, Avedis: Aspects of Medical Care Administration; Harvard University Press, Cambridge 1973
[clxxxiv] Bhande. A.Asha; Tara Kanitkar, Principles of Population Studies, Himalaya Publishing House, 14th Edition, 2001. p 23, 29
[clxxxv] Nair P.S and Santosh S, Primary Health Care Services, Jai Mahal Publications, Hyderabad, 1987. p 51
[clxxxvi] United Nations: Population Policies in Developing Nations – A Review 1992.p 4
[clxxxvii] Shaji S., Dr.: Health Care Services for the Elderly, India Health, Deepika Publications, 2002. p 447
[clxxxviii] Cochrane, A L: Effectiveness and efficiency; Random Reflections in Health Services; Nuffield Provincial
Hospitals Trust; London; 1972 p 61
[clxxxix] World Health Organization: Promoting Health in the Human Environment, Geneva, 1975 p 67-69.
[cxc] Brown E.L., New Dimensions of patient Care; Russell Sage Foundation. NY 1984. p 169 - 171
[cxci] Eberst R.M; Journal for School Health, 99 – 104, 1984.
[cxcii] Feldman, Jacob J: The Dissemination Of Health Information- A Case Study In Adult Learning; Aldine; Chicago, 1966.

[cxciii] WHO. Evaluation of the Strategy for Health For All by Year 2000, Vol 1 1987. p 11
[cxciv] Apple Dorian: Sociological Studies of Health and Sickness: McGraw Hill, NY, 1980. p 243
[cxcv] Government of Kerala: Health Profile Kerala; Department of Health and Family Welfare, Thiruvananthapuram. 1989. p 7-9
[cxcvi] Government of India: Health Information of India; New Delhi; 1997
[cxcvii] Friedson, Eliot: Professional Dominance: The Social Structure of Medical Care, NY 1970. p 89
[cxcviii] Ahluwalia A: Medicine in India in Survey of Research in Social Sciences; Major Group IV. ICSSR: Delhi; 1994. p 4
[cxcix] WHO; Concepts of Health Behavior Research - Health Paper No.13, SEARO, New Delhi, 1996. p 12
[cc] Gupta, JP, Gupta RS, Mehara P., et. al, Evaluation of the functioning of Area development project in Health sector in India for improving the health care system, NIHFW, New Delhi, 1992. p 233-234
[cci] Hanlon John. J. Public Health – Administration And Practice. Times Mirror / Mosby College Publishing 1990
[ccii] McGinnis, J.M. Setting Objectives for Public Health in the 1990s: Experience and Prospects, Annual Review of Public Health. 1990
[cciii] Mechanic, David: Medical Sociology: Second Edition; Free Press New York, 1968.
[cciv] Advani Mohan: Doctor-Patient Relationship In Indian Hospitals Sarghi Prakashan; Jodhpur: 1980. p 18
[ccv] Berman P. and Khan M.E. (ed.); Paying for India's Health Care, London; Sage Publications; 1993 - 94. p 26 - 27

[ccvi] Dr.P.Vinayachandran. Kerala Chikistha Charithram, Current Books, Kottayam 2000. p 125
[ccvii] Gladstone, Iago: Medicine In Transition, The University Of Chicago Press, Chicago; 1965.

[ccviii] Hanlon John. J. Public Health – Administration And Practice. Times Mirror / Mosby College Publishing
CA, 1990

[ccix] Asha. A. Bhande; Tara Kanitkar, Principles of Population Studies, 14th Edition, Himalaya Publishing House, New Delhi. 2001

Bibliography

Journals: -

Asha A. Bhande: Health of the Population. – A Study Paper on Indian Population, Population Study 1999 Vol: 8, Pune, 1999.

Ashokan R.V., Dr: Indian Medical Association – Annual Report – Kerala State Branch 1999 – 2000, Thiruvanantapuram, 2000.

Austin G: Hospitals And Health Systems – A Global Perspective: Paper, Medicine And Health, Chicago, 1992.

Banerji D: Population Planning In India – National And Foreign Priorities, CSMCH, J.N.U, New Delhi, 1973.

Bellin, Saymour S And H. Jack Geiger: The Impact Of Neighborhood Health Center On A Patient's Behavior And Attitudes Relating To Health Care- A Study Of Low Income Housing: Medical Care: Vol. 10, New Jersey, May-June: 1972.

Benyousseff. A.B. And A.F.Wessen: Utilization Of Health Services In Developing Countries;Social Science And Medicine, Vol.8, West Germany, 1974.

Berman P. and Khan M.E. (ed.); Paying for India's Health Care, London; Sage Publications; London, 1993-94.

Bossert J.Thomas And David A. Parker: The Political And Administrative Context Of Primary Health Care In The Third World. Social Science And Medicine; Vol. 18, No.8, New York, 1984.

Curran William: The Constitutional Right to Health Care, The New England Journal of Medicine, 1989.

Dinesh Varma M.: Genesis Of A Medical College – A Write-Up; The Hindu Daily December 9, Chennai,1996.

Duggal R and Nandraj S, Vadair A: Special Statistics on Health Expenditure Across States. Economic & Political Weekly, Bombay Vol XXX No 15 & 16,Mumbai, 1991.

Duggal R., Amin S: Cost of Health Care, Survey of an Indian District, FRCH, Bombay. 1989.

Duggal R, Nandraj S: Regulating the Private Health Sector, Medico Friend Circle, Bulletin No 173-174, July/August, Nasik. 1991.

Duncan CJ: Today's Health Tomorrow's Hope, Tropical Inc., Minnesota, 1989.

Eberst R M: People's Health Needs, Journal for School Health, Page 99 - 104, 1984.

Evans J R Hall K L and Warford J Shattuck: Health Care in the developing world: Problems of Scarcity and Choice, New England Journal of Medicine 305: 1117, November 5, 1981.

Expert Committee on Public Health Systems: MHFW, Government of India, New

Delhi, 1993.

Fletcher H.Robert et al: Patients' Priorities For Medical Care: Medical Care: Vol. XXI, No.2, London, February 1983.

Fuchs, Victor R. : The Growing Demand For Medical Care: New England Journal Of Medicine: Vol.279, July, London, 1968.

Garg Pulin K and Parikh Indira J: "Organizational Change and Adaptation, Organization Identity, Change and Adaptation"- Proc. of the International Conference, ISISD, Vol. 3 pp 111-117;Ahmedabad, 1991.

Ghosh B: Time Utilization and Productivity of Health Human Power-A case study of a Karnataka P.H.C, IIM, Bangalore, 1991

Government of India: Bulletin on Rural Health Statistics, Rural Health Division, Directorate General of Health Services. New Delhi. 1993.

Government of India: Bulletin on Rural Health Statistics, Rural Health Division, Directorate General of Health Services. New Delhi. 2002.

Government of India: Health Information of India - Ministry of Health and Family Welfare, New Delhi 1998.

Government of India: Health Information of India - Ministry of Health and Family Welfare, New Delhi 2003.

Government of India: Health Information of India, Central Bureau of Health Information, New Delhi, 1992.

Government of India: Health Information of India - Central Bureau of Health Intelligence, New Delhi 2002.

Government of India: Health Information of India - Central Bureau of Health Intelligence, New Delhi 2003.

Government of India: Health Information of India, New Delhi 1997.

Government of India: Health Information of India, New Delhi 2003.

Government of India: Health Statistics of India 2001, Central Bureau of Health Insurance, Directorate General of Health Services. New Delhi ,2001.

Government of India: Ministry of Health and Family Welfare - Annual Report, New Delhi 1987.

Government of India: Ministry of Health and Family Welfare - Annual Report, New Delhi 1997.

Government of India: Planning Commission – Draft of Five Year Plans, Controller of Publications, New Delhi, 1966.

Government of India: Planning Commission – Draft of Five Year Plans, Controller of Publications, New Delhi, 1972.

Government of India: Planning Commission – Draft of Five Year Plans, Controller of Publications, New Delhi, 2001.

Government of India: Report of the Working Group on the Health for All by 2000, Ministry of Health 1981.

Government of India: Report of the School Health Committee: Central Health Education Bureau. New Delhi. 1998.

Government of India : Health Information of India, Ministry of Health, New Delhi. 1985.

Government of India : Health Information of India, Ministry of Health, New Delhi. 2003

Government of Kerala: Administration Report of the Health Services Department, Department of Health and Family Welfare, Thiruvananthapuram. 1986 - 87.

Government of Kerala: Administration Report of the Health Services Department, Department of Finance - Civil Budget Estimates 2002 - 03 ;Thiruvananthapuram, 2002 - 03.

Government of Kerala : Report of the Activities of State level Nutrition Programme, Directorate of Health Services, Thiruvananthapuram. 2001

Government of Kerala: A Report on National Health Programmes in Kerala. Directorate of Health Services, Thiruvananthapuram. 2000

Government Of Kerala: Health Information Cell: Directorate of Health Services, Thiruvananthapuram, 2004.

Government Of Kerala: Health Profile Kerala: Department Of Health And Family Welfare; Thiruvananthapuram, 1989.

Government Of Kerala: Health Profile Kerala: Department Of Health And Family Welfare; Thiruvananthapuram, 1999.

Government Of Kerala: Report On The Survey Of Private Medical Institution In Kerala; Directorate Of Economics And Statistics; Thiruvananthapuram, 1986.

Government Of Kerala: Report On The Survey Of Private and Government Medical Institution In Kerala; Directorate Of Economics And Statistics; Thiruvananthapuram, 1995.

Government Of Kerala: Statistic For Planning: Directorate Of Economics And Statistics; Thiruvananthapuram, 1988.

Government of Kerala: Administration Report of the Health Services Department, Department of Health and Family Welfare, Thiruvananthapuram, 1988 - 89.

Government of Kerala: Administration Report of the Health Services Department, Department of Health and Family Welfare, Thiruvananthapuram, 1990 - 91

Government of Kerala: Administration Report of the Health Services Department, Department of Health and Family Welfare, Thiruvananthapuram, 1993 - 94.

Government of Kerala: Administration Report of the Health Services Department, Department of Health and Family Welfare, Thiruvananthapuram, 1994 - 95.

Government of Kerala: Administration Report of the Health Services Department, Department of Health and Family Welfare, Thiruvananthapuram. 1996 - 97.

Government of Kerala: Health Profile Kerala, Department of Health and Family Welfare, Thiruvananthapuram, 1985.

Government of Kerala: Health Profile Kerala, Department of Health and Family Welfare, Thiruvananthapuram, 1989.

Government of Kerala: Report of High Power Committee, Thiruvananthapuram,1997.

Government of Kerala: Report on the Survey of Private Medical Institutions in Kerala, Directorate of Economics and Statistics, Thiruvananthapuram, 1986.

Gupta, JP, Gupta RS, Mehara P., et.al: Evaluation of the functioning of Area development project in Health sector in India for improving the health care system, NIHFW, New Delhi. 1992.

Hannes, James D: The Measurement Of Health; Medical Care Review: Vol. 29, December; NY, 1972.

Holland.T.P: Organizational Structure And Institutional Care; Journal Of Health And Social Behavior; Vol 14, 1973.

ICMR: Utilization Of Health Services In Bihar, Gujarat And Kerala, New Delhi, 1989.

ICMR: Evaluation of Quality of Family Welfare Services of Primary Health Center Level, New Delhi. 1991

Kothari Ranjini: "The Yawning Vacuum: A World Without Alternatives", The Economic And Political Weekly, 28(22): 1100-1107, Calcutta,29th May 1993.

Kotter J.P: A Force For Change: How Leaders Differ From Managers: New York Free Press: 1990.

McGinnis, J.M:. Setting Objectives for Public Health in the 1990s: Experience and Prospects, Annual Review of Public Health; Washington,1990

Mukharjee.B.: Report on Reorganization on Family Planning Services, Administration and Basic Health Services. Ministry of Health, Government of India, New Delhi,1956.

National Sample Survey Organization (NSSO): Morbidity and Utilization of Medical Services, 42nd Round, July 1986-June 1987, Report No 364, Dept of Statistics, Government of India, New Delhi,1998.

Narayana Pai K. Dr:. "Health Care Delivery in Kerala"; Medical College Souvenir, Thiruvananthapuram, 1976

NCAER: Household Survey Of Medical Care; National Council For Applied Economics, New Delhi. 1991

NIRD: Health Care Delivery System Of Rural Areas – A Study Of MPW Scheme, Hyderabad. 1989

Paniker.P.G.K: Health Care Delivery System In India- Alternative Approaches; Economic And Political Weekly: Vol: X1, No.22, May 29, 1979.

Paniker.P.G.K. and Soman: Health Care System In India; Economic And Political Weekly: Vol: X1, 1985.

Parameswara Iyyer S.Ulloor: "Progress of Travancore Under HH Sreemoolam Thirunal"; Department of Cultural Publications, Government of Kerala, Thiruvananthapuram. 1938.

Parikh Indira: "Health without alternatives"; The Economic and Political Weekly, 28(22): 1100-1107, 29th May, 1993.

Patnaik K.C: Health in India; Souvenir, Indian Public Health Association, Calcutta. 1997.

Rao R.N: " Some Challenges In Health Administration";Background Documents, Mumbai, 1996.

Rao.K.N: Government of India, Report of the Health Survey and Development

Committee, Government of India Press, Simla, 1999.

Rotem A: "Managing Systems For Better Health – Facilitators Guide"; Western Pacific Education In Action Series', CA, 1988.

Russell M.Elezabeth: Choice And Change In Health Care In Britain. Social Science And Medicine. Vol: 18, No.1, Britain, 1984.

Satya Raju R., A Parthasarathy: Indian Health Scenario – 2000. Deepika Publications, Kottayam, 2000

Schonic W and Price W: Reorganizations of Health Agencies by local government in American Urban centers: What do they portend for public health? Milbank Q 55:233, Spring, 1977.

Shreedhara Menon: "Kerala District Gazetteer - Thiruvananthapuram", Kerala Gazetteer, Thiruvananthapuram, 1997.

Srivasthava Committee: Report of the Group on Medical Education and Support Manpower, MHFW, New Delhi, 1975.

White Kerr L And Donald O.Anderson: Health Services; Concepts For National Planning And Management; World Health Organization; Geneva, 1977.

World Health Organization: Concepts of Health Behavior - Research Paper No. 13, SEARO, 1996.

World Health Organization: Evaluation of the Strategy of Health For All by 2000, Vol.: 2; Geneva, 1987.

World Health Organization: Guidelines For The Development of Health Management Information Systems, Manila, 1993.

World Health Organization: Health Planning and Management Glossary, Health

Papers, SEARO, New Delhi, 2003

World Health Organization: Modern Management Methods and Organization of the Health Services, Public Health Paper No. 65, 1988.

World Health Organization: Promoting Health in the Human Environment, Geneva 1975.

Books: -

Alexander A Jeffery And Thomas G Rundall: Public Hospital Under Contract Management; An Assessment Of Operating Performance; Medical Care; Vol: 23, No.3, March; Boston, 1985.

Anderson Ronald: A Behavioral Model Of Families' Use Of Health Use Of Health Services, Research Series 25,Center For Health Administration Studies; Chicago, 1968.

Anderson. C.L: Health Principles And Practice- Sixth Edition; The C.V.Mosby Company,U.S.A., 1970.

Asha. A. Bhande, Tara Kanitkar: Principles of Population Studies, 14th Edition; Himalaya Publishing House, New Delhi, 2001.

Beckman: "Hospital Management International"; International Hospital Federation, 1994.

Berg, Per-olof: "Organizational Change as a Symbolic Transformation Process", in Organization Culture; Sage Publications Inc., California,1985.

Berman P. and Kutzin J: Public Hospitals in Developing Countries – Resource use, Cost, Financing; World Bank; Washington, 1993.

Bhatia. S.L.: Indian Journal of the History of Medicine, Calcutta ,1956.

Bhorkar.G: Health in Independent India, Ministry of Health, New Delhi ,1952.

Blum, Richard H: The Management Of Doctor-Patient Relationship;McGraw Hill, Canada ,1960.

Bose, Ashish And David M et.al: Practicing Health For All; Oxford University Press, 1984.

Bose, Ashish And Desai. P.B.: Studies In Social Dynamics Of Primary Care; Hindustan Publishing Corporation (India), Delhi, 1983.

Breslow, L And Breslow N: Health Practices And Disability- Some Evidences From County, Preventive Medicine, New York, 1993.

Brockington, Fraser C: The Health Of The Community; J & A Churchill Ltd. London, 1960.

Brown E L: New Dimensions of Patient Care; Russel Sage Foundation, New York, 1984.

Chandran E: 8th Five year Plan (1992 - 97): Issue of Current Interest Series 4; Book Hives, Pune, 1972.

Chatterjee, Debashis: Human Values And Management Of Change- An Indian Perspective, Managing Transition, Association Of Indian Management Schools; New Delhi, 1994.

Chatterjee Meera: Implementing Health Policy; Manohar Publications, New Delhi, 1988.

Cochrane A.L.: Effectiveness And Efficiency- Random Reflections In Health Services; Nuffield Provincial Hospitals Trust, London, 1972.

Cooper Michael H: Rationing Health Care; Halsted, New York, 1975.

Cowling A.G., Stanworth M.J.K., et al: "Behavioral Science For Managers" Elbs; Hodder & Stoughton, Mill Road, Kent, 1988.

Cullis, G John And Peter A West: The Economics Of Health- An Introduction; Martin Robertson, Great Britain, 1979.

Cummings, L.L and Schwab D.P: Performance in Organizations- Determinants and Appraisal; Scott, Faresman and Co., England, 1973

Donabedian, Avedis: Aspects Of Medical Care Administration- Specifying Requirements For Health Care; Harward University Press, Cambridge, 1973.

Drucker. P.: Technology, Management and Society, Heinemann, 1970.

Drucker. P.: The Practice of Management, Heinemann, 1955.

Dubos R.J: Man, Medicine and Environment; New American Library, New York. 1969.

Duncak A.H and Ginter. E: Management Perspective – Innovative Thoughts; AJ Publishing House, Chicago, 1988.

Duncan WJ, Ginter PM, Swayne LE: Strategic Management for health care Organizations; Blackwell, Cambridge, 1994.

Duncan WJ: Essentials of Management, Ed 2; Hinsdale, Dryden Press, IL, 1978

Fahey Arshad and Narayanan.M.K: Management Methods; New Land Publications. New Delhi, 1997.

Feldman, Jacob J: The Dissemination Of Health Information- A Case Study In Adult Learning; Aldine; Chicago, 1966.

Fiedler, F.E: A Theory Of Leadership Effectiveness; McGraw Hill, 1967.

Field, Minna: Patients Are People- A Medical Social Approach To Prolonged Illness; Columbia University Press, New York,1967.

Finer S.E: "Premier Of Public Administration"; London,1991.

Fuchs, Victor R: Who Shall Live? Health, Economics And Social Choice; Basic Books, New York ,1974.

Gardner, N.B: Effective Executive Practices; McDonald, IL, 1965.

Gladstone, Iago: Medicine In Transition; The University Of Chicago Press, Chicago, 1965.

Goel.S.L: Health Care Administration; Sterling Publishers Pvt. Ltd., New Delhi; 1980.

Goel S.L: "Health Care Administration"; Sterling Publishers (P) Ltd, New Delhi, 1983.

Goerke A.Lenor And Earnest L.Stabbins: Mustard's Introduction To Public Health; The Macmillan Company, New York, 1968.

Goss, Mary E.W.: Organizational Goals And Quality Of Medical Care- Evidence From Comparative Research On Hospitals; Journal Of Health And Social Behavior; Vol.11, Mc Graw Hill, December 1970.

Grostick, Sara M.: Health Information- Management Of A Strategic Resource; Saunders Company, NJ, 1996.

Gupta, Giriraj (Ed): The Social And Cultural Context Of Medicine In India; Vikas Publishing House Limited, New Delhi,1981.

Hanlon John. J: Principles Of Public Health Administration; Third Edition , C.V.Mosby Company, CA,1960.

Hanlon John. J: Public Health – Administration And Practice; Times Mirror / Mosby College Publishing CA, 1990.

Jaggi O.P: Indian System of Medicine; Atma Ram and Sons, New Delhi, 1973.

Jesani Amer: 'Laws Of Health Care Providers';Cehat (140), Mumbai,1996

Jesani. A, Ananthraman S: Private Sector and Privatization in the Health Care Services;FRCH, Bombay; 1993.

John Evans, James A.H.: Health Promotion And Obstacles; Rolland Publishing, Hethrew, 1994.

Karunakaran C.O., Dr: Medical Education in Travancore; NBS, Thiruvananthapuram, 1951.

Katz, Alfred.H. And Jean Spencer Felton: Health And Community; The Free Press, New York, 1965.

Kaur, Parvinder: The Manager's Values-An Investigation, Managing Transitions; Association Of Indian Management Schools, New Delhi, 1994.

Klarman, Herbert E: The Economics Of Health; Columbia University Press, New York,1965.

Koontz Harold, Weihrich Heinz: "Essentials of Management"; McGraw Hill Publishing Company, New York, 1990.

Levey S And Loomba N.P: Health Care Administration- A Managerial Perspective, Ed 2; 18984, JB Lippincott Co. Philadelphia, 1994.

Levin Arthur (Ed): Health Services- Local Perspective; The Academy Of Political Science; Capital City Press, New York, 1977.

Lothan: Community Medicine; Appleton Century Crofts, 2, NY, 1975.

Lyon, Grant And Green: "Fayol On Administration" As Illustrated In Brodie; M.B NJ, 1967.

Mayes CL and Allen H: Todays' Manager and his Challenges; SB Publications, Birmingham, 1998.

Mechanic, David: Public Expectations And Health Care- Essays On The Changing Organization Of Health Services; Wiley-Interscience, New York, 1972.

Mencken H.L: Health Care Systems – Management Outlook – Health Through Generations; Seahorse Publications, NY, 1987

Mintzberg H: The Structuring of Organizations-A Synthesis of research; Englewood Cliffs, Prentice Hall, Inc. NJ, 1979.

Morley D: Health Management and Education; JS Publications, New York, 1984.

Nair N.G;"Managing Systems"; First Edition, S.Chand & Co, New Delhi, 1996.

Nair P.S., Santosh S: Primary Health Care Services; Jai Mahal Publications, Hyderabad, 1987.

Newbrander W. (Ed.): Private Health Sector Growth In Asia-Issues And Implications;John Wiley And Son, New York, 1997.

Pareek Udai: "Beyond Management"; Oxford and IBH Publishing Co., Delhi, 1994.

Park J.E And K.Park: Text Book Of Preventive And Social Medicine; Banaridas Bhanot Publishers, Jabalpur, India ,1983.

Phadke A: The Private Health Sector; FRCH, Bombay, 1993.

Pickett George, Hanlon J.John: Public Health Administration And Practice; Times Mirror / Mosby College Publishing, St Louis, 1990.

Roger Detels, Walter W. Holland Et Al :Oxford Textbook Of Public Health – Vol 1 – Scope Of Public Health, Oxford University Press,1997

Roger Detels, Walter W. Holland Et Al :Oxford Textbook Of Public Health – Vol 2 – The Methods Of Public Health;Oxford University Press, 1997.

Ruslink Doris: Family Health And Home Nursing; The Macmillan Company, New York, 1963.

Sadler P: "Principles of Management"; Hamilton Publications, New Jersey, 1993.

Sadler, P: 'Principles of Management' in Lock, D. and Farrow, N., Handbook of Management; Gower; 1983.

Sarantakos: Social Research in health management: Mc Millan Education (P) Ltd, Australia, 1993.

Shaji S. Dr: Health Care Services for the Elderly- India Health; Deepika Publications

2002.

Smith, Bryan C: Community Health- An Epidemiological Approach; Macmillan Publishing Company Inc, New York, 1979.

Subramani Aiyar.G: "Short Story Of Medical Institutions Of Travancore", Superintendent; Government Press, Thiruvananthapuram. , 1987

Sudha S:Healthy Living in Community; New Hamilton, 1994.

Takulia.H.S: The Health Center Doctor In India- The John Hopkins Monographs In International Health; John Hopkins Press,1967.

Turner C.E et.al: School Health and Health Education; C.V.Mosby Co Ltd., 1967.

Vinay Chandran: History of Evolution of Medicine in Kerala; Current Books, Kerala, 2000.

Vinayachandran P. Dr: " Kerala Chikilsa Chartithram"; Current Books, Kottayam, Kerala, 2001.

Webster C, Orlon S., L: Health in the Millennium; Violet Publishers, Oranto, 1998

Emerging trends in Health care Management system in Kerala.

Interview Schedule - Part A - Beneficiaries

1. **Name**

2. **Sex :** [] M [] F

3. **Age (years):** [] 25 – 30 [] 30 – 35 [] 35 – 40; [] 40 – 45;
   [] 45 – 50 ; [] 50 – 55 ; [] 55 – 60; [] 60 - 65

4. **Educational Qualification**

   a. Undergraduate
   b. Graduation
   c. Post graduation
   d. Professional

5. **Occupation** 6.**Designation**

7. **Income**

[]	Below 5000	[]	5000 – 10,000.	[]	10,000 to 15,000.
[]	15,000 to 20,000	[]	20,000 – 25,000	[]	25,000 and above

8. **Professional Experience: -**

   Departments Worked: **Years of Experience**

   1.
   2.
   3.
   4.

9. **Present place of work: -**

10. **Nature of Work: -**

[]	Administrative	[]	Executive	[]	Teaching
[]	Research	[]	Other		

10. **Since when you are working in this department: -**

11. **No of Persons working**

    1. Above you: [] 3 – 5, [] 6-8, [] 9-15, [] more than 15
    2. Below you: [] 3 – 5, [] 6-8, [] 9-15, [] more than 15

12. **Are you aware of any health care programmes?**

[] Yes [] No

13. **If yes, give details**.

14. **If No, Why?**

15. **Have you ever attended any of these programmes?**

Health awareness programmes	[]	Yes	[]	No
Health Education Programmes	[]	Yes	[]	No
School Health Programmes	[]	Yes	[]	No
Rehabilitation Programmes	[]	Yes	[]	No
Camps and Meetings	[]	Yes	[]	No
Others (Specify)	[]	Yes	[]	No

16. **If No, Please specify**

17. **How you ever come to know about these programmes: -**

[] Advertisements [] Media [] Notices

[] Other (Pl. specify) [] Never

18. **Do you think these kinds of programmes are essential in the present day?**

[] Yes [] No

19. **Do you think these kinds of programmes are useful to the people?**

[] Yes [] No

20. **Does your participation in these kinds of programmes encourage people to participate?**

[] Yes [] No

21. **If yes, how?**

22. **What kind of programmes to which you are familiar of :**

[]	School Health Programmes	[] Yes	[] No
[]	Dental Hygiene Programmes	[] Yes	[] No
[]	Ophthalmic camps	[] Yes	[] No
[]	Diabetics detection camps	[] Yes	[] No
[]	Cancer detection programmes	[] Yes	[] No
[]	Family Planning programmes	[] Yes	[] No

[]	STD / AIDS	[] Yes	[] No
[]	Maternal and Child health Programmes	[] Yes	[] No
[]	Reproductive and Child health Programmes	[] Yes	[] No
[]	Rural sanitation	[] Yes	[] No
[]	Save Water Programmes	[] Yes	[] No
[]	Community Education Programmes	[] Yes	[] No
[]	Others	[] Yes	[] No

23. **If yes how?**

24. **If so, how long?**

25. **According to you, what is the most useful method for better health of the people?**

[] Health check-up camps

[] Health education

[] Meetings and Seminars

[] Distribution of leaflets

[] Training to field staff

[] All the above

[] Others

26. **According to you, who can organize the programme much effectively: -**

[]	Private hospitals	[]	Government Hospitals
[]	NGOs	[]	Local self-government Organizations
[]	Local bodies	[]	Others

27. **You feel that these kind of programmes educate people**

[] Very much [] To certain extend [] not much [] Not at all

28. **What motivates people to attend these kinds of programmes?**

[] Free health check-ups

[] Availability of qualified doctors

[] Free counseling

[] More knowledge about various diseases and its causes

[] Availably of free medicines

[] Availability of booklets leaflets brochures etc

[] Others (Specify).....

29. **Do you feel these kinds of programmes eradicate certain or some kind of diseases?**

[] Yes [] No

30. **Do you feel that these programmes are popularly utilized by**

	Fully		Partially		Never	
Government machinery	[]Yes	[]No	[]Yes	[]No	[]Yes	[]No
Private Institutions	[]Yes	[]No	[]Yes	[]No	[]Yes	[]No
NGOs	[]Yes	[]No	[]Yes	[]No	[]Yes	[]No
Participants	[]Yes	[]No	[]Yes	[]No	[]Yes	[]No
Others	[]Yes	[]No	[]Yes	[]No	[]Yes	[]No

31. **Are you associated with any of the health care programmes in**

Your area [] Yes [] No

Other Area [] Yes []No

32. **If yes, give details:**

33. **If so, since how long you are involved:**

34. **According to you which category of persons should be the real decision makers for organizing health sector management programmes?**

[] Health Department, State government [] District medical Officer

[] Medical Superintendent, Dist Hospitals [] Local Self-Govt. Organizations

35. **Can you recommend any change in the present health care management programmes?**

[] Yes [] No

36. **If yes what kind of changes is required.**

Emerging trends in Health care Management System in Kerala

Interview Schedule - Part B - Policy makers and Implementers

1. **Name**

2. **Sex :** [] M [] F

3. **Age (Years):** [] 25 – 30 []30 – 35 []35 – 40; []40 – 45;
[]45 – 50 ; []50 – 55 ; []55 – 60; []60 - 65

4. **Educational Qualification**

   e. Undergraduate
   f. Graduation
   g. Post graduation
   h. Professional

5. **Occupation** **6.Designation**

7. **Income**

[]	Below 5000	[]	5000 – 10,000.	[]	10,000 to 15,000.
[]	15,000 to 20,000	[]	20,000 – 25,000	[]	25,000 and above

8. **Professional Experience: -**

Departments Worked: **Years of Experience**

1.
2.
3.
4.

9. **Present place of work: -**

10. **Since when you are working in this department: -**

11. **Nature of Work: -**

[]	Administrative	[]	Executive	[]	Field Work
[]	Teaching	[]	Research	[]	Any other

12. **No of Persons working**

3. Above you: [] 3 – 5, [] 6-8, [] 9-15, [] more than 15
4. Below you: [] 3 – 5, [] 6-8, [] 9-15, [] more than 15

13. **Kind of decisions you take quite often: -**

[] Policy Decisions [] Strategic Decisions

[] Implementing Decisions [] Any Other (Pl.Specify)

14. **What are your involvements in medial service in the institution?**

[] Community Outreach [] Out patient Services

[] In-patient services [] Medical and Supportive Academic Programmes

[] Extension activities

[] Health awareness programmes [] Health Education Programmes

[] School Health Programmes [] Rehabilitation Programmes

[] Camps and Meetings

15. **How these programmes are organized: -**

[] Through health check-up camps

[] Through health education

[] Through Meetings and Seminars

[] Distribution of leaflets

[] Training to field staff

[] All the above

[] Any other methods

16. **What is the frequency of such programmes: -**

[] Routine basis [] As and when need arises [] Others

17. **If routine, how frequent: -**

[] Once in a week [] Once every fortnight

[] Once in a month [] Once in six months

18. **Generally who take initiative for the programmes**

[] Department staff [] Volunteer Groups

[] Local Bodies / institutions [] NGOs.

[] Field staff

19. **Who is responsible for conducting the programmes :-**

Public / Govt. Sector Institutions:	**Private Sector Institutions: -**
[] D.H.S.	[] Managing Committee
[] D.M.O	[] Director
[] A.D.M.O	[] Executive Officer
[] Medical Superintendent	[] Superintendent
[] Medical staff at P.H.C	[] Heads of Departments
[] Medical Officers at Community center	[] Others
[] Organizing associations	
[] Heads of departments	
[] Programme Officers	

20. **Who undertakes financial responsibility?**

21. **The facility for the programmes is organized by: -**

[] D.M.O

[] Medical Superintendent

[] Organizing associations

[] Local Self Government Agencies

[] Programme Officers

22. **In your experience which all category of population are covered through this programme**

[] Rural [] Urban [] Others

23. **In your experience which type of Population attend the programme**

		Regularly	*Occasionally*	*Rarely*	*Not at all*
[]	Literate	1	2	3	4
[]	Illiterate	1	2	3	4
[]	Both	1	2	3	4
[]	Others	1	2	3	4

24. **Planning for the programmes are done by: -**

[] Centralized departmental functions

[] De-centralized activities through voluntary organizations

[] NGOs

[] Local Self Government Organisations

[] Others

25. **If centralized, the authority is with: -**

[]	DHS	[]	A.D.H.S
[]	DMO	[]	Medical Superintendent
[]	Administrative Officers	[]	Organizing Agencies

26. **From where the finance for the programmes are generated from: -**

[]	Camp participants	[]	Government funds
[]	Contributions from general public	[]	Sponsors

[] Any other sources (Specify)

27. **In your assessment, how useful are the projects for safe public health.**

[] Very Useful [] Useful [] Not Useful

28. **In your experience do these programmes bring in any change in the health conditions of people?**

[] Serious change [] Moderate Change [] Slight Change

[] No Change

29. **If so, which segment of people are responding to the programmes?**

[]	Lower - Lower	[]	Lower - Middle	[]	Lower - Upper
[]	Middle - Lower	[]	Middle – Middle	[]	Middle - Upper
[]	Upper Middle	[]	Upper – Middle	[]	Upper - Upper

30. **What are the services or facilities available in your institution: -**

[] Laboratory with general tests

[] Laboratory with general and specific tests

[] X-ray departments with updated facilities

[] X-ray department of old make

[] C.T scan unit

[] M.R.I machine

[] Ultra-sound scan unit

[] Color Doppler

[] Any other facilities.

31. **How many supportive and clinical staff is working: -**

[] Ten

[] Eleven to fifteen

[] Sixteen to twenty

[] Twenty-one to twenty-five

[] Twenty-six and above

32. **What is the basis of the recruitment of staff?**

[] Based on strict merit

[] Based on experience

[] Based on qualification and experience

[] Others

33. **Generally, what is the procedure for recruitment of staff?**

	Clinical	*Non-clinical*	*Admn.*	*Others*	
Open Selection	[]	[]		[]	[]
By Promotion	[]	[]		[]	[]
Others	[]	[]		[]	[]

34. **Generally who is authorized to make appointment of staff**

	Clinical	*Non-clinical*	*Admn.*	*Others*	
Director Board	[]	[]		[]	[]
M.D	[]	[]		[]	[]
Med. Suptdt.	[]	[]		[]	[]
P.S.C	[]	[]		[]	[]
Others	[]	[]		[]	[]

35. **Do you make provisions for giving training for staff**

	Yes	No
Management Training	[]	[]
Job related training	[]	[]

Academic training	[]	[]
Field training	[]	[]
Others	[]	[]

36. **If yes, how often?**

[] Once in three months [] Once in six months

[] Once in a year [] Others

37. **If so to whom the training is extended?**

[] Medical Staff [] Supportive staff

[] Technical staff [] Ancillary staff

[] All categories of staff

38. **Do you have any power / authority in**

1. Selection procedure of staff [] Yes [] No
2. Purchase of equipments [] Yes [] No.

39. **What is the duration of working pattern of your organization.**

[] 8-hour a day

[] 12-hour a day

[] Any other (if so, specify)

40. **In your assessment, how is the general co-operation of staff in your hospital: -**

[] Excellent [] Good

[] Better [] Poor

41. **How often you meet your colleagues**

[] Routine Meetings [] Meets Occasionally

[] As per intimation [] Only telephonic discussions.

[] Others

42. **Routine Meetings are held**

[] Once a week [] Once in fifteen days

[] Once in a month [] Others

43. **Do you often discuss matters with subordinates** [] Yes [] No

44. **If yes, in what way you discuss.**

[] At formal meetings [] Individual meetings

[] Informal discussions [] Others

45. **Formal discussions with subordinates are held**

[] Once a week [] Once in every two weeks

[] Once in a month [] Other

46. **Do you welcome the viewpoints of your subordinates?**

[] Yes [] Occasionally [] Not at all

47. **Do you adopt them practically?**

[] Yes [] Occasionally [] Not at all

48. **Do you await orders from the top authorities in implementing urgent matters?**

[] Yes [] No

49. **If yes, how long you will wait.**

[] Two days [] A week [] Till a decision arrives

[] Others

50. **How is the working environment in your area of work?**

[] Very co-operative work environment

[] Got enough freedom

[] Enough red-tapism

[] Needs to depend many people

[] Too much external involvement

[] Others

51. **Are you satisfied with the co-operation from?**

1. *Superiors: -*

[] Very much-satisfied [] Satisfied [] Not at all satisfied

2. *Colleagues: -*

[] Very much-satisfied [] Satisfied [] Not at all satisfied

52. **The reasons for dissatisfaction: -**

[] No co-operation [] Non-co-operation

[] Keep away from works [] Any others

53. **Do incentive schemes help in better employment?**

[] Yes [] No

54. **Is there any scheme for providing incentives: -**

[] Yes [] No

55. **If yes, give details**

56. **If no why: -**

57. **Do you feel the need of training and development programmes to staff in the respective area of activity?**

Top Level	[]	Yes	[]	No
Middle Level	[]	Yes	[]	No
Lower level	[]	Yes	[]	No

58 **If yes, what kind of training programmes is required?**

[] Programmes related to job

[] Programmes related to general management

[] Related to various situations and case analysis

[] General topic of common interest

[] All the above.

59. **Have you felt that the periodic training has been successful from the point of view of turnover of service.**

[] Yes [] No

60. **Have you implemented any health care programmes for any specialization: -**

		1999	2000	2001	2002	2003.
1.	Health screening camps	[]Y []N	[]Y []N	[]Y []N	[]Y []N	[]Y []N
2.	Health awareness programmes	[]Y []N	[]Y []N	[]Y []N	[]Y []N	[]Y []N
3.	First Aid clinics	[]Y []N	[]Y []N	[]Y []N	[]Y []N	[]Y []N
4.	School Health Programmes	[]Y []N	[]Y []N	[]Y []N	[]Y []N	[]Y []N
5.	Rehabilitation Programmes	[]Y []N	[]Y []N	[]Y []N	[]Y []N	[]Y []N

6. Seminars and workshops []Y []N []Y []N []Y []N []Y []N []Y []N

61. **If so, the extent of participation**

[] Very active [] Moderately active [] Occasional response

[] No participation

62. **How many persons attended the programmes**

	1999		2000		2001		2002		2003	
	M	F	M	F	M	F	M	F	M	F
1. Health screening camps										
2. Health awareness programmes										
3. First Aid clinics										
4. School Health Programmes										
5. Rehabilitation Programmes										
6. Seminars and workshops										

63. **Do you think this institution is fully utilizing the resources available for the benefit of people for their health improvement?**

[] Yes [] No

64. **If yes, how?**

65. **If no, why?**

66. **What purchase procedure is followed in your organization?**

[] Tenders and Quotations

[] Committee decisions

[] Selection based on brand name and features

[] Others

67. **Do you give any advertisements / communication programmes to publicize health care programmes.**

[] Yes [] No

68. **If Yes, give details.**

69. **If No, why?**

70. **In general, how do you rate the promptness of the employees attending to the profession?**

[] Very Prompt [] Moderate [] Less Prompt [] Irregular

71. **Do you give special importance to clinical investigations in relevant cases?**

[] Yes [] No

72. **Where the clinical investigations contribute to the revenue of the organization?**

[] Yes [] No.

73. **Have you ever witnessed any non-institutional influence in rendering health care service in the institution?**

[] 1 [] 2 []3 []4

[] Influence from colleagues

[] Influence from top management

[] Influence from politicians

[] Other external influences

([1] Very much [2] Quiet often [3] Once in a while [4] Never)

74. **Have you ever noticed any change with respect to previous years in the service system of health care delivery the last five years?**

	[] Yes	[] No
1999		
2000		
2001		
2002		
2003		

75. **If yes, give details**

76. **If so how?**

77. **What are the marketing strategies followed in your organization**

78. **Have you ever attempted to get the cost benefit conditions of organization?**

[] Yes [] No

79. **If yes, the result**

80. **If No, why?**

81. **Have you ever attempted to get the quality assessment of the various units of your organization through scientific methods**

[] Yes [] No

82. **If yes, give details**

83. **If No, why?**

84. **If so, have they been detrimental to the effective health care services.**

[] Yes [] No

85. **If yes, how.**

86. **Are you of the opinion that increased specialization in health care system have Contributed to progress in health care services**

Specialization of Personnel	[]	Yes	[]	No
Services	[]	Yes	[]	No
Modern facilities	[]	Yes	[]	No
Sophisticated Equipments	[]	Yes	[]	No

87. **Do you feel that the present increase in the number of patients and doctors has Contributed positively to the health care machinery / health status of people**

Health Services	[]	Yes	[]	No
Health Status of Community	[]	Yes	[]	No.

❖ ❖ ❖