SOCIO-ECONOMIC DIMENSIONS OF HEALTH CARE DEVELOPMENT AMONG TRIBALS IN KERALA: A STUDY OF TRIBAL COMMUNITIES IN WYNAD

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CERTIFICATE

Certified that the thesis "Socio-Economic Dimensions of Health Care Development Among Tribals in Kerala: A Study of Tribal Communities in Wynad" is the record of bonafide research carried out by Sri S. Radhakrishna Pillai under my supervision. The thesis is worth submitting for the degree of Doctor of Philosophy in Economics.

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DECLARATION

I declare that this thesis is the record of bonafide research work carried out by me under the supervision of Dr. M.K. Sukumaran Nair, Reader, Department of Applied Economics, Cochin University of Science and Technology. I further declare that this thesis has not previously formed the basis of the award of any degree, diploma, associateship, fellowship or other similar title of recognition.

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CONTENTS

CHAPTER I

INTRODUCTION

In this chapter we introduce our study. It begins with a discussion of certain broad trends that explain the relationship between health and society. This also provides a theoretical framework for our analysis. It is then followed by description of the methodology adopted for the study.

The contemporary explanations and discussions of the relationship between medicine and health, and society centre around assumptions that can be broadly classified into three sets[1].

The first set considers health and illness as predominantly 'biological' and therefore, having nothing to do with the social and economic environment in which it occurs. The struggle to combat illness therefore, lies entirely within the purview of modern medicine which is neutral to economic or social change.

The second considers practice of medicine as a natural science. It allows the doctor to separate himself from his subject matter, the patient, in the same way as the natural scientist is assumed to separate himself from his

subject matter, the natural world. As a 'science' and with the scientific method, it can produce unchallengable and autonomous body of knowledge which is free from the wider social and economic context.

The third, different from the above, recognises the relationship between health, medicine and society. Social and environmental aspects as determinants of illness or of health comes to sharp focus here and it assigns to medicine the status of a mediator, the only viable mediator, between people and diseases. In this scheme of things the usefulness of medicine is unquestionable but the problem lies in not having enough of it to go around[2]. The solution to health problem thus lies in the adequate provision of health care facilities which, irrespective of the economic and organisation of the societies, is expected to benefit such different sections.

This approach which recognises the relationship between health, medicine and society prevails as the basis of health care policies in most developing countries, including India. However, in spite of its logical validity and egalitarian slant, it does not consider the nature of medical practice or the broader role of medicine in society. Consequently, issues like class difference in health and illness, differential utilisation of medical facilities by different social groups, regional and class inequalities in

the expenditure on medical care etc., are approached mechanically without consideration of the reasons why such differences originate and persist in societies. In other words, questions relating to the social production of health and illness and the social organisation of medical care are often ignored in this frame of analysis. A review of the historical context of health, medicine and society will bring these issues in to focus.

Historical context

Western medical science traces its origin to the Hippocratic tradition of medical thought prevalent around 400 B.C. Health, according to this tradition, was considered as a state of balance between environmental factors such as wind, temperature, water and food and individual life styles such as his eating, drinking, sexual habits and his work and recreation. This balance which he attains externally with the environment determines his internal balance or an equilibrium between the four humors of the human body: blood, phlegm, black bile and yellow bile. The function of medicine, according to this tradition was to discover and support the natural laws that ensure this organic relationship between man and his environment[3] This point of view of health emphasising the organic unity of living things was shared by other traditions also. The Chinese had

evolved a similar tradition, which was older than the Hippocratic system of western medical practice that also believed in the dynamic balance of different components of the human body. Illness was considered as a deviation from this balance caused by factors such as poor diet, lack of sleep, lack of exercise and disharmony with the family and society[4]. Both these systems placed great importance on the human eco-system and developed a system of clinical practice whose function was to assist nature's healing process. The great Indian systems of Ayurveda and Unani also had the same foundations and recognised the importance of nature and the ultimate harmony that individuals had to attain for healthy living.

The emphasis of health espousing the organic unity of living things with nature survived till the scientific revolution of the Seventeenth Century. The development of natural science which began with the Renaissance transformed the concern of science, and even philosophy, from merely understanding the natural (or supernatural) world to a purposeful understanding of it with a view to control and master the natural world. This was a radical departure from the past and supported by the philosophies of Hobbes and Desecartes, particularly the latter, a new world view was evolved which considered the entire universe, including the body of all living creatures, as a huge mechanical machine

functioning like a clock according to some irrevocable laws. The task of the scientist or the natural philosopher was to apply the analytical method and study their component parts in order to discover the laws that ultimately help him to control nature. Following this logic, medical science concentrated exclusively on human organisms and its parts. The Cartesian paradigm which advocated the dichotomy of body and mind also supported this mechanistic approach. Illness, consistent with this approach, was considered as 'a temporal or permanent impairment in the functioning of any single component, or of the relationship between components making up the individual'[5].

The conceptualisation of health and medical practice in this fashion was a radical departure from the holistic approach of health which valued the crucial role of nature and human environment in maintaining health. It was also radical in another sense, in that it transformed medicine to a curative, individualistic and interventionist practice which denied individuals their status as social beings. The shift in the emphasis away from the social and environmental aspect as determinants of illness or health acquired new dimensions towards the end of the 19th century with the growth of bacteriology. The doctrine of 'specific aetiology of disease' or the 'germ theory' and the successful identification of micro organisms that causes the

disease completely eclipsed the existing belief about the causation of diseases. However, the theory that micro-organisms are the sole cause of diseases did not have its sway for long as it proved inadequate in explaining the prevalence of communicable diseases. Several studies conducted during this period proved that micro-organisms are only necessary but not sufficient condition for the development of infectious diseases. In addition, these studies had also established the positive relationship between diseases and poor working and living conditions, malnutrition, illiteracy and poverty[6] The development occurred in the field of medicine subsequently like the discovery of immunological resistance and vaccination, and the developments in psychosomatic medicine ultimately replaced the single factor doctrine of disease causation by a probabilistic framework which recognises the interplay of several factors.

The multifactorial explanation of health is a comprehensive concept and an improvement of the bio-medical model. It recognises the social dimensions and discusses the implications of social and economic factors on the health of populations. There were several studies in the past, particularly during the closing phase of industrial capitalism in the West, that discussed the relationship between the working and living conditions of people and

their health status[7] The growth of epidemiology and the studies conducted along these lines also provided empirical evidence about the relationship between social, cultural, economic and environmental factors and illhealth. It was also established, empirically, that poverty breeds illhealth and vice versa leading to a vicious relationship between the two. There are several reasons that explain the disadvantages of the poor in terms of the attainment of their health. The supply of health services, the major source of providing health care to populations, is a scarce good in most societies and hence poses problems in its equal distribution[8]. The victims undoubtedly are the poor who are inarticulate. They also suffer several additional handicaps, particularly the lack of education and therefore knowledge of matters relating to health[9] 'Indirectly socio-economic level is an important variable in accounting for response to illness because in a very gross way differences in socio-economic level encompass differences in health values, understanding and information concerning diseases, future and preventive planning, cultural expectations concerning health services, feeling of social distance between oneself and health practitioners and so on'[10] The interplay between these factors also limits their access to health care facilities even if they are provided for their benefit. The impact of poverty is thus vicious and multifaceted and boils

down, ultimately, to the unequal distribution of means and privileges. And, health is only a reflection of this inequality. The poor, irrespective of the differences in social and economic system, are deficient in terms of subsistence and privileges of life which include the intangible social and psychological possessions that give him access to social power, participation in decision making, ability to plan and execute decisions and possession of knowledge[11].

The political-economic dimension

The recognition of the impact of social economic and environmental aspects on health, as reflected in the above discussion, however, does not consider the broader questions of social and economic organisation in which they originate and which perpetuate these conditions. It ignores the differences between societies; it also ignores the differences in the pattern of health and illness among populations and assumes, in a blanket fashion, that it is industrialisation which causes illhealth. Poor health, in this context, is a necessary outcome of economic growth. But this argument which accepts the destruction of human and physical resources as a result of economic growth, though probably realistic, does not explain the nature and extent of destruction in societies with varying levels of industrial development.

However, a systematic beginning to analyse the problems in this light was made by Frederic Engles in his studies on the conditions of working class in England in 1844 in which he traced the origins of diseases like tuberculosis, typhoid, typhus etc., to malnutrition, contaminated water, overcrowding and to the social conditions prevalent at that time[12]. Subsequently, several other studies came up to support the point of view which advocated changes in social conditions apart from improving clinical activities. Elaborating on Engel's point of view Rudolf Virchow developed an analysis of multifactorial aetiology for explaining the reasons for diseases[13] His studies on typhus epidemic and famine of 1847-48 in Upper Siberia examined a variety of factors that are social, political, economic, geographic, climatic and psychologic that causes disease. According to him, the material conditions in which people live, particularly the deprivations of the working class, were crucial in causing diseases. Consequently, he prescribed certain socio-economic remedies such as redistribution of land, income and housing along with public health activities to combat infectious diseases. 'Medicine is a social science and politics is nothing but medicine on a grand scale' for him[14]. The deprived social conditions and its positive effect on health was later highlighted by several other studies.

The focus on the social origin of illness and the framework in which they analysed the problem of providing health care acquired newer dimensions during the colonial and post-colonial periods. The role of medicine in retaining control over the mode of production by the dominant class for reproducing the social relations to their advantage through production, politics and science was explored deeply by Vincente Navarro[15] He argues that the reproduction of power relations in the present day capitalist societies is realised through the subtle manipulation of the production system. The increased division of labour and specialisation weakens the class solidarity among working class and creates a hierarchial relationship of dominance-dependence amongst them. This results in the erosion of class consciousness of workers as producers and consequently their potential and desire for controlling the production process. Workers are thus reduced to the status of 'wage earners' and are subtly excluded from the production system. The orientation of working class in such situations shifts from controlling the production to maximising consumption. The medical system too repeats the same process by excluding people from participating in their health care development, instead they are reduced to the status of mere consumers of medical services[16]. Allocation of facilities then, will be decided not by the health needs of people but by the representative

politics of the state. The control, inevitably, will be in the hands of the dominant class whose interest is identified with profit. The state often assumes the role of a moderator and makes interventions to contain contradictions for sustaining the system. The medical ideology which supports the professional superiority, an offshoot of the argument that science is politically neutral and value-free, justifies the arrangement, and allows the state to perpetuate the system. This has resulted in the growth of a medical system that mystified health care to the point of pushing people into a 'debilitating dependence', as Ivan Illich puts it[17]

Ivan Illich in his critique on modern medicine argues that 'the medical establishment has become a major threat to health'. And in his opinion, a professional and physician-based health care system which has grown beyond tolerable bounds is sickening for three reasons; it must produce clinical damages which outweigh its potential benefits; it cannot but obscure the political conditions which render society unhealthy; and it tends to expropriate the power of the individual to heal himself and to shape his or her environment[18] He bases his argument on three types of pathology or 'iatrogenesis' which he describes as the 'epidemic of doctor made diseases' The first, the 'clinical iatrogenesis' pertains to the physical damage caused by the

doctors in their attempts to cure people; the second, the social iatrogenesis indicates the addiction of people to medical care as a solution to all their problems; and the third, 'the structural iatrogenesis' explains the destruction of patient's autonomy along with the expropriation of one's own responsibility for individual health care[19] These impacts resulted in a debilitating dependence on medicine' which is inevitable in industrialised and bureaucratic societies. He advocates a total rejection of modern medicine so that health care is no longer the doctor's exclusive domain and it could be reappropriated by the people. He rejects the egalitarian distribution of health as he believes that modern medicine is not only ineffective but also harmful. The struggle for a healthy society is possible only if de-industrialisation and de-bureaucratisation is achieved in which the rejection of modern medicine is a strategic link.

Illich's ideas are illuminative in several respects and brings out candidly the ill effects of drugs and unwanted surgical interventions and its social and psychological impact. But his wholesale rejection of it in the belief that people would be better off without medicine ignores completely the positive role of medicine in helping the sick. The argument, which is anarchic, partially arises out of his assumption about societies as 'industrialised'

without making distinctions about the mode of production. The hierarchial and bureaucratic structures therefore, are seen as entities in themselves and not as structures created by the capitalist form of society in which they are essential to sustain the social and economic relationship within the spheres of production and consumption. Such a perspective being central to our argument, it is quite unlikely that the destruction of a particular system of medical care would bring about a change in the relations or in the authoritarian and bureaucratic set up. Illich's exhortation to move away from the industrialised to an 'autonomous' society, therefore, projects only a cultural solution ignoring the socio-economic dimensions.

Navarro's analysis of health care development explains candidly the directions in which health care system develops within the framework of advanced capitalism. As an extension of the arguments of Engles, Virchow and several others it highlights the shift in the focus from the production of health to the consumption of health services to maintain social control and maximise profit. This is realised through the exclusion of labour form the realm of production of health care by reducing them to the status of wage earners rather than producers in partnership with capital. It permits a growth of a system that places control over production in the hands of few who command capital. The

labour is compensated through greater share in consumption. The process gradually transforms the medical care system into a distributive system controlled by the dominant sections of society. The economic organisations and the social relations therefore, remain unchanged under the system.

The manifestations of these developments to ensure the hegemony of the dominant class and its control over the mode of production leads to different types of contradictions at different points of time depending on the balance of equation between various classes. In advanced capitalism, health care system developed according to the laws of capital accumulation and achieved tremendous progress in the after-event curative medical system ignoring the broadly based prevention measures to conserve health. The growth had also resulted in the growth of vested interests that widened the gap between medical care and people through its sophistication, specialisation and cost, and also through mystifying health care to the extent of pushing people into a debilitating dependence. The provision of nationalised health care system in certain societies and its co-existence with privatised medical care has also thrown up a set of contradictions with far reaching implications. Though the historical justifications and the reasons for nationalised health care system differ between

countries, the ruling class considered this as part of the reproduction of labour power[20] But conflicts tend to surface when there is organised demand from different sections to expand the coverage as well as standard of medical care which necessitates increased public expenditure which pinches upon the interests of individual capitalists. At the same time, expansion of medical care also provides opportunities for capital accumulation and thereby pitching a section of the capitalists who are involved in the production of commodities used in health care against those who are against the increase in public expenditure on medicine. The conflicts become acute at times, especially during times of recession, when the state will attempt to keep down the cost of public expenditure to the minimum. This in turn, leads to a lopsided growth of investment in health care where capital is flowing towards high profitability areas which are inevitably curative oriented using sophisticated equipments and drugs. The genuine health needs of people are ignored in the pursuit of profit[21]. Underdeveloped countries with capitalist structure also exhibit the same pattern but with added dimensions of imperialism. The health care system that is implanted in these countries on their indigenous structures and its dependence on the health care systems at the global level however, generate new contradictions in these societies.

The discussion of the nature of development of health care in different systems, particularly in underdeveloped societies, where production of health care is shaped according to the logic of capital accumulation throws up certain inevitable trends.

a) western scientific medicine with its bio-medical orientation had either destroyed or stifled the existing indigenous medical practices that were holistic and integrated organically with individual and community life styles. This has resulted in an unambiguous emphasis or orientation on curative services at the cost of preventive and promotive medical practices. Also, in the process of its development, curative medicine promoted and perpetuated a health culture that made individuals depend debilitatingly on modern medicine.

b) The inherent nature of modern medicine with its curative orientation, specialisation and sophistication developed exclusive constituencies for its growth among those sections who can afford to pay for the services. This resulted in the exclusion of large masses of people who are poor from the orbit of modern health care. Even in societies where nationalised health care system exist to cater primarily to the health need of

these deprived sections this tendency exists.

c) The development of health care, again because of its orientation and nature, and also because of its tendency to maximise profit, followed an uneven pattern of growth permitting the concentration of health care facilities in developed urban centres. This geographical discrimination of peripheries against urban centres compounded the problem of coverage to the disadvantage of rural poor.

The pattern of health care development in India after Independence demonstrates these tendencies clearly. The achievements in health care development in the country during this period is largely confined to eradication of communicable diseases, growth of curative facilities like hospitals and dispensaries and growth in the production of drugs and medical equipments. Consequently, there had been an improvement in the health status of people where mortality rate per thousand population has been reduced from 27.4 at the time of Independence to 14.8 in the late seventies to 10.9 in the eighties and life expectancy has increased from 32.7 to 52 in the seventies to 56 in the eighties. Several communicable diseases like plague and small pox had been eradicated; others like cholera, malaria and even T.B. are brought under control. A vast net-work of

dispensaries, hospitals and institutions providing specialised curative care had been built up over the decades. There was also remarkable improvement in the production of drugs and pharmaceuticals. The National Health Policy which summed up the progress in the three decades after Independence was also candid about the non-achievements as well as the nature of our health care system that evolved during these years. 'The high rate of population growth continues to have an adverse impact on the health of our people and the quality of their lives. The mortality rates for women and children are distressingly high; almost one third of the total deaths occur among children below the age of 5 years; infant mortality is around 129 per thousand live births. Efforts at raising the nutritional levels of our people have still to bear fruit and the extent and severity of malnutrition continues to be exceptionally high. Communicable and non-communicable diseases have still to be brought under effective control and eradicated. Blindness, leprosy, and T.B. continue to have a high incidence. Only 31 per cent of the rural population has access to potable water supply and 0.5 per cent enjoy basic sanitation'[22]. The failures, as admitted in the Policy statement, are largely due to 'wholesale adoption of western models which are irrelevant to the real needs of our people and the socio-economic conditions obtaining in

the country; to the neglect of the preventive, promotive, public health and rehabilitation aspects of health care' and 'to the policies of education and training that widened the gap between the health personnel and the rural masses'[23] The Planning Commission also, while reviewing the plan progress during the same period, came out with similar understanding about the nature of health care development. It admitted that 'the infrastructure of sub-centres, primary health centres and rural hospitals built up in the rural areas touches only a fraction of the rural population. The concept of health in its totality with preventive and promotive health care services in addition to the curative, is still to be made operational'[24]. This has resulted in several policy measures and programmes to affect a shift from city based, curative services and specialities to tackling rural health problems and to provide additional infrastructure to look after the problems of extremely deprived sections.

The very low health status of tribals, when compared to other sections of deprived populations is an illustration of the uneven development and orientation of health care development in India during the post-Independence period. The National Health Policy was honest enough to admit this and suggested a preferential treatment to solve their health problems.

The Tribal Context

Historically, the tribals were an isolated group confined mostly to forests or to other remote regions away from the mainstream populations. Forests were their chief source of livelihood but at later stages of their development they switched over to settled agriculture and to other manual jobs. As their requirements were limited and the resources were abundant, including land, they evolved a system of property relations and ownership pattern that are different from that of non-tribals. With that, they also evolved a unique culture and life style and also traditions and practices which are quite often referred to as 'backward' and 'irrational' by outsiders. The development task, therefore, was to 'integrate' them into the mainstream culture which had become a crash priority during post Independence period. Considering their uniqueness, economic, social and cultural, several special programmes were introduced from time to time allotting additional resources on a priority basis for their development particularly for improving their health status. The health facilities, as a result, registered improvements in tribal regions during the last few decades though, perhaps, its pace had been slow. There were also sporadic attempts, programmes and campaigns, for specific health problems of tribals at different periods in different regions. But when we take stock of all these

efforts made during the past, as a group, tribals still remain as the single largest section of our population that was largely unaffected by improvements in health status[25] The claim that there is an improvement in the facilities may be a statistical truth but the reflection of these on their health status is hardly remarkable. Evidently, the provision of facilities per se does not ensure its access or utilisation, instead it (the access to facilities) depends upon a host of factors that are social, economic, cultural and ecological besides the nature and content of health care itself.

Objectives and Hypotheses

The present study focuses on tribals to understand the nature of growth of health care development within the broad framework of social production of health and illness. It, therefore, asks questions such as what makes people ill and how much of it is avoidable, and also, what type of medical care does it produce. It examines the social and economic organisations and the contradictions it generates vis-a-vis the health care system. The tribals are chosen for their position in the social and economic hierarchy as they constitute the lowest rung among the under privileged. Not only this, they are also uniquely placed in our social rubric because of their cultural and historical

specificities. The development process initiated since Independence has given them a privileged status recognising their special backwardness. Provision of health care was one of the priorities and it was considered as a pre-requisite for their development. This has prompted substantial flow of resources on a preferential basis to tribal regions for strengthening the health care infrastructure. The impact of these initiatives are considered in the study to bring out the conflicts when health care system perform.

The objective of the study is to examine the nature and growth of health care development among tribals in Kerala with special reference to those who live in Wynad. Specifically, it concentrates on the social origins of illness among tribals and their responses to the health care system. The study examines the health problems and needs of tribals, the relationship between these and their living and working conditions, the responses of the state to their health problems and needs, the type of services that are provided to them, the attitude of tribals towards these interventions, towards health care facilities created and finally, the factors that determine the nature and extent of utilisation or accessibility. In short, the study proposes to unravel the relationship between health and social and economic conditions. The specific objectives, therefore, can be stated as:

1. to study the nature and trend of health care development in Kerala, particularly among tribals, during the post-Independence period;
2. to study the factors that contribute to, as well as perpetuate, the health problems among tribals; and
3. to study the organisation of health care system and its response to the health problems and needs of tribals.

These objectives are set against the background outlined earlier that discussed the relationship between health and society. In a hierarchial society such as ours where populations are differentiated into categories on the basis of their position in the relations of production and other social and cultural attributes the interaction between the interests of these groups decide the nature and content of social institutions which includes health care system as well. And, these interactions which condition the nature and content of social institutions function within certain framework some of which can be hypothesised as follows:

1. The mode of economic and social organisation influences, to a great extent, the pattern of health and illness in a society.
2. In hierarchial societies social and economic inequalities lead to unequal access to health care

services. This eventually leads to the development of a health care system that excludes the 'marginal' sections of populations from its influence.

3. These inequalities and the resultant contradictions also lead to unequal distribution of health care resources and uneven development in health care infrastructure, both spatially and socially, favouring urban centres and prominent classes.

The hypotheses are specially relevant in the context of tribals as they are positioned uniquely in the social hierarchy. The analysis takes into account these aspects while discussing the nature and growth of health care development among them.

Methodology

The study is conceived as a primary investigation. But it uses a great deal of secondary data on tribals in Kerala and Wynad, especially on their socio-economic and living conditions. We shall now discuss the methodology adopted for generating the required primary data.

Population and sample

The study chooses Wynad for detailed investigation. The main consideration was the high

concentration of tribal population in the district.

The tribal population of the State, which forms only 1.03 per cent of the total population according to the 1981 Census, is distributed all over the State. They are found in every district and live in pockets interspersed with other sections of populations. Though this is so, they are concentrated largely in certain districts such as Wynad, Cannanore, Palghat and Idukki which can be considered as hilly and inaccessible and fall within the Western Ghat terrain bordering other states. The four districts together account for about 78 per cent of the total tribal population of the State. Among these four, Wynad stands out distinct from the rest showing the highest concentration of tribal population in the State. As per the 1981 Census, the Scheduled Tribe population of the district was about 95557 which was about 37 per cent of the total tribal population. Cannanore comes next to Wynad in terms of tribal concentration but claims only 15 per cent of the tribal population.

Wynad is also representative of the tribal situation in the State, both in terms of the composition of different communities and in terms of their socio-economic development. Out of the 35 communities listed as scheduled tribes 24 are found in Wynad and they, like their counterparts elsewhere, live in isolation away from the

mainland in hilly terrains which provide an ideal atmosphere for tribals to maintain their identity. Their level of backwardness is also comparable to the general situation in other districts.

Table 1 District-wise distribution of scheduled tribes in Kerala in 1981.

Sl. No.	District/ State	Population	Tribal population as percentage to total tribal population
1.	Trivandrum	14145	5.41
2.	Quilon	7442	2.86
3.	Alleppey	435	1.25
4.	Kottayam	15227	5.82
5.	Idukki	38712	14.80
6.	Ernakulam	3551	1.36
7.	Trichur	3227	1.24
8.	Palghat	28794	11.01
9.	Malappuram	7955	3.04
10.	Kozhikode	3888	1.49
11.	Wynad	95557	36.54
12.	Cannanore	39704	15.18
	Total:	261475	100.00

Source: Census of India, 1981.

The tribal households in Wynad, 18545 according to the 1981 Census, forms the population of the study. The households which are distributed unevenly among the 31 villages fall under 5 major Primary Health Centres (PHCs). The number of households in villages vary from 146 to 1578. The situation, in terms of the number of households in villages, has changed marginally over the years since 1981. This, poses a major problem in that the exact number of tribal households in a village or in a PHC area is difficult to obtain. The Integrated Tribal Development Project and the Tribal Development Offices which are in charge of the entire tribal population of the district have a list of tribal settlements that fall within their jurisdiction which though not exhaustive are the only available information. The sample households are chosen from these lists using a simple random procedure.

The sample size was limited to 200 which constitutes more than one per cent of the total tribal households in the district. They are distributed uniformly among the 5 PHCs limiting the number of sample households from a PHC to 40. However, after the completion of field survey we were compelled to reduce the sample size to 179 as we had to exclude certain interview schedules due to their inconsistencies and inadequacies. The distribution of sample households from the PHCs is as follows:

Table 2 Distribution of sample households from the Primary Health Centres.

Taluk/PHCs	No. of households in the sample
1. Vythiri Taluk	
a. P.H.Centre, Thariode	36
b. P.H. Centre, Meppadi	35
2. Sultan Battery Taluk	
a. P.H. Centre, Meenangadi	39
b. P.H. Centre, Pulpalli	33
3. Mananthody Taluk	
a. P.H. Centre, Porunannor	36
Total:	179

Though the tribal households were the main focus, the study has given adequate weightage to the health care delivery system and its interaction with the households. This consideration has prompted us to include PHC also in the focus of primary investigation. Accordingly, three PHCs were selected at random - Porunannor, Meenangadi and Meppadi

- to collect primary information from the medical officers in-charge and the public health nurses. Two nurses each from the PHCs were selected for this purpose.

Data Collection

The study demands data on a wide range of aspects connected with their living and working environments, health problems and attitude towards health care system. This information is partly quantitative and partly qualitative. An interview schedule was prepared to collect the required data. This was administered to the head of the household, preferably the female head because she keeps a better track on matters related to health. The schedule developed for this purpose (Appendix 1) combines questions that were structured and questions that were open-ended and gave enough flexibility to accommodate various responses. Though this was the main tool for data collection, the study had also resorted to informal interviews and personal observations which were helpful in understanding the qualitative dimensions of the problems.

Besides this main schedule two more interview schedules were developed for generating information; the first, to collect information from the medical officer-in-charge of PHCs and the second to collect information from the primary health nurses (Appendix 2 and 3). These

schedules were not as elaborate as the first but they provided a framework for systematic probing and generated valuable qualitative information necessary for the study. The data collected through these schedules therefore, did not form a part of the study but were used wherever possible to substantiate arguments.

The field survey was a revealing experience and it provided an excellent opportunity to mingle with the tribal communities. But there were several difficulties, right from locating the chosen household to getting them to talk about their problems. The interviews were normally lengthy and took more than two hours to cover a household. In several cases the interviews turned out to be a collective affair where members of several households participated and voiced their opinion on matters of common interest. The collective encounters were also advantageous in another respect that it could highlight certain common practices and could also expose incorrect and indifferent responses. It took almost four months to complete the field work.

The field work was conducted in 1989.

Analysis of Data

The data collected through the interview schedule were substantial. These were coded appropriately, especially the responses of open ended probings, and fed to the

computer for processing. The relationship between variables were analysed mainly through frequency tables. The study deliberately avoided complicated statistical exercises keeping in tune with the general concerns and emphasis.

The study is interdisciplinary in nature; but it has a strong sociological bias. Even the discussions on the quantitative dimensions of various relationships follow this bias as we consider this as consistent with the focus of the study.

Limitations of the Study

The conception of the study in the framework discussed above and the weightage given to the quantitative dimensions based on personal interviews with the help of an interview schedule gives rise to certain limitations. In fact, the decision to choose this framework and this emphasis was unavoidable because it was an outcome of our assumption about the relationship between economic and social conditions and health problems. The economic dimensions such as their status in relation to assets, employment and income are measurable; so also, to a certain extent, their perceptions about health problems, their attitudes and responses. However, the social and cultural dimensions are difficult to quantify and requires indepth case studies based on participant observation involving more

time. Consequently these dimensions are not adequately elaborated in the study either in the form of case discussions or through other methods. The objectives and the scheme of the study justify this but considering the specific nature of their backwardness and level of cultural integration with the rest, the incorporation of such descriptions could have provided more insight into their health problems.

The inadequacy of secondary data was a problem all through the study. It caused serious difficulties in deciding on a rigorous methodology as we did not even have an exhaustive list of tribal households in the district. This compelled us to follow a simple random sampling procedure which within the limitations ensured maximum representativeness. The proportionate strength of different communities in the sample and its correspondence with the general situation in Wynad indicates this. However, the selection procedure, because of the inadequacy of data, could not take into account other important variables such as the distance from PHC or from the township or other characteristics of development. The absence of stratification in this fashion might have affected the representativeness. But this was unavoidable under the present circumstances.

The study, as it evolved, concentrates rather

heavily on the responses of tribals. The analysis of the nature and content of health care system as a result, are confined to the perceptions of tribals as consumers of health care services or how the health care system has been unfolded to them. The developments at the provider's end are discussed in terms of secondary data and these are confined mostly to the changes in the thrust of policies and programmes at different periods. The responses of the delivery system, particularly at the grass root level like the PHCs and sub centres are considered only indirectly as they were used generally to substantiate our arguments.

The absence of a control group of non-tribals poses difficulties to make comparisons about the health problems, awareness, health status and the pattern of use of health care facilities. A comparison like this would have brought out the stark realities of social inequities and its impact on the population's health status.

Organisation of the study

The study is organised in seven sections. It begins with a review of the developments in the concept of health and the emphasis it has acquired at different points of time. The review throws up certain broad trends that explain the relationship between health and society which are taken up to decide the focus of the study. The section

then concludes with the methodological design adopted for the study.

The following two chapters trace the development of health care system at the national and at the State level with special emphasis on the developments that took place among the tribals. The first among the two provides an account of the developments during the post Independence period in two phases: the pre and post Alma Ata phases. This sets the necessary background for discussing the health care system of tribals which is taken up in the subsequent chapter. The chapter concentrates specifically on the socio-economic aspects and health problems and the nature and pattern of growth of the health care delivery system.

The following three chapters discusses the data collected from the field. The first explains the health problems of tribals and concentrates on their perception about health problems and their responses. The second chapter deals. with the nature and content of health care system and its interventions, the organisation of the delivery system, their level of awareness and extent of use and also the impact of health care system as perceived by tribals. The following chapter concentrates on the factors that influenced the nature and trend of health care development by bringing together various arguments in a conceptual framework. It argues that the extent of

utilisation of health care facilities depends ultimately on two factors: the availability of and accessibility to health care which itself are decided by a set of economic social and cultural factors. The final chapter provides a summing up and an account of conclusions that can be inferred from the analysis.

Notes and References

1. Lesley Doyal (1979). **The Political Economy of Health**, Pluto Press, London, p.12.
2. **Ibid.** p.12.
3. Abelin, T., Brzezinski, Carstains Vera D.L. (1987). **Measurement in Health Promotion and Protection**, WHO Regional Publications, Copenhagen, p.7.
4. **Ibid.** p.8.
5. Polger, S. (1968). **Heath, International Encyclopedia of the Serial Sciences**, MacMillan & Free Press, New York, Vol.5.
6. Berkman, L.F. and Breslow, L. (1983). **Health and Ways of Living**, Oxford University Press, p.4.
7. See for example: (1) Rosen, G. **The Evolution of Serial Medicine** in Freeman, H.E. et al. (1979). Handbook of Medical Sociology; (2) Hastwell, R.M. **The Economic History of edical Care**, in Mark Perlman (ed.) (1974).

The Economics of Health Care and Medical Care; (3) Mark Perlman **Economic History and Health Care in Industrial Nations, Ibid.**

8. Lerner, M. **Social Differences in Physical Health,** in John Kosa, Aran Antonovsky and Irving K. Zola (ed.) (1969). Poverty and Health A sociological Analysis, Harward University, Cambridge, p.71.
9. Rosenstock, I.M. **Prevention of illness and Maintenance of Health, Ibid.** p.189.
10. Mechanic, D. **Illness and Care, Ibid.** p.192.
11. Kosa, J. **Nature of Poverty** Ibid, pp.2-3.
12. Engels, F. **The Conditions of the Working Class in England,** Panther, London, (1969). The book discusses the health conditions in the context of a general analysis of the evolution of industrial capitalism. He also provided brief account on the health and living conditions of the working class.
13. Virchow, R. (1962) **Disease, Life and Man,** selected essays translated by Lelland, J. Rather, Collier Books, New York.
14. **Ibid.**
15. Navarro,V.(1987). **Works, Iedology and Science,** Radical Journal of Health, Vol.2, June-September, pp.18-31.
16. **Ibid.**
17. Illich, I. (1975). **Medical Nemesis: The Expropriation**

of Health, Marion Boyars, London.

18. **Ibid.** pp.11.
19. **Ibid.** pp.25-28.
20. Waitzkin, H. (1984). **A Marxist view of Medical Care**, Socialist Health Review, Vol., No.1, June, p.8.
21. Heredia, R.C. (1990). **Social Medicine for Holistic Health: an alternative response to prevent crisis**, Economic and Political Weekly, Vol.XXV, December, pp.2673-2680.
22. Government of India (1983). **Statement on National Health Policy**, issued by the Ministry of Health and Family Welfare, reproduced in Bose A and Desai P.B. 'Stuides in Social Dynamics of Primar Health Care', Institute of Economic Growth, Delhi, pp.201-215.
23. Ibid.
24. Planning Commission, (1980). **Sixth Five Year Plan 1980-85**, Government of India, New Delhi, p.367.
25. See for example: (1) Kunhaman M. (1989). **Development of Tribal Economony: Development of underdeveloped**, Classical Publishers, New Delhi; (2) Bureau of Economics and Statistics (1979). **Report on Socio-economic Survey of Tribals in Kerala 1976-78**, Government of Kerala, Trivandrum. These studies, though not specifically focus on the health problem of tribals, they discuss these aspects.

CHAPTER II

DEVELOPMENT OF HEALTH CARE SYSTEM: POST INDEPENDENCE PERIOD

In this chapter we shall present an overview of the development of health care system during the post Independance period. We shall discuss this as two phases - the pre Alma Ata phase and the post Alma Ata phase. We shall begin with developments at the national level as it provides a backgrounder and sets the trend elsewhere in the country and then narrow it down to the development in Kerala state.

The Alma Ata conference on primary health care in 1978 provides a convenient point of departure in a discussion of the development of health care system in India in the post Independance period .The Declaration of the conference committing primary health care to all by the end of the century provoked, the world over, a change in tha approach as well as in organisation of health care. Such changes are visible in India too where around this time two important events took place accelerating the changes. The first was the Report of a Study Group set up jointly by the Indian Council of Social Science Research (ICSSR) and the Indian Council of Medical Research (ICMR), 'The Health for All - An Alternate strategy', in 1981 which put forward an alternate strategy of health care taking into account our

specific characteristics of development and the second, was the National Health Policy of the Government of India in 1982 which was passed in the parliament a year later. The Sixth Five Year Plan (1980-85) roughly coincides with these changes. Our discussion of the developments during these two phases concentrates mainly on three aspects: the major concerns and approach of health care planning, the pattern of growth of health infrastructure and expenditure on health and finally, the impact of these developments on the health status of people.

The Pre Alma Ata phase: 1951-1979

Developments at the national level

'Modern medicine' or allopathy was a colonial gift to our society. It was brought in to serve the elites of the society, the colonial military and civil establishments and was confined largely to fighting against epidemics like plague, malaria and small pox.

This orientation of the health care system that catered only to the health needs of the elite, however, began to change during the freedom struggle when the national leadership started demanding governmental action for solving the problems of people including that of health. The Government of India Acts of 1919 and 1935 were steps in this direction. However, the first systematic attempts that

discussed the health situation of the country were the two Reports that appeared in the last decade of the colonial era. The first was the 'Report of the sub-committee on National Health' popularly known as the Sokhey Committee prepared for the National Planning Committee (NPC) constituted by the Indian National Congress in 1940, and the second was the 'Report of the Health Survey and Development Committee' appointed by the Government of India under the chairmanship of Sir Joseph Bhore in 1946. The 'Report of the sub-committee' reflected the concern of the national leadership on problems of health and also the approach they advocated for posterity. The subsequent NPC resolution in this context demanded a health organisation in which curative and preventive functions were suitably integrated under the control of State[1]. The Second Report was more systematic and comprehensive and provided the much wanted basis for developing a public health and medical system for the coming years. Analysing the health conditions and the public health delivery systems that existed, the Report suggested several modifications. It advocated a system in which (a) no individual should fail to secure adequate medical care because of inability to pay for it, (b) health services should provide all facilities for proper diagnoses and treatment, (c) preventive health care should receive adequate emphasis, (d) health services should be as close to

the people as possible and (e) the active co-operation of people in the health programmes should be enlisted[2]. These suggestions forwarded in the report were incorporated subsequently in the Five Year Plans after Independence.

The First Five Year Plan (1951-56) thus, began with the over all emphasis of creating facilities throughout the country for delivering health services to all without discrimination. The plan placed considerable importance on promoting preventive health care of the rural masses through basic health units, the Primary Health Centres as they were known later, and through mobile units. The other tasks that were given priority included control of malaria, provision of health services for mothers and children, provision of water supply and sanitation, improvement of education and training, and the control of population[3]. The Second Plan was more focussed and assigned increased importance on the operational aspects of health programmes initiated earlier. The emphasis on investment in public health infrastructure and man power training continued without significant deviation in the Second Plan also. The achievements and non-achievements during the ten years after Independence shaped the priorities of the two successive Plans, that is the Third and Fourth, and they were decided in such a way as to correct the deficiencies. The over all thrust therefore remained unchanged and investments were directed mostly to

build up infrastructure and man power to deal with health problems. Family Planning and population control also gained considerable importance during this period. The Fifth Plan (1974-79) which marks the end of Pre-Alma Ata phase in several ways, was different from the pattern that was beeing followed so far because of its new National Minimum Need Programme (MNP) in which health was conceived as an important component. The programme gave priority to the provision of minimum public health facilities in all areas, supply of drinking water to villages suffering from chronic disadvantages and improvement of slums. However, the most significant innovation during this Plan was the launching of the Rural Health Scheme in October 1977. The new scheme called the Community Health Workers Scheme(CHW) proposed the creation of a country-wide non-professional cadre of health workers in order to provide adequate health care to the rural people. But, unfortunately, the scheme did not gain acceptability among all States because of several administrative reasons and even those states who launched the scheme discontinued it in the early 60's when it ceased to be a completely centrally sponsored programme[4]. In spite of this failure the Scheme deserves attention for the fact that it accepted the grave inequalities in health care delivery in the country and took an initiative in correcting it.

The pre-Alma Ata period was also significant for

the two Committees appointed by the Government to look into the matters concerning health care development which helped in shaping the approach and the priorities of subsequent Five Year Plans. The first Committee was appointed in 1959 under the chairmanship of Dr. A.L. Mudaliar who submitted his report, 'Report of the Health Survey and Planning Committee' in 1961 and dealt in detail with the developments in the field of medical relief and public health since Independence[5] The second report, 'Report on Health Services and Medical Education: A Programme for Immediate Action' (1975) under the chairmanship of Dr. J.B. Shrivastava discussed the strategies of improving the quality of manpower in tune with the national requirements. It pointed out the need to develop an integrated service combining promotive, preventive and curative aspects of health service and family planning as well as making it accessible to all[6] The suggestions and the approaches suggested by these Reports found expressions subsequently in our Plans and also in the programmes which were implemented.

A review of achievements in health care during these three decades that ends with the Fifth Five Year Plan presents a mixed picture. The health facilities in terms of institutions and manpower had increased progressively over the Plans. The number of Primary Health Centres(PHCs) or the basic health units were only 67 at the end of the First Plan

which increased to 2565 in the Second Plan and to 4631 in the Third Plan. The increase in the case of sub-centres was also remarkable which was about 44532 at the end of the Fifth Plan. A number of other institutions such as specialised institutions and referral centres had also increased considerably during this period. The manpower situation registered an increase of several fold particularly the number of medical personnels which increased from 959 in 1951 to 13722 in 1977.

The expenditure on health in Five Year Plans correspondingly increased several fold; from 65 crores in the First Plan to 141 crores in the Second Plan and to 226 crores in the Third Plan. The successive two Plans maintained the same trend but the allocation on health as a percentage to total plan outlay decreased consistently from 3.3 in the First plan to 2.6 in the Third Plan and to 1.9 in the Fifth Plan[7]

The concerns expressed in the Five Year Plans during this period and the resultant shifts in their emphasis on various tasks indicates the directions in which our health care system was moving. The nature and magnitude of the health problems of the country were apparently considered when fixing the objectives and priorities in each Plan. While the first two Plans gave considerable weightage on building infrastructure in health

care for reaching out to the people, the subsequent Plans placed importance on improving the performance and correcting the imbalances created between groups and regions. The initial thrust on providing basic health care to all which necessitated an appropriate mingling of preventive, promotive and curative elements of health care through simple and affordable methods was gradually giving way to a point of view that supported the growth of sophisticated, expensive curative health care on the pretext of technological superiority and scientific advancement in medicine. The result was a widening gap in the health status of people in rural and urban areas.

The Planning Commission in its review of the existing health situation when formulating the Sixth Five Year Plan identified a number of disquieting characteristics of our health care delivery system that had emerged over the last three decades. These were 'the unintelligent adaptation of a health system from industrially advanced, consumer oriented western societies; its alienation from the social, economic and ecological factors and conditions of work in our society; its negligence of other important issues like nutrition, water supply, dieting requirements and habits; its bias in favour of the rich and its concentration on doctors and hospitals leaving other services that go to meet the need of the masses; its educational system preparing

doctors not for the health of the people but for medical practice that is concerned with disease and the technology to deal with it; its contempt for other systems especially the indigenous systems; its increasing use of drugs and the resultant subjugation of it to the drug industries and the imbalances it created in the supply of various components of medical service such as doctors, nurses and other paramedical services'[8] Two years later, a study conducted by the ICSSR-ICMR 'Health for All - An Alternative Strategy' 1981, confirmed these observations even more emphatically. The Report opined that the 'imported' and therefore, inappropriate system of our health service is 'top heavy, over centralised, heavily curative in approach, urban and elite oriented, costly and dependency creating'[9] It had also pointed out the growth of vested interest in the present day health care system that benefited the practitioners, the clinicians, the pharmacists and the drug manufacturers and which also stood against any radical change in the approach or strategies in health care. In fact the world over a process of critical evaluation of modern health care system was taking place around this time of which Alma Ata Conference in 1978 was an imporant event.

Developments in Kerala

The developments of health services in post

Independence period in Kerala, to a certain extent, conforms to the national pattern. The State, however, enjoys a historical advantage in that it inherited a comparatively developed health infrastructure which is reflected in the high health status of people. In Travancore and Cochin, the then rulers had initiated a number of far reaching public health and medical programmes during the pre Independence period. The impact of these measures was so convincing that the death rate in Travancore-Cochin had come down to about 15 in the early forties which was comparable only to France and Sweden a decade earlier[10]

The First Five Year Plan launched in 1951-52, technically was the beginning of planning exercise in the State of Travancore-Cochin though it was only a collection of schemes proposed to be implemented during the coming five years. The Second Five Year Plan which coincided with the formation of the Kerala State in 1956 was the first systematic attempt in planning and it outlined a framework for development in health care. In tune with the thrust given at the national level, the Second Plan of the State had given importance to expanding the existing facilities to bring them increasingly within the reach of the people and in promoting a progressive improvement in the level of national health. To achieve this, the Plan envisaged the following[11]:

1. establishment of institutional facilities to serve as bases from which services could be rendered to people.
2. development of technical manpower through training programmes and employment of persons trained.
3. improvement of public health institutions to control communicable diseases.
4. family planning and other supporting programmes for raising the standard of living of the people.

The emphasis on building up institutional facilities to spread health services and improving the manpower for health care continued to receive importance in the Third Five Year Plan while in the Fourth Plan priorities were identified as training of medical and public health personnel, control of communicable diseases, family planning, health education and improvement of existing medical and public health institutions. The Fifth Five Year Plan, however, assumed a change in the pattern in tune with the changes at the national level where the Minimum Need Programme was introduced. The overall approach of the Plan was also different in the sense that for the first time, it expressed concern about the growing regional imbalances in health care. The Plan identified this as a major task and set the objectives as follows[12]:

1. to improve the quality of inpatient care by providing

modern equipment and specialities to the existing institutions.

2. to rectify the regional imbalances in the provision of medical facilities and
3. to improve the medical education facilities available for research, training programmes etc.

These objectives were further supplemented by those envisaged under Minimum Need Programmes which had taken care of the expansion and strengthening of primary health units.

The objectives as well as the thrust of various programmes in the Plans were indicative of the basic approach that was beeing followed during this phase. The concern unambiguously was on expanding facilities with adequate supply of resources particularly trained manpower which was considered as the solution for solving health problems. The emphasis on the curative aspects of medicine is overwhelming and the development of medical manpower such as doctors at the cost of other categories of health workers was considered as logical and funds were provided unproportionately for this purpose. Much of the criticism raised about the type of health systems that had developed at the national level was also applicable to the State but the negative impact was less pronounced because of the

historical advantage it enjoyed in terms of health care development. The Fifth Five Year Plan, however, was the beginning of a retrospection and for the first time, the growing imbalances in health care development across regions and groups was recognised. The Plan envisaged the creation of additional facilities in the neglected areas and for neglected groups on priority basis as the immediate tasks. This growing concern about the state of affairs of our health care resulted in the appointment of a High Power Committee on Health Services under the Chairmanship of Dr. K.N. Pai which submitted its report in 1979. This Report was the basis for deciding policies for the Sixth Five Year Plan.

Kerala, as we noted elsewhere, had the advantage in beginning its planned effort of health care development with a comparatively developed net work. At the end of the First Five Year Plan (1955-56) the State had 638 health institutions of various categories and under different systems. The total number of beds in Government institutions alone was 9338 while the private institutions had a strength of 1608 beds[13] The number of institutions over the years increased steadily both in the public and private sector. The growth of allopathic institutions in Kerala during the first phase is shown in Table 1. In the case of hospitals the increase was from 68 in 1957-58 to 101 in 1965-66 and to

140 in 1978-79. The Primary Health Centres had registered a growth from 68 to 163 during the above period.

Table 1 Growth of Government allopathic institutions in Kerala from 1957-58 to 1978-79

Category	1957-58	1960-61	1965-66	1970-71	1975-86	1978-79
Hospitals	68	67	101	112	135	140
Dispensaries	182	197	217	261	552	558
Primary Health Centres	68	82	155	162	162	163
Others	-	10	17	18	36	38
Total:	318	356	490	553	885	899

Source: Statistics for Planning, State Planning Board and Bureau of Economics and Statistics, Trivandrum, 1972, 1977 and 1983.

Along with the increase in the institutions, the number of beds had also increased enabling it to achieve the national target of one bed for every thousand population during the sixties itself. The ratio was 0.9 at the end of the Third Plan (1961-66) with 18738 beds which went up to 1.07 with 23386 beds in 1970-71. The growth of institutions under indigenous systems like Ayurveda and Homoeopathy was also equally commendable. The number of Ayurvedic institutions in 1956 were 432 in which 22 were hospitals, 94 were dispensaries, 7 were Taluk Visha vaidyalayas, 275 were grant-in-aid institutions and 5 were non-subsidised

institutions[14]. The number of institutions in the Government were 1008 in 1976-77 which had gone upto 1169 in 1979-80. The Homoeopathic institution had registered an increase from 6 in 1960-61 to 121 in 1976-77 to 143 in 1978-79.

The growth of facilities in terms of institutions and number of beds also indicates the growing imbalances between regions and groups of populations. Even during Independence the northern districts of Malabar, the part of erstwhile Madras Presidency, was lagging considerably behind its southern counterparts. The number of institutions in Travancore-Cochin and Malabar area at different points of time explains this. In 1961, out of a total of 313 allopathic institutions 212, that is about 68 per cent, belonged to the districts in Travancore-Cochin. The situation remained almost unchanged in the next two decades: it was 329 out of 509 in 1971 (65 per cent) and 529 out of 870 in 1981(61 per cent). In the case of availability of beds the difference was even sharper. In 1961 the districts in Travancore-Cochin had 76 per cent of the total beds available which had decreased marginally to 71 per cent in 1971 and in 1981. However, in terms of the average annual growth of institutions, Malabar region recorded faster rates, 7.9 per cent between 1961-71 and 8.9 per cent between 1971-81 compared to the 5.5 and 5.8 per cent for Travancore-Cochin respectively in the above two decades. The number of

beds on the other hand presents a slightly different picture. In the case of Malabar which had experienced a high average annual growth of 9.2 per cent during 1961-71 it had come down to 4.6 in 1971-81 while in Travancore-Cochin the growth rate had increased from 4.1 per cent in 1961-71 to 4.7 in the next decade 1971-81.

Table 2 Inter-Regional distribution of allopathic institutions (Government) and beds

	1961		1971		1981	
	Travancore-Cochin	Malabar	Travancore-Cochin	Malabar	Travancore-Cochin	Malabar
Institutions						
Hospitals	50	17	80 (6.0)	31 (8.2)	102 (2.8)	45 (4.5)
PHCs	50	24	111 (12.2)	51 (11.3)	112 (neg)	51 (neg)
Dispensaries	112	60	138 (2.3)	98 (6.3)	316 (12.9)	247 (15.2)
Total	212	101	329 (5.5)	180 (7.9)	519 (5.8)	341 (8.9)
No.of Beds	9946	3060	14042 (4.1)	5868 (9.2)	20644 (4.7)	8576 (4.6)
Beds per lakh population	92.7	49.6	109.8	73.2	134.4	85.4

Source: Panikar, P.G.K. and Soman, C.R. **Health Status of Kerala**, Centre for Development Studies, Trivandrum, 1984, P.94.
Figures in brackets are percentage increase over decades.

The division of the State as Malabar and Travancore-Cochin generally explains the differences in health facilities in Kerala. This is evident from Table 3. The number of Government allopathic institutions available per sq. km. for the State as a whole in 1978-79 was 0.02, or considering it alternatively one allopathic health institution in the State served an area of 43.2 sq. km. in 1978-79. The advanced districts in term of availability of health facilities, that show a comparatively superior position compared to the state average are Trivandrum, Alleppey, Kottayam, Ernakulam and Trichur all of which fall in erstwhile Travancore-Cochin region. The availability of bed per 1000 population also corresponds to the above pattern. While all the districts, except Kozhikode, from Malabar region show a low ratio comparative to the State average of 1.18 beds per thousand population in 1978-79 only two districts from the South, Idukki and Quilon, fall in this category. It is also interesting to note that nearly 85 per cent of the tribal population in the State is concentrated in these six backward districts - Quilon, Idukki, Palghat, Malappuram, Kozhikodu and Cannanore - irrespective of their location in the north or south[15]

Along with the increase in health infrastructure the expenditure on health in absolute terms had also been steadily increasing. The total outlay on health and related

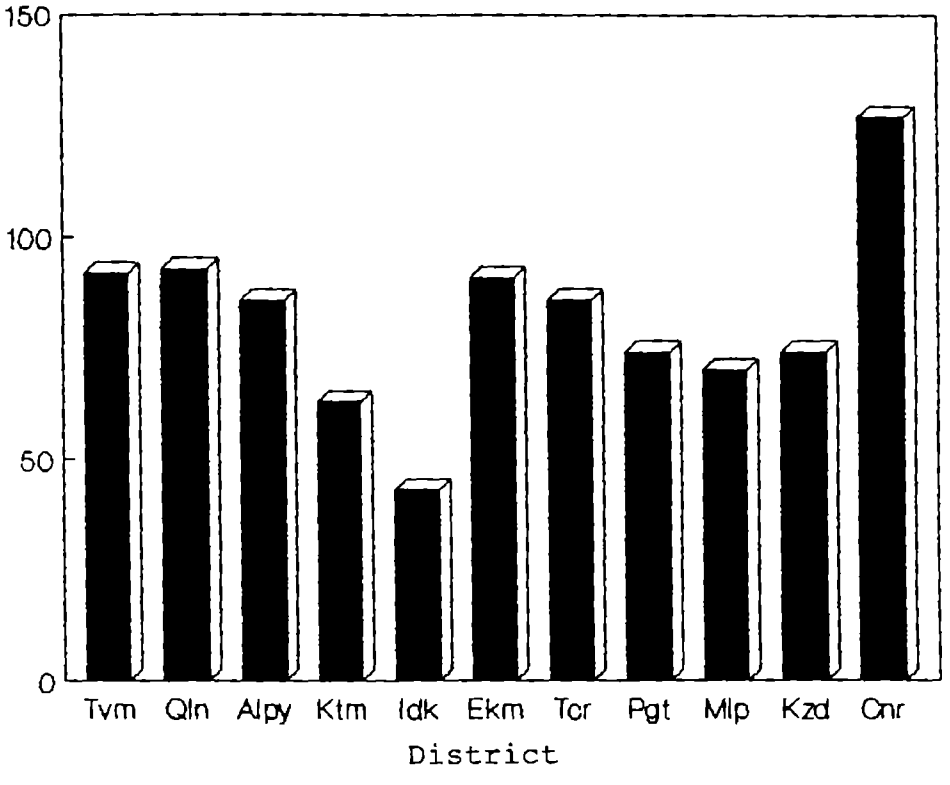
Table 3 Number of allopathic institutions and Beds in Kerala (Government) in 1978-79 - district wise

District	Total number medical institutions	Total number of beds	No. of institutions per sq. km.	Area covered (sq. km) by one medical institution	No. of beds per thousand population
Trivandrum	92	5578	0.04	23.8	2.15
Quilon	93	2132	0.02	49.7	0.76
Alleppy	86	3940	0.05	20.3	1.68
Kottayam	63	2686	0.03	34.9	1.58
Idukki	43	376	0.01	118.3	0.38
Ernakulam	91	3249	0.04	26.3	1.28
Trichur	86	3475	0.03	35.3	1.42
Palghat	74	1313	0.02	59.5	0.64
Malappuram	70	1015	0.02	51.9	0.42
Kozhikodu	74	3643	0.02	50.4	1.39
Cannanore	127	2540	0.02	44.9	0.85
Kerala	899	29947	0.02	43.2	1.18

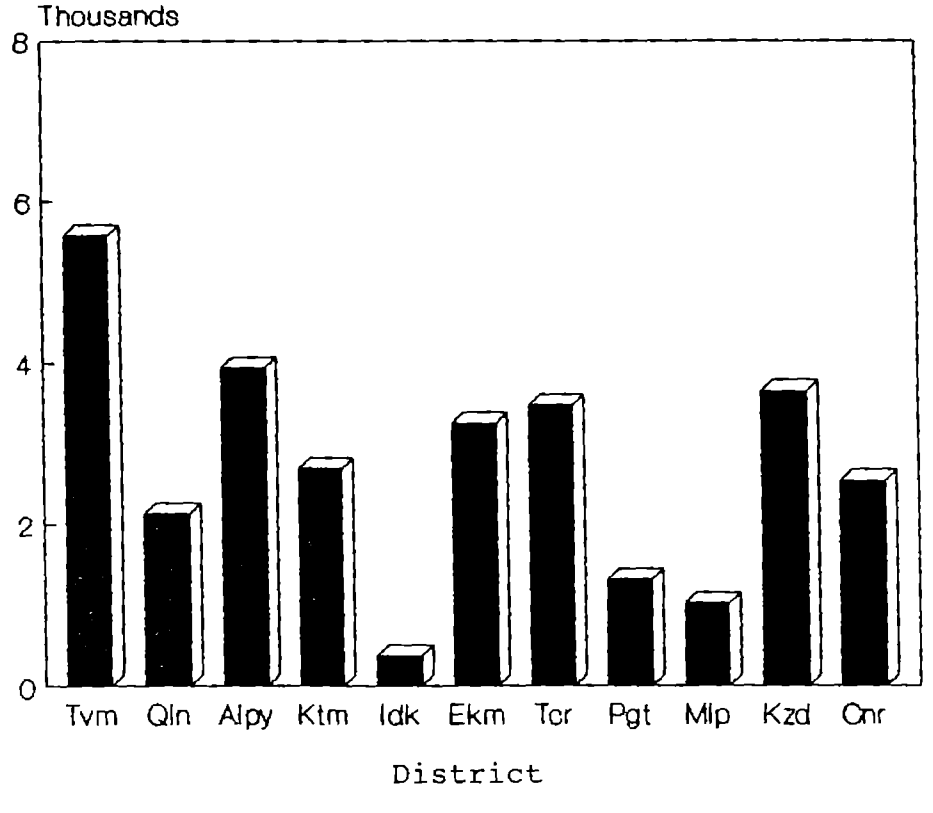
Source: **Statistics for Planning 1983**, Directorate of Economics & Statistcs, Trivandrum, 1984.

activities was Rs.848 lakhs in the Second Plan of which only 45 per cent was spent during the Plan period. The outlay on health as percentage to the total outlay of the Second Five Year Plan was 9.7. During the Third Plan the allocation on health had increased to Rs.1350 lakhs which in the Fourth

Number of allopathic institutions in Kerala (Government): 1978—79



Number of beds in Kerala (Government) 1978-79



Plan reduced marginally to Rs.1044 lakhs. The State outlay on health during the Fifth Plan was Rs.1249 lakhs of which Rs.942 lakhs was spent during the five years. Though this is so, the outlay on health as percentage to the total plan outlay had been decreasing consistently till the Fifth Plan. In the Second Five Year Plan the allocation to health care as percentage to total plan outlay was as high as 9.74, compared to the 3 per cent at the national level, which came down to 7.94 in the Third Plan, to 4.04 and then to 2.19 and 1.19 in the subsequent two Plans. The actual expenditure on health as percentage to total expenditure also shows the same trend.

The disaggregation of the outlays on health on the basis of allocations to various schemes and programmes indicates clearly the emphasis and approach we have been following in each of the Plans. The Second Five Year Plan, which considered the provision of basic health care through primary units as the prime objective apportioned 35 per cent of the total outlay for activities related to the provision of basic health care through PHCs and control of communicable diseases, while the major share of the proposed outlay had been allotted to activities related to medical care centred around hospitals. The Indian System of Medicines received about 10 per cent of the total proposed outlay[16] In the next Five Year Plan, primary health care

Table 4 The pattern of outlays and expenditure on health under various Plans in Kerala

	I Plan (1951-56)		II Plan (1956-61)		III Plan (1961-66)		Annual Plans (1966-69)		IV Plan (1969-74)		V Plan (1974-78)	
	1	2	1	2	1	2	1	2	1	2	1	2
Outlay & expenditure on health	192 (6.4)	259 (10)	848 (9.7)	467 (5.8)	1350 (7.9)	1589 (8.7)	787 (5.5)	495 (3.4)	1044 (4.0)	849 (2.5)	1249 (2.2)	942 (1.9)
Total outlay and expenditure	3003	2590	8701	8022	17000	18231	14254	14437	25840	33335	56896	48562

Source: Draft Seventh Five Year Plan 1985-90 and Annual Plan 1985-85 Vo.I, State Planning Board, Trivandrum, pp.3-5.
Figures in the bracket are percentage to total.
1 denotes Outlay and 2 expenditure.

and control of communicable diseases received a better share, about 37 per cent, and allocation to medical care in hospitals and dispensaries, education and training and other activities received about 48 per cent. The share of Indian System of Medicine had registered a fall from 10 per cent in the previous plan to 7.2 per cent. Family Planning, for the first time assumed a distinct priority with 8.5 per cent of the total outlay proposed in the Plan[17] The situation did not change substantially in the other Plans too. In the Fifth Five Year Plan activities related to the provision of basic health care such as the Minimum Need Programme (MNP) and control of communicable diseases received 27.5 per cent of the total proposed outlay. Activities related to medical care, drug control, medical education and research etc. received 29.1 per cent; Indian System of Medicines 6.5 per cent and Family Planning and MCH which was entirely Central Goverments contribution received about 37 per cent of the total proposed outlay[18] The allocations to various components of health as explained above clearly show the progressive neglect of the provision of basic health to curative programmes and lately to family planning which from the Fifth Plan onwards was considered as the primary duty of PHCs.

The State in comparison to the rest of India had always been ahead in terms of achievements in the health

status of people. From the beginning of the present century, Kerala had been experiencing a decline in the mortality rate largely due to the availability of better medical care and efficient control of infectious diseases. The death rate per thousand population, according to the Census estimates, during the period 1941-50 was estimated to be about 22.3 which had come down to 16.1 during 1951-60 and to 13.7 during 1961-70. The rate had declined further to 7.11 in 1980. The crude death rate, based on three year moving averages by the Registrar General of India, for the period 1970-72 was 7.1 for Kerala compared to 16.1 for all India. By 1977-79 the rate had come down to 7 by the same estimate while it was 15.1 for all India. One of the significant aspects of the crude birth rate in Kerala is the extremely low variation between rural and urban rates which was appalling for other States in the country. In 1970-72 the crude death rate for rural Kerala was 9.3 compared to 17.6 for all India; in the case of urban populations the rate was 8.3 compared to 10.1 for all India. The rates had declined to 7.1 and 6.7 for rural and urban respectively for the period 1977-79 while the corresponding figures were 15.1 and 9.0 for all India. The birth rate per 1000 population also had the same pattern which was estimated to be 38.9 during 1951-61 and had come down to 37.5 during 1961-71. As per the Sample Registration estimate the birth rate had declined

from 34.33 in 1968 to 26.84 in 1979. The fall in infant mortality rate(IMR) which is considered as a better indicator of the health status of populations had also registered drastic decline during the above period. In 1965-67 the IMR for Kerala was 74 which over the period had declined to 48.5 in 1979. The life expectancy was 46.17 for males and 50.0 for females during 1951-60 and this had gone upto 63.82 and 66.91 for males and females respectively for 1977-79.

Table 5 Birth Rate, Death Rate and Infant Mortality Rate in Kerala

Year	Birth Rate	Death Rate	Infant Mortality Rate
1951-61*	38.9	16.1	-
1961-70*	37.5	13.7	-
1975	28.17	8.48	57.3
1979	26.84	7.19	48.5

* Figures for 1951-61 and 1961-70 are Census estimates, rest are Sample Registration, Kerala, estimates.

Source: Directorate of Economics and Statistics, Trivandrum.

The development of health care in Kerala during the Pre-Alma Ata phase, in spite of its better performance compared to other states, suffers from the same drawbacks we had noticed at the national level. The initial commitment of

providing basic health care to people, particularly to the vast majority of rural masses had eventually given way to programmes that strengthened facilities in developed regions benefitting the better off sections. The spatial inequalities that had been growing during this period was also reflective of the neglect of the under privileged sections like tribals who are mostly confined to these backward districts. The emphasis of the Plans had been evidently shifting from provision of basic health care to strengthening large hospitals engaging in curative facilities and finally to family planning. The real casuality was the Primary Health Centres, the key unit for reaching out to the people. The 'Report of the High Level Committee on Social Infrastructure and Services' of the State Planning Board had noted this and attributed 'multiplicity of programmes and the consequent increase in the workload in the extension service personnel' along with 'the lack of desire on the part of professionals to take up the duty of comprehensive health care delivery as the two major reasons for the non-fulfillment of objectives stated in the Plans'[19] The Report had also acknowledged that 'preoccupation with the promotion of curative and clinical services through urban hospital has by and large benefited only a section of the rural population. The concept of health in its totality with preventive and promotive health

care services in addition to the curative, is still to be made operational'[20] The Six Five Year Plan that heralded the second phase, had attempted to incorporate these observations while formulating its objectives.

The Post Alma Ata phase (1980-1990)

Developments at the National Level

The International Conference on Primary Health Care at Alma Ata in the USSR organised jointly by the World Health Organisation (WHO) and United Nation's Children's Fund (UNICEF) in 1978 provided a new thrust in the basic approaches to health care organisations the world over. As one of the signatories of this Conference,India was also committed to the basic approach adopted in the Declaration which considered 'primary health care' as the key to attaining health for all peoples of the world by the year 2000 as part of development in the spirit of social justice. As we mentioned earlier, the concept of primary health care addresses the main health problems of the community providing promotive, preventive, curative and rehabilitative services and includes elements such as education concerning health problems, promotion of food supply and nutrition, adequate supply of safe drinking water and basic sanitation, maternal and child health care including family planning, immunisation against infections diseases, prevention and

control of locally endemic diseases, appropriate treatment of common diseases and provision of essential drugs for achieving the target set for the year 2000[21].

The holistic approach adhered to by Alma Ata and its enthusiasm in solving the health problems of the people in a collective spirit marked the beginning of several attempts to translate the commitment into action. With this objective in mind the Indian Council of Social Science Research (ICSSR) and the Indian Council of Medical Research (ICMR) initiated a study to outline an 'alternative strategy for health for all by 2000' and presented its finding in 1980[22]. Taking into account the special features of the Indian situation the new strategy set targets to reduce the morbidity and then the infant mortality rate from 120 to 60 per thousand and crude death rate from 15 to 9 per thousand by the turn of the century. It called for a radical change in the health care system that is exotic, top-down, elite-oriented, urban based, centralised and bureaucratic which overemphaises the curative aspect, large urban hospitals and drugs to a people oriented, efficient service that integrates promotive, preventive and curative aspects of health care[23] The Sixth Five Year Plan (1980-85), which was formulated after the Alma Ata Conference and which coincides with the ICSSR-ICMR study reflects these concerns strongly and it is with this logic that we arranged the discussion of

post Independence developments in two phases - the first which ends with the Fifth Plan and the second that begins with the Sixth Plan.

The Sixth Plan explicitly endorses the goal of 'health for all by 2000 AD' declared by the Alma Ata Conference - for which, it admits, the primary task is to restructure and re-orient the existing health care delivery system. An important step in this direction is to encourage the involvement of people in solving their health problems which was totally ignored in all previous plans. And, imbibing the spirit of both the Declaration and the ICSSR-ICMR study the Plan advocated a strategy that strengthens the horizontal and vertical linkages between all inter related programmes having an impact on health such as protected water supply, environmental sanitation and hygiene, nutrition, education, family planning and maternity and child welfare. The thrust of the Plan was in rectifying the mistakes of the past and it suggested specifically the several new strategies[24].

The Sixth Five Year Plan and its renewed commitment to solve the health problems of the vast majority of rural masses by involving them in the task was only a beginning. In two years time the Ministry of Health and Family Welfare brought out a policy statement on health, 'Statement of National Health Policy', (1982) which was

subsequently approved by the Parliament in 1983. And, slated for implementation thereafter it outlines the broad approach for the tasks to be completed in the coming decades. The policy statement was comprehensive and systematic[25] To attain the objective of health for all by 2000 AD the policy statement advocated a thorough overhaul of the existing approach to the education and training of medical and health personnel and the re-organisation of health service infrastructure. It argued that, the contours of the National Health Policy have to be evolved within a fully integrated planning framework which seeks to provide universal, comprehensive primary health care services, relevant to the actual needs and priorities of the community at a cost which the people can afford[26] In terms of content and spirit the National Health Policy thus was the logical conclusion to the changes that were taking place since Alma Ata. The approval of the Policy in the Parliament, first of its sort after Independence, made it more significant and programmes were initiated keeping the basic premise outlined by the Policy.

Developments in Kerala (1979-90)

The thrust of health care planning in the Sixth Plan of Kerala was to consolidate the gains of the past. Influenced by the recommendations of the High Power

Committee on Health (Pai Committee) which submitted its report in 1979 the Plan identified its major objectives as correcting the regional imbalances by creating the necessary infrastructure in rural areas; improving the quality of medical services by strengthening the specialised medical and para-medical personnel and by providing sufficient quantity of medicines and essential medical equipments; ensuring optimum use of medical facilities by strengthening management and supervision; linking health care with nutrition facilities in medical institutions especially in the case of children and introducing school health programmes; giving more importance to preventive aspects and revitalising the clinical facilities already available[27] The High Power Committee had pointed out that the quality of health services available to the common man was poor because of overcrowding, lack of cleanliness, inefficient emergency services, unserviceable cost of many costly items of equipments and above all inadequacy of drugs and hospital supplies. The medical institutions were also distributed unscientifically, often without assessing the need and giving consideration only to political pressures. The Report therefore, recommended a revised norm for health institutions to reach out to people and satisfy their health needs. The objectives of the Sixth Plan, as we noted above, incorporated these concerns which broadly aims at correcting

the drawbacks rather than at restructuring or re-orienting health services which were the explicit concern of the National Plan. The Seventh Plan was more radical in this regard and followed an approach that was weighted in favour of the concept 'health by the people' instead of 'health for the people'[28] To realise this the Plan visualised grass-root level planning where the concerned regions formulate their own plans to achieve the goals set for national planning. The Plan also accepted the challenge of providing health care for all by 2000 AD for which the strategy should be concentrating not only on services for health care but also on related matters like housing, food, education, sanitation, community development, transport etc. The major issues that it wanted to tackle in the next five years were the improvement of infrastructure in backward districts such as Idukki, Malappuram, Palghat, Wynad, Quilon and Cannanore, the provision of beds and hospitals according to the needs of different regions for correcting the imbalances created in the past and to rectify the disproportionate emphasis on the establishment of curative centres like dispensaries and hospitals especially in urban areas[29]

The approach and the concerns expressed in the two Five Year Plans after Alma Ata, therefore, differ in several respects, from the national pattern which is only natural in the light of the highly developed health care situation in

the State compared to the rest of the country. In fact, Kerala has already achieved the norms set against 2000 AD in terms of indicators like birth rate, death rate, infant mortality rate and life expectation at birth. The tasks before the State therefore was only to consolidate these gains and correct the imbalances. The Sixth and the Seventh Plans attempted this within the framework of primary health care propounded by the Alma Ata Conference. The restructuring and re-orienting of health services as well as involving the people in solving their health problems therefore assumed a different dimension in the State Plans.

The growth of health care facilities in Kerala during the second phase had a comparatively slower pace. The number of institutions over the period of ten years, 1978-79 to 1988-89, increased by 25 per cent from 899 to 1126 while the number of beds during the same period increased by 24 per cent from 29947 to 37100. The corresponding increases during the Fourth and Fifth Plan period from 1970-71 to 1978-79 were 38 per cent each for institutions and number of beds. A significant feature of the growth during this period was that of the PHCs which registered an increase of 354 per cent or from 163 to 740; the hospitals compared to this increased marginally from 140 to 143 while the dispensaries decreased from 558 to 72 which in fact explain, partly, the unprecedented growth of PHCs. During the Seventh Five Year

Plan, steps were taken to restructure the distribution of facilities according to the norms prescribed by the National Health Policy that prescribes a Sub-Centre with one pair of health workers, male and female, for serving every 5000 population or 3000 in the case of tribal and hilly areas, one PHC for every 30,000 population or 20,000 in tribal and hilly areas and a Community Health Centre(CHC) with 30 beds and specialised services for one lakh population which culminated in a massive programme of strengthening and upgrading dispensaries to PHCs along with the creation of new ones. In a number of cases this was only an administrative change due to a change in the nomenclature though it contributed to the abnormal increase in the case of PHCs.

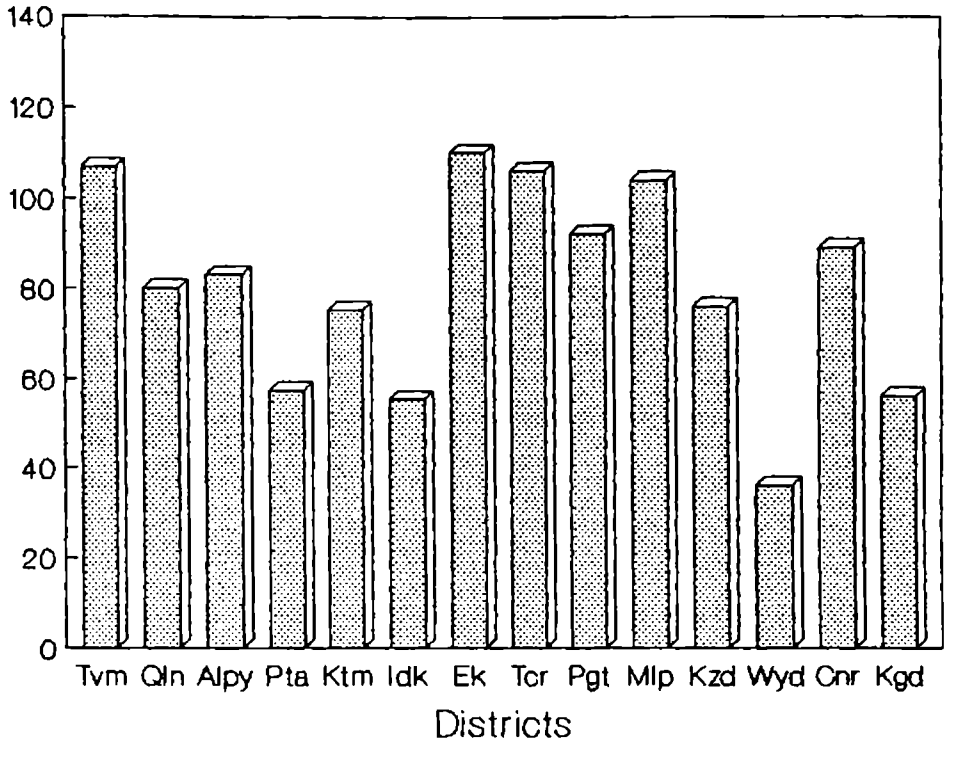
The disparities between districts, even between regions within district, had been a recurring theme in our Plans. The Sixth and the Seventh Plans considered this as the main objective and included several schemes to correct the imbalances. The result is explained in Tables 6 and 7. In terms of beds per thousand population the districts saw considerable variation among them with Trivandrum at one end and Idukki on the other. Several of the districts identified as backward in the previous phase - most of the districts of Malabar and Idukki and Quilon - still maintained their comparatively low status in terms of the availability of

Table 6 Growth of allopathic institutions and beds in Kerala from 1978-79 to 1988-89 - district wise

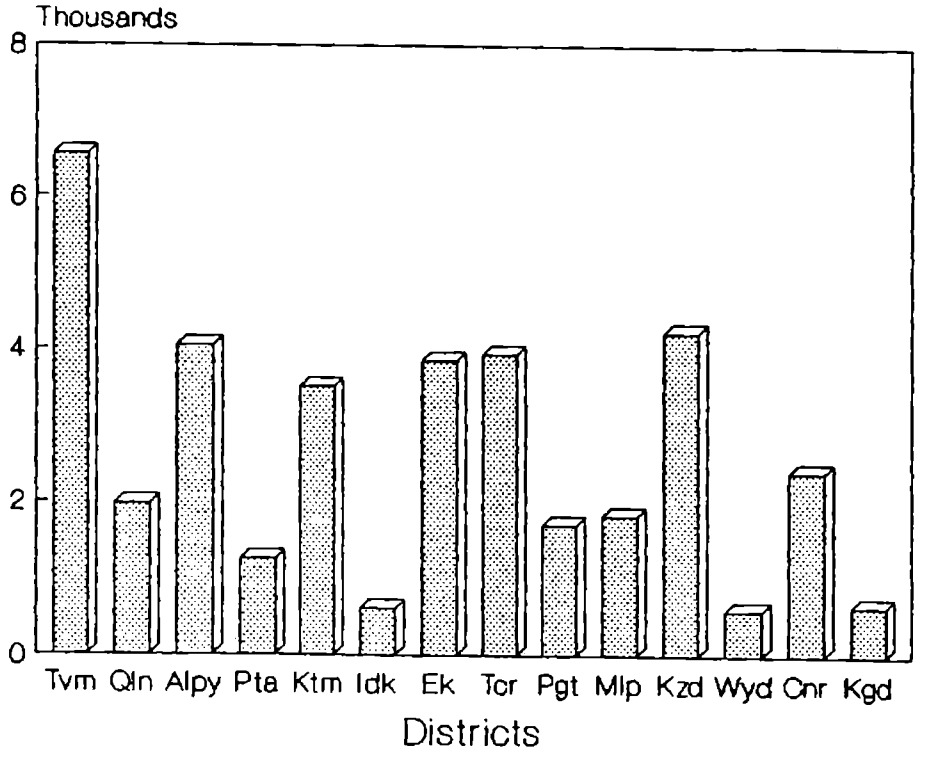
District	1978-79		1985-86		1988-89		% increase from 85-86 to 88-89
	Total no.of inst.	Total no.of beds	Total no.of inst.	Total no.of beds	Total no.of inst.	Total no.of beds	
1.Trivandrum	92	5578	97	6156	107	6550	10.3
2.Quilon	93	2132	70	1755	80	1973	14.3
3.Alleppy	86	3940	69	3486	83	4043	20.3
4.Pathanamthitta	-	-	47	831	57	1262	21.3
5.Kottayam	63	2986	65	2850	75	3506	15.4
6.Idukki	43	376	50	472	55	609	10.0
7.Ernakulam	91	3249	99	3342	110	3846	11.1
8.Trichur	86	3032	98	3717	106	3929	8.2
9.Palghat	74	1313	85	1597	92	1705	8.2
10.Malappuram	70	1015	91	1326	104	1816	14.3
11.Kozhikode	74	3643	67	3950	76	4224	13.4
12.Wynad	-	-	30	528	36	590	20.0
13.Cannanore	127	2540	81	2422	89	2399	9.9
14.Kasargodu	-	-	50	596	56	648	12.0
Kerala	**899**	**29947**	**999**	**33028**	**1126**	**37100**	**12.7**

Source: Statistics for Planning 1983, 1988 and Economic Review 1989, Directorate of Economics and Statistics & State Planning Board, Government of Kerala.

Number of allopathic institutions (Government) in Kerala: 1988-89



Number of beds in Kerala (Government) 1988-89



beds per thousand population. However, the physical increase of institutions and number of beds in some of these districts is impressive specially in the case of consistently backward districts like Wynad, Malappuram and Quilon. The number of beds per 1000 population for the State as a whole has increased from 1.18 in 1978-79 to 1.29 in 1988-89. Among the districts the ratio was the highest in Trivandrum with 2.23 in 1988-89, compared to 2.15 in 1978-79, followed by Alleppy, 1.91, Kottayam, 1.82, and Kozhikode, 0.66. The backward districts are still Idukki, Kasargodu, Malappuram, Palghat, Wynad and Quilon as they show a lower ratio than the State average. Significantly, the ranking remains more or less the same even in 1978-79 also with Trivandrum at one end and Idukki at the other. In terms of institutions per sq. km. and also in terms of area covered by one institution the pattern remains the same.

The trend of declining importance for health in the Five Year Plans as reflected in the percentage share of health in the total outlay however began to improve from the Sixth Plan onwards. The Plan outlay on health in the Sixth Plan was Rs.3655 lakhs which constituted about 2.3 per cent of the total outlay and this in the Seventh Plan increased to Rs.6426 lakhs claiming a better share in the total allocation, 29 per cent. The scheme-wise outlay on health in

Table 7 Beds per thousand persons, Institution per Sq. km and area covered by one institution (allopethic) in 1978-79 and 1988-89

District	1978-79			1988-89		
	No.of beds per 1000 popu-lation	No.of insti-tution per sq.km	Area cove-red by one insti-tution	No.of beds per 1000 popu-lation	No.of insti-tution per sq.km	Area cove-red by one insti-tution
1.Trivandrum	2.15	0.05	23.8	2.23	0.05	20.5
2.Quilon	0.76	0.02	49.7	0.79	0.03	32.2
3.Alleppy	1.68	0.05	20.3	1.91	0.06	15.1
4.Pathanamthitta	-	-	-	1.01	0.02	47.9
5.Kottayam	1.58	0.03	34.9	1.82	0.03	29.4
6.Idukki	0.38	0.01	118.3	0.55	0.01	90.9
7.Ernakulam	1.28	0.04	26.3	1.34	0.05	21.9
8.Trichur	1.42	0.03	35.3	1.42	0.03	28.7
9.Palghat	0.64	0.02	59.5	0.74	0.02	48.7
10.Malappuram	0.42	0.02	51.9	0.67	0.03	34.1
11.Kozhikode	1.39	0.02	50.4	1.66	0.03	30.8
12.Wayanad	-	-	-	0.93	0.02	59.2
13.Cannanore	0.85	0.02	44.9	1.09	0.03	33.7
14.Kasargodu	-	-	-	0.65	0.03	35.0
Kerala	**1.18**	**0.02**	**43.2**	**1.29**	**0.03**	**34.5**

Source: Calculated from Statistics for Planning 1988, 1988 and Economic Review 1989, Directorate of Economics & Statistics and State Planning Board.

the two Plan periods is explained in Table 8. The break-up of allocations for various schemes is also revealing for the emphasis the Plans actually placed on various objectives. In the Sixth Plan programmes coming under the Minimum Needs Programme such as strengthening and creating new PHCs, sub-Health centres etc. benefitting mostly the poor sections in rural areas received about 20 per cent of the total outlay. This coupled with the allocation on prevention and control of communicable diseases, by and large, indicates the importance given in the Plan on the health problems of the poor as well as on the preventive aspects of medical care. In both Plans medical education and research rank consistently the highest claiming nearly one-third of the total allocations - 25 and 34 per cent respectively in the Sixth and Seventh Plans. Hospitals and dispensaries relating to the strengthening of curative aspects of health care received 9.5 per cent in the Sixth Plan and 8.2 per cent in the Seventh Plan. The Indian Systems of Medicines, Ayurveda and Homoeopathy, maintains a consistent share in the Plans that vary from 6 to 10 per cent over these years of which roughly one-third is spent on Minumum Need Programmes.

Table 8 Scheme-wise outlay in Sixth and Seventh Five Year Plans

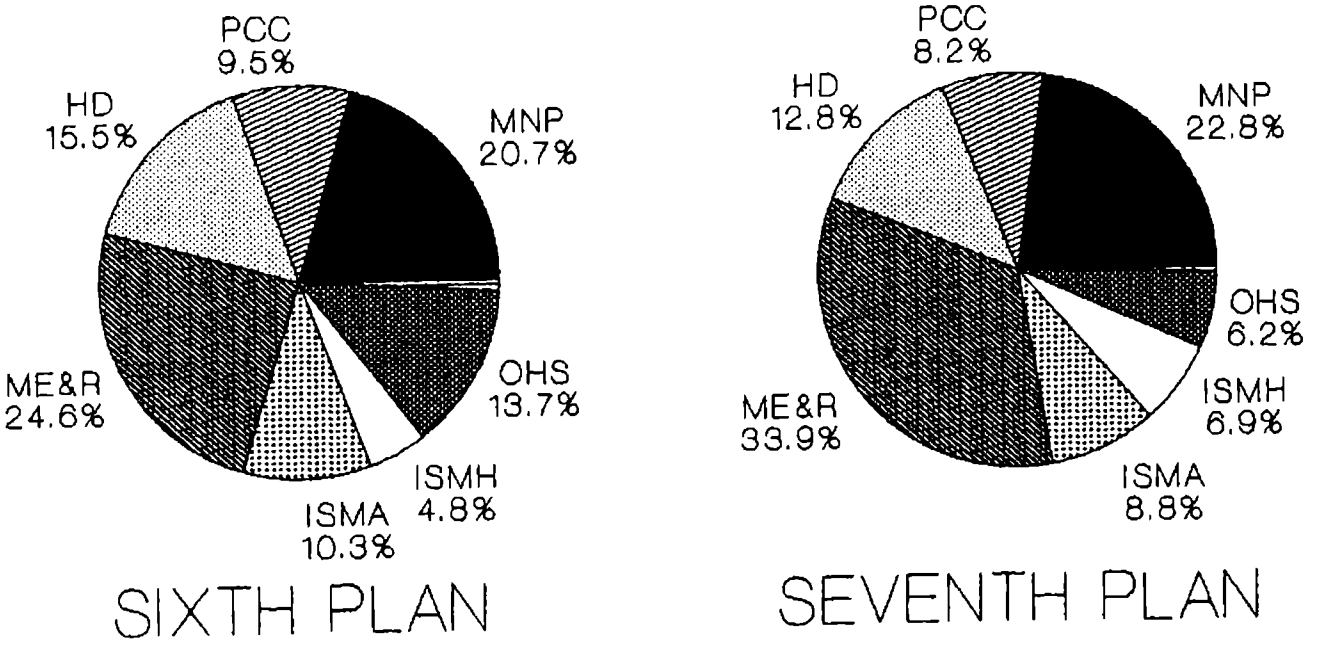
(Rs. in lakhs)

Category	VI Plan 1980-85		VII Plan 1985-90	
	1980-85 proposed outlay	% to total	1985-90 proposed outlay	% to total
1. Minimum Need Programme (PHCs,SHCs,Subsidiary Health Centres,Govt. dispensaries in backward areas, Community Health Worker Scheme etc.)	757.00	20.7	1461.70	22.8
2. Prevention and control of communicable diseases	348.60	9.5	526.80	8.2
3. Hospitals and Dispensaries	569.40	15.5	820.00	12.8
4. Medical Education & Research	900.00	24.6	2180.00	33.9
5. Indian Systems of Medicine:				
a. Ayurveda	375.00	10.3	567.50	8.8
b. Homoeopathy	175.00	4.8	440.50	6.9
6. Other Health Schemes	500.00	13.7	399.50	6.2
7. E.S.I.	30.00	0.9	30.00	0.4
Total outlay	3655.00	100.0	6426.00	100.0

Source: Draft Seventh Five Year Plan 1985-90 Vol. II pp.174-179 and Draft Eighth Five Year Plan 190-95 Vol.II pp.51-55, State Planning Board 1885 and 1990.

The total annual expenditure, both plan and non-plan, on medical and public health was also increasing substantially during this period. In 1979-80 the total expenditure on health was Rs.4119.0 lakhs which increased to Rs.14509 lakhs in 1989-90 or about 254 per cent. The

Scheme-wise outlay in Sixth and Seventh Five Year Plans - Kerala



MNP - Minimum Need Programme, PCC - Prevention and Control of Communicable diseases, HD - Hospitals and Dispensaries, ME&R - Medical Education Research, ISMA - Indian System of Medicine (Ayurveda), ISMH - Indian System of Medicine (Homeopathy), OHS - Other Health Schemes

expenditure per head was also increasing at the same rate from Rs.19.13 in 1980-81 to 64.18 in 1989-90.

Table 9 Plan and Non-Plan Expenditure on Medical and Public Health in Kerala.

(Rs. in lakhs)

Year	Expenditure			Expenditure per head
	Plan	Non-Plan	Total	
1980-81	651.38	4229.27	4880.65	19.13
1981-82	905.97	4936.88	5842.85	22.88
1982-83	880.10	5058.12	5938.22	22.76
1983-84	1044.41	5935.02	6979.43	25.88
1984-85	1074.00	6354.81	7428.81	32.73
1985-86	1102.50	8754.37	9856.87	40.44
1986-87	1799.34	9576.09	11375.93	50.13
1987-88	1532.08	10207.12	11739.20	52.39
1988-89	1486.12	11700.75	13186.87	64.18

Source: Economic Review 1989, State Planning Board, Trivandrum.

The post Alma Ata period, as discussed above, was a period for consolidating the gains it had achieved in the past. The task was recognised in the two five year plans and in terms of birth, death and infant mortality rates and also in terms of life expectancy at birth the State continued to

maintain its unique position.The birth rate has come down from 26.8 in 1980 to 21 in 1987 while the death rate has declined from 7 to 6 during the above period. The decline in the infant mortality rate (IMR) was also spectacular from 42 to 26 all which was comparable only to the developed nations. The life expectancy at birth was 67 years for males and 70 years for females in 1987.

Table 10 Birth,Death and Infant Mortality Rate in Kerala

Year	Birth Rate per '000 population	Death Rate per '000 population	Infant Mortality Rate
1980	26.8	7	42
1981	25.6	6.6	37
1985	22.9	6.4	33
1987	21.0	6.0	26

Source: Economic Review 1989, State Planning Board, Trivandrum.

Health Care Development in the Private Sector

The growth of health care facilities in the private sector in Kerala had been phenomenal. In 1956 the number of health institutions that did not receive any assistance from the government in Kerala was only 16 - which perhaps is indicative of the number of institutions outside the

government sector[30]. The situation in 1986, in which year a census was taken by the Department of Economics and Statistics, Government of Kerala, to collect information about the health care institutions under private sector, was bewildering in the sense that their number was several times larger than that of the institutions in the Government sector[31]. The number of allopathic medical institutions in Government during 1985-86 were only 999 where as in the private sector the corresponding figure was 3569, almost four times larger than the government institutions. The difference is more sharp in the case of Ayurveda and Homoeopathy under which there were 3925 and 2076 institutions respectively. The number of beds available in these private institutions (allopathic) were 49030 compared to 33028 in Government. The distribution of institutions and beds under various systems in the private sector, which is shown in Table 11, also indicates the same tendency that was visible in the case of government institutions and availability of beds that their concentration is more in certain developed districts compared to the rest. The backward districts even in this regard are Idukki, Palghat, Malappuram, Wynad, Cannanore and Kasargod and together they constitute only 26 per cent of total institutions under allopathy. The indigenous systems were not exceptions to this tendency.

Table 11 Number of private medical institutions and beds in Kerala, 1986

District	Number of institutions and beds					
	Allopathy		Ayurveda		Homeopathy	
	Institutions	Beds	Institutions	Beds	Institutions	Beds
Trivandrum	369	3744	301	359	121	42
Quilon	324	4504	262	210	141	73
Pathenamthitta	231	3720	178	23	104	2
Alleppy	392	3157	301	40	224	6
Kottayam	376	6189	398	119	327	43
Idukki	194	3521	98	14	72	-
Ernakulam	436	8646	365	79	371	71
Trichur	256	5101	592	103	137	16
Palghat	142	1013	357	71	86	15
Malappuram	188	1931	358	209	148	10
Kozhikode	241	2411	342	62	213	18
Wynad	88	1594	77	-	43	-
Cannonore	190	2550	191	10	65	-
Kasargode	138	949	105	2	26	-
Total	2565	49030	3925	1310	2078	296

Source: Government of Kerala, Report on the Survey of Private Medical Institutions in Kerala, Trivandrum, 1986, pp.6-7.

The existence of a health care system of this magnitude in the State outside the government perhaps is equally unique as the State's achievement in health status. The implications of this is far-reaching. On the positive side the private sector can supplement the Government in its efforts to provide health care to people particularly in curative medicine. The Government can therefore concentrate more on preventive and public health activities as well as on the health needs of those sections who cannot afford the cost of health care. On the negative side this can lead to excessive medicalisation and misuse and abuse of medical care creating dependency. The proliferation of private medical institutions on this scale is also indicative of the growing inequalities in society where a sizable sections who can afford the cost of expensive health care exist along with a vast majority who are at the mercy of government institutions.

Conclusion

The development of health care system in Kerala during the post Independence period had certain distinct features. The Five Year Plans, by and large, reflected the national concern but the approaches were modified to accommodate the specific realities of the State. During the pre Alma Ata

phase the planned efforts were directed mostly to improve the infrastructure in terms of institutions and manpower. In both cases achievements were remarkable and the State enjoys a unique position in this regard. The improvement in the facilities however, was not uniform. The backward districts of Malabar, which suffers a historical disadvantage in terms of health care development before Independence, still remained backward as the facilities are concentrated in certain developed districts. The Fifth Five Year Plan recognised this trend and considered it as a challenge. The growing disparity between regions was also reflective of the growing disparity between groups of populations. A large segment of the poor, particularly the underprivileged sections like tribals (85 per cent of them) are concentrated in these backward districts. The developments during this phase were also significant for the disproportionate emphasis on curative health care. From the Second to the Fifth Plan only one-third of the total allocation on health was earmarked for provision of basic health care and prevention and control of communicable diseases. Allocation to medical education and research had been consistently large in Plans which again indicate the disproportionate emphasis on medical personnel at the cost of other categories of health workers. The growth in this number which was remarkable in terms of different categories of

institutions, number of beds and medical personnel available was however, not matched by quality. Institutions are ill equipped and inadequate. The orientation of personnel manning these institutions was incompatible with the standards set by the Plans.

There was a discernible change in the approach towards health care in the second phase, especially after the Sixth Plan. 'Health by the People' replaced the concept of 'Health for the People' in the Seventh Plan encouraging involvement of communities in solving health problems. The efforts to narrow down the disparities between districts produced results. The disparities however exist but on a reduced scale. The disproportionate emphasis on curative aspects continued to loom large. The efforts to rectify this were weak in both Plans. The co-existence of a significantly large health care system under private sector is again unique to the State. The implications of this are both positive and negative but it undoubtedly contributed to project the indicators of health status at the macro level. The concentration of private medical institutions in developed urban centres is substantial and shows the same pattern as that of the government medical institutions. Even the institutions under Indian Systems of Medicines subscribe to the same trend and concentrate generally in developed districts. The health care systems, over the last four

decades had acquired a mammoth structure which is centralised and bureaucratic and apparently stand against the goal set in the Seventh Plan of involving people in looking after their health.

References

1. National Planning Committee (1948). **National Health,** Vora & Co., Bombay, p.225.
2. Government of India (1946). **Report of the Health Survey and Development Committee (Bhore Committee),** Summary V of Vol.IV, New Delhi.
3. Planning Commission (1952). **First Five Year Plan,** Government of India, New Delhi, p.491.
4. Bose A. and Desai P.B. (1983). **Studies in the Social Dynamics of Primary Health Care** Hindustan Publishing Corporation, Delhi, p.55.
5. Government of India (1961). **Report of the Health Survey and Planning Committee** (Mudaliar Committee), New Delhi.
6. Government of India (1975). **Health Services and Medical Education: A programme for Immediate Action,** New Delhi. p.7.
7. Chatterjee M. (1988). **Implementing Health Policy,** Manohar Publications, New Delhi, p.222
8. Planning Commission (1979). **Draft Sixth Five Year Plan**

1978-83, (Revised), Government of India, New Delhi, p.431.

9. ICSSR-ICMR (1980). **Major Recommedations of the ICSSR-ICMR Study Group**, New Delhi, pp.VII-XV.
10. Panikar, P.G.K and Soman.C.R. (1984). **Health Status of Kerala: Paradox of Economic Backwardness and Helath Development**, Centre for Development Studies,Trivandrum, p.46.
11. Government of Kerala (1958). **Second Five Year Plan-Kerala**, Trivandrum, p.45.
12. State Planning Board, Kerala (1974). **Fifth Five Year Plan: A Draft outline**, Trivandrum, p.483.
13. Government of Kerala (1958). **op. cit.** p.46.
14. **Ibid.** p.51.
15. The total tribal population of the State according to 1981 census was 261475. The tribal population in six districts alone constituted about 222052, which was about 84.9 per cent of the total tribal popualtion. **Census of India, 1981.**
16. Government of Kerala (1958). **op. cit.**, p.48.
17. Government of Kerala (1960). **Third Five Year Plan-Draft outline**, Trivandrum, p.295.
18. State Planning Board (1974). **op. cit.**
19. State Planning Board (1984). **Report of the High level Committee on Social Infrastructure and Services,**

Trivandurm, p.66.

20. **Ibid.**, p.74.

21. WHO UNICEF (1978). **Primary Health Care**, Report of the International Conference on Primary Health Care, Geneva.

22. ICSSR-ICMR (1981). **Health for All - An Alternative strategy** Indian Institute of Education, Pune.

23. ICSSR-ICMR (1980). **op. cit.**, p.vii.

24. Planning Commission (1980). **Sixth Five Year Plan 1980-85**, Government of India, New Delhi. p.368.

25. Government of India (1982). **Statement of National Health Policy**, Ministry of Health & Family Welfare, Reproduced in Bose. A & Desai P.B. (1983). **Studies in Social Dynamics of Primary Health Care**, New Delhi, pp.201-215.

26. **Ibid.** p.203.

27. State Planning Board (1980). **Draft Sixth Five Year Plan 1980-85**, Trivandrum, p.17.

28. State Planning Board (1984). **op. cit.**, p.77.

29. State Planning Board (1984). **Draft Seventh Five Year Plan 1985-90 and Annual Plan 1985-86**, Vol.I, p.183.

30. Government of Kerala (1958). **op. cit.**, p.51.

31. Government of Kerala (1987). **Report on the Survey of private Medical Institutions in Kerala, 1986.** Department of Economics and Statistics, Trivandrum.

CHAPTER III

HEALTH CARE DEVELOPMENT AMONG TRIBALS IN KERALA: WITH SPECIAL REFERENCE TO WYNAD

The present chapter attempts a discription of health care development among Tribals in Kerala focussing mainly on tribal communities in Wynad. The tribal situation in Kerala is discussed first, followed by an account of the tribal communities of Wynad. After thus providing a background, we shall proceed to indentify the trends in health care development among tribals during the post Independence period first and then narrow this down to tribals in Wynad.

1. Tribal situation in Kerala

Tribals constitute a small per cent of the State's population. In 1981, as per the Census estimate, their population was 261478. A decade ago, their number was 2,69,356 showing a decline in their number by about 7881 over the period. Their population as percentage to the total population of the State correspondingly declined from 1.26 in 1971 to 1.02 in 1981. The tribal settlements are located all over Kerala but many of them are concentrated in a few

districts - Wynad, Idukki, Palghat and Cannanore - most of which fall in the erstwhile Malabar region. In terms of their distribution among districts, Wynad claims more than one-third of the total tribal population, 36.5 per cent; followed by Cannanore, 15.18 per cent; Idukki, 14.8 per cent and Palghat, 11.01 per cent. The tribal population as percentage to the total population in all these districts is higher than that of the State as a whole. In Wynad it is as high as 17.25 per cent compared to 3.98 per cent in Idukki which ranks second in this regard. By and large, the tribals live interspersed with other categories of population but geographically they are concentrated more in the remote and hilly terrains of the districts lying close to the Western Ghats that separates Kerala from the adjoining States of Karnataka and Tamil Nadu.

Though limited in number the State has a wide variety of tribal communities numbering about forty eight of which 35 are classified as scheduled tribes[1] The dominant among them are Paniyans (56952) and Irulas (18698). There are about 12 tribes whose population, according to the 1981 Census, are below 1000 and face the threat of extinction. The communities also differ among themselves in terms of the level of development. While some among them are educationally and economically advanced, like the Malai Arayans and Kurichians, others like the Paniyans,

Table 1 Population of Scheduled Tribes in Kerala - Districtwise 1981.

Sl. No.	District	Population	Percentage to the total tribal population	Percentage to the total population of the district
1.	Trivandrum	14145	5.41	0.54
2.	Quilon	7442	2.86	0.26
3.	Alleppey	435	1.25	0.14
4.	Kottayam	15227	5.82	0.90
5.	Idukki	38712	14.80	3.98
6.	Ernakulam	3551	1.36	0.14
7.	Trichur	3227	1.24	0.13
8.	Palghat	28794	11.01	1.41
9.	Malappuram	7955	3.04	0.33
10.	Kozhikode	3888	1.49	0.17
11.	Wynad	95557	36.54	17.25
12.	Cannanore	39704	15.18	1.42
	Kerala	2,61,475	100.00	1.03

Source: Census of India, 1981, Primary Census Abstract, Kerala.

Kattunaickans and Kurumans, are backward and suffer from several disadvantages. Some of them are primitive and still in their pre-agricultural stage. The Cholanaickans, Kurumbas, Kattunaickans and Kadars, found in the northern districts of Palghat and Wynad, are identified as primitive tribes. Their popualtion compared to other tribes are limited and some of them are also experiencing a constant decline in their popualtion. Details about the tribal communities in Kerala are explained in Table 2.

The level of literacy among scheduled tribes is comparatively low. In 1971 the percentage of literates among them was 25.7 compared to 60.4 among the general population. In ten years time the percentage has increased to 31.8 while that of the general population has gone up to 70.4. There is, however, considerable variation among districts in this regard. Wynad which has the largest concentration of scheduled tribes has only 14.2 per cent of its tribes as literates while the situation is still poor in Palghat where this rate is only 12.04. The other backward districts in terms of the rate of literacy are Trichur, Malappuram and Kozhikode. Kottayam presents a stark contrast to this situation where the percentage of literates among tribes is as high as 73.6 in 1981 which is surprisingly higher than that of the State average. The rate is also close to that of the general population in the district which is 81.7 per

Table 2 Community wise popualtion of scheduled tribes and their rate of literacy in Kerala

Sl.No.	Tribes	Total population	No. of literates	Rate of literacy(%)
1.	Adiyan	8152	1223	15.0
2.	Arandan	95	18	18.94
3.	Eravallan	2071	168	8.11
4.	Hill pulaya	3092	809	26.16
5.	Irular/Irulan	18698	2198	2.12
6.	Kadar	1503	425	28.27
7.	Kammara	83	64	77.1
8.	Kanikkar	13724	7806	86.87
9.	Kattunayakan	8803	760	8.63
10.	Kochuvelan	10	9	90.00
11.	Konda kapus	11	4	36.36
12.	Kondareddis	1064	825	77.53
13.	Koraga	1098	362	32.96
14.	Kota	41	26	63.41
15.	Kudiya, Melakudi	597	233	39.02
16.	Kurichian	22215	8337	37.52
17.	Kurumans	20741	8000	38.57
18.	Kurumbas	1283	170	13.25
19.	Maha malsar	9	6	66.66
20.	Mala Arayar	24499	18754	76.55
21.	Malai pandaram	2122	790	37.22
22.	Malai vedan	2435	384	15.77
23.	Malai kuravan	254	129	50.78
24.	Malasar	967	57	5.89
25.	Malayan	2394	594	24.81
26.	Malayarayar	2746	2068	75.30
27.	Mannan	5813	1123	19.31
28.	Marati	22195	8462	38.12
29.	Muthuvan/Mudugar	11213	1183	10.55
30.	Palleyan	30	11	36.66
31.	Palliyan	793	220	27.74
32.	Palliyar	420	118	28.09
33.	Paniyan	56952	6274	11.01
34.	Ulladan	12687	6117	48.21
35.	Uraly	9032	3385	37.47

Source: Census of India, 1981.

cent. The reason for this rate in the district is attributed to the concentration of Malai Arayans who are far advanced in this respect. Trivandrum, where the Kani tribes are in majority, also stands out with a rate of 58.1 per cent. The other developed districts are Alleppey, Quilon and Ernakulam. The variation of the literacy rates among the tribal communities is also equally acute. Irular whose population is 18698 rank the lowest with 2.1 per cent of literates among them followed by Malasur, 5.9 per cent; Eravallan, 8.11 per cent; Kattunaickan, 8.6 per cent; Muthuvan, 10.6 per cent and Paniyans, 11 per cent. Most of these backward tribes are located in Palghat and Wynad. The advanced tribes with regard to the rate of literacy are Kanikkars(86.8), Konda Reddi(77.5) and Malai Arayans(76.5) all of which are higher than rate of literacy of the State as a whole.

The economic base of the tribal communities has been changing rapidly in the recent past. The forest based existence with shifting cultivation which had been characteristic of tribals in general gave way to land based existence practicing settled agriculture and then to labour based existence as agricultural labourers. The transition is significant among most communities which can be seen from the distribution of working population among them. Main workers as percentage to total popualtion in 1971 was 49.45

which came down to 40.5 in 1981. The work participation rate for the general population in the State for the corresponding periods were 29.1 and 26.7 respectively. Among the workers about 58 per cent are agricultural labourers and 21 per cent are other manual labourers in 1981. Cultivators constitute only 21 per cent of the total working population. A survey conducted on the socio-economic aspects of scheduled tribes during 1976-78 by the Bureau of Economics and Statistics, Government of Kerala offers a detailed picture of their economic organisation[2]. The Survey which covered a total of 41452 families in 3469 hamlets indicated that nearly 30 per cent of the households are landless while the rest 70 per cent possess some land. The number of landless households varies considerably between districts with less than one per cent in Trivandrum to 52.3 per cent in Cannanore. The average area owned by a tribal household during the referene period 1976-78 is about 2.96 acres which again shows considerable variation among districts. In Alleppey the average area owned by a tribal household is only 9 cents while it is about 3.83 acres in Idukki. Nearly 73 per cent of the tribals reported that they cultivated their land while the rest kept it idle because of financial difficulties, lack of irrigation and the threat of wild animals. The report has also estimated the extent of alienation / or dispossession of land from tribals. During the

period between 1967-77 a number of families, 3546 households in the Survey, has reported loss of land mostly to non-tribals[3]

The estimate about the average annual income of a tribal household as well as their average per capita income clearly reveals their economic backwardness. The average family income is estimated to be Rs.2042 and the per capita income Rs.421. About 67 per cent of the households have an annual income upto Rs.2000, 27 per cent have income between Rs.2000 and 4000 and the rest 7 per cent have more Rs.4000. Those who live below the poverty line among them are estimated to be 76 per cent. The living conditions of most of the tribes are deplorable. The majority live in huts or kutcha houses, (88 per cent) while 6 per cent have reasonably good pucca houses. They also face problems in getting drinking water, the main source being rivers, ponds and springs, and about 38 per cent of them have to cover a distance of more than one kilometre to fetch water.

Though the state of affairs as explained above, refers to the late seventies, it still remains unchanged. The Tribal Sub-Plan of Kerala 1980-85 accepted the fact and stated that 'except among articulate tribals we find an over all decline in the level of living of other tribals' and 'though some money has been ploughed into the region, the life of the tribals remain unchanged. The main problems

faced by the tribals are extreme poverty, exploitation by non tribals and the evils of drink'[4]. Indeed, the statement sums up succinctly the tribal situation in Kerala. The Government expenditure on tribals and on areas of tribal concentration has been increasing steadily, particularly from the Fifth Plan when the strategy of Tribal Sub-Plan was introduced. During the Sixth Plan (1980-85), the flow of funds under Tribal Sub-Plan for different sectoral programmes was Rs.2410 lakhs or 1.6 per cent of the total planned outlay. In the Seventh Plan (1985-90) from a total outlay of Rs.210000 lakhs for the State. Rs.3556 lakhs was envisaged as flow to Tribal Sub-Plan which constitute about 1.7 per cent of the total outlay. In addition to this there were investments supported by the Centre on specified programmes for their welfare. Though this massive investment bypassed the tribals for a variety of reasons, it unleashed a set of other forces that had considerable impact on their lives. The geographical isolation and aloofness of tribal communities, are now increasingly thinning down. The economic exploitation of regions particularly of its forest based resources as part of our development efforts makes these communities face situations that they fail to comprehend. The tribals as a result becomes defensive, as the competition is not equal, and a feeling of distrust emerges. This accentuates the

process of alienation of these communities sets them further away from the mainstream. The forces that can counter these tendencies are few like education which unfortunately is time consuming in producing results. The inability of the tribals to understand the complexities of the rest of the world which are repungent to their traditional and non formalised system gradually forces them to withdraw spatially as well as culturally resulting first, in loss of their land and then in de-skilling themselves. The process of this pauperisation intensified during the decades after Independence as the chances of their moving into forests as a survival strategy were stifled by stringent laws and regulations. The tribals, as a result of all these got increasingly marginalised. Now they merely form a sub-stratum of the mainstream social structure where they are further exploited for their unskilled labour. The situation throughout Kerala, except perhaps for an insignificant percentage of tribal elites, corresponds to the above.

Tribal communities in Wynad

The major tribes in Wynad district are Paniyan, Kuruman, Kurichian, Kattunaickan, Adiyan and Urali. Paniyans are numerically the largest tribal community (40975) constituting about 43 per cent of the tribal population in

the district. They consider themselves the original inhabitants of Wynad but were later conquered and enslaved by powerful migrants, the Gowdans and Nairs[5] And, since then, for generations they were bonded labourers serving these landlords. The system, Kundal Pani[6] as it is known in Wynad, got legitimised over the years and it has become a custom for the Paniyan to work as bonded labourer. Though the system does not exist legally now the practice is still visible in modified ways. In the tribal hierarchy of Wynad they rank low and are backward economically and socially compared to other tribes. A sample study of the socio-economic conditions of scheduled castes and tribes conducted by the Government of Kerala in 1981 explains this comparative position[7] In terms of the main activity, 48 per cent of the 417 Paniyan families covered in the Study are casual workers mostly in agriculture earning very low wages. Landlessness is also very high among Paniyans and as per the Study 28 per cent belong to this category. Only 11 per cent own more than one acre of land which is indicative of the extent of land alienation among them who were once owners of large tracts of fertile land.

The Kurumans or the mullu kurumans come second numerically and constitute about 21 per cent of the tribal population in Wynad. Traditionally they were hunters and forest dwellers collecting honey and other forest produces.

Table 4 Tribal population in Wynad District (1981)

Tribal communities	Population	Percentage total
1. Adiyan	7266	7.6
2. Arandan	1	-
3. Hill Pulaya	1199	1.3
4. Irulan	1	-
5. Kadar	422	0.4
6. Kattunaickan	7436	7.8
7. Konda Kapus	1	-
8. Konda Reddis	158	-
9. Koraga	39	-
10.Kota	3	-
11.Kundia,Mela kundia	1	-
12.Kurichian	15269	15.9
13.Kuruman	20232	21.2
14.Kurumban	112	-
15.Maha Malasar	2	-
16.Malai Arayan	73	-
17.Malai Pandaran	19	-
18.Malai Vedan	2	-
19.Malai Kuravan	11	-
20.Muthuvan, Mudugal	12	-
21.Palleyan, etc.	29	-
22.Paniyan	40975	42.9
23.Ulladan	16	-
24.Uraly	2254	2.4
25.Others	24	-
Total:	95557	100.0

Source: (as in Table 2).

The communal ties among them are strong and they maintain many of their old traditions and practices. The percentage of landless among them is 27 according to the Study, but in contrast to the Paniyans some of them own substantial amount of land which is reflected in the high percentage of

agriculturalists among them (11 per cent), the highest for any tribal community in Wynad. The agricultural labourers among Kurumans are about 21 per cent. The Uralis are also considered as a branch of Kurumans and are traditionally involved in basket making and pottery. Some are blacksmiths but now like other tribal communities are predominantly casual labourers. Educationally they are better off with 29 per cent of them as literates.

Kurichians occupy the highest social status among tribals in Wynad and in many respects they stand apart from other tribals. In terms of population they stand behind the Kurumans who account for 16 per cent of the total tribal population. One of the oldest inhabitants of Wynad, they had the history of fighting against the British along with the army of Kerala Varma Raja of Kottayam till 1805[8] The Kurichians consider themselves as migrants from Travancore and trace their antecedents to the Nairs and because of this they practice touch pollution against all castes and communities except the Namboothiri Brahmins. They live in large extended families like the tharawad[9] of the Nairs and the male member manages the property with the support of others. Kurichians are also matrilineal. They are mainly cultivators and now, agricultural labourers. According to the socio-economic study of 1981 which covered a total of 240 Kurichian families, the percentage under these two

categories, cultivators and agricultural labourers, are 9 and 30 respectively. In terms of land ownership nearly 33 per cent of these own land more than two acres of land; the landless are only 9 per cent. Educationally, they are advanced in Wynad with a rate of 38 per cent literacy.

Kattunaickans, recognised as a primitive tribe, rank very low in the tribal hierarchy of Wynad. They were traditionally honey collectors, food gatherers and hunters and continued these occupations till recently. A large number of them are now forced to join the band of agricultural labourers working in plantations. Kattunaickans are traditional and backward in their outlook and have a closed social structure where the moopan or the headman plays an important role. Educationally they are considerably poor and their rate of literacy is only 8. In terms of their main occupation, 50 per cent are agricultural labourers according to the above mentioned study while only 0.11 per cent are cultivators. Landlessness is extremely grave with 41 per cent of the families belonging to this category; only 4 per cent have more than 2 acres.

The Adiyans numbering about 8152 forms 7.6 per cent of the total tribal population in Wynad. Found mostly in the northern parts, they are also traditionally bonded labourers like the Paniyans but claim a superior social status to the Urali Kurumans and Kattunaickans.

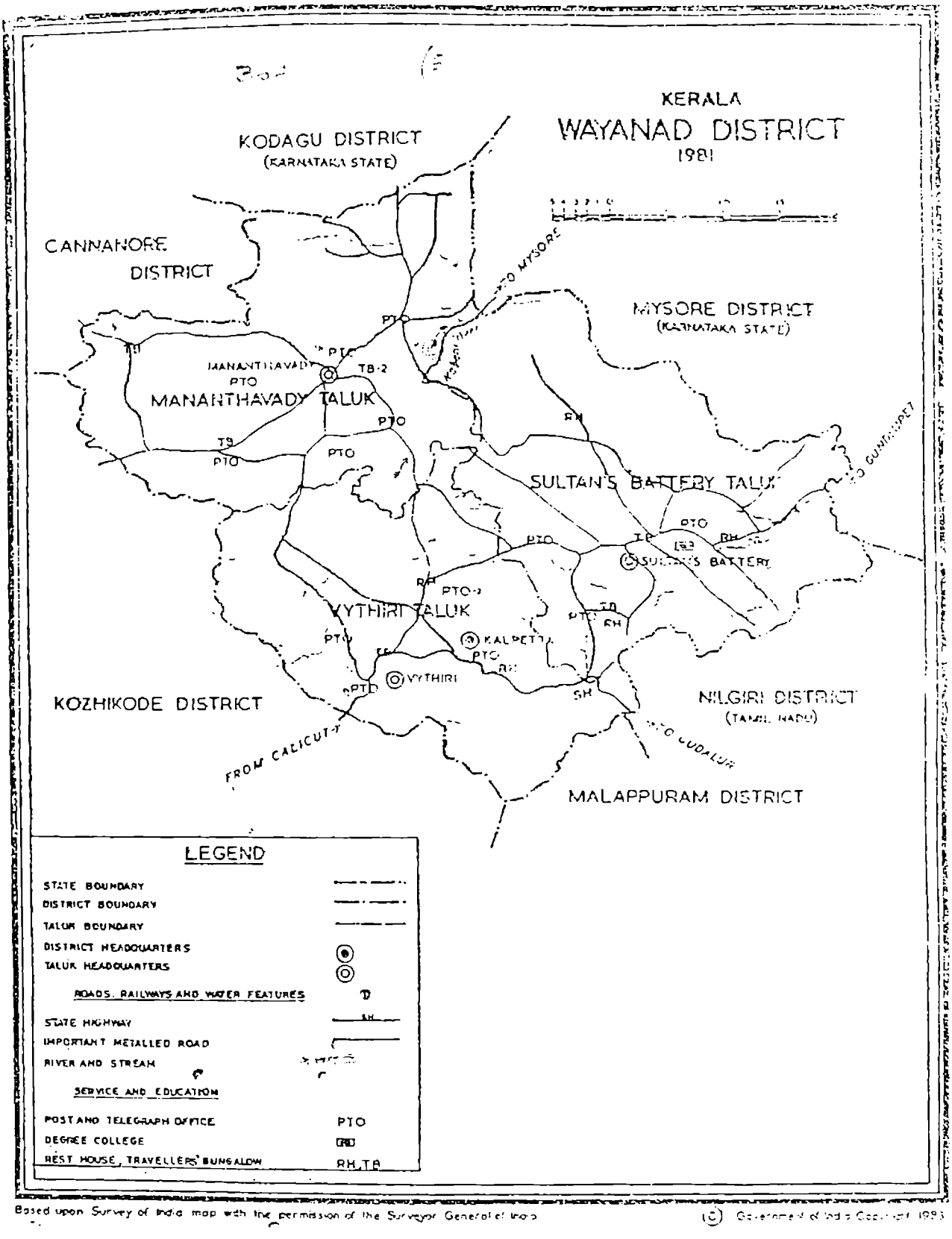
Educationally they are behind several other tribes with 15 per cent as the rate of literacy and like the Kattunaickans they also show a very high percentage of agricultural labourers among them, 50 per cent. The comparative picture of prominent tribes in Wynad in terms of occupation and ownership of land is explained in Table 5.

Table 5 Important Tribes in Wynad and their distribution according to occupation and ownership of land

(percentages)

Tribe	Total No. of households in sample	Occupation					Ownership of land				
		Agriculturist	Agricultural labour	Service	Unskilled labour	Others	No occupation	No land	5-50 cents	51-100 cents	101-200 cents	201+
1.Adiyan	231	0.19	50.98	0.28	0.47		47.80	37.23	32.47	18.18	10.82	1.30
2.Kattunaickan	202	0.11	50.39	0.88	2.00	0.11	46.51	40.50	49.99	4.95	1.49	2.97
3.Kuruman	367	8.66	30.14	0.71	0.49	0.31	59.69	8.99	24.52	9.81	23.16	33.52
4.Kurichian	368	11.02	20.89	0.14	1.29	0.29	66.45	27.08	7.49	7.08	10.83	47.52
5.Paniyan	417	0.13	47.53	0.73	0.94	0.04	50.63	28.53	52.04	8.87	5.04	5.52

Source: Commission on the Socio-Economic Conditions of Scheduled castes and Scheduled tribes - Report Vol.III Part I & II Socio Economic Source Data (pp. 50-51 & p.6).



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Health Care Development among Tribals during the Post Independence period

The programmes for the development of Scheduled Tribes are undertaken by different departments. In the beginning of the plan period all such activities were undertaken as part of rural development but wherever the tribals were in majority 'integrated tribal development blocks' were created to give special emphasis to their problems. The efforts towards tribal welfare acquired a new dimension in the Fifth Plan when we adopted the Sub-Plan strategy for the State. A new department, the Scheduled Tribe Development Department, also came into existence in 1975 and since then it is functioning as the apex department for tribal welfare. It is also responsible for co-ordinating the programmes implemented by other departments for tribal development. Five Integrated Tribal Development Projects(ITDP) were then launched, first in Attappady in 1976 and then in other parts, Punaloor, Idukki, Nilamboor and Mananthody in 1980 to plan, co-ordinate and implement the development programmes for tribes in these regions. The welfare of other dispersed tribes is taken care of by the Department seperately under Tribal Development Officers. The activities of the Department are broadly educational, economic development and welfare oriented, and including

health and housing. The sectoral programmes coming under the Sub-Plan, the programmes with special central assistance, centrally sponsored schemes and the programmes of the Department constitute the range of activities that are undertaken for tribals in the State.

The responsibility of health care development of all categories of populations including tribals primarily rests with the Department of Health and the concerned Directorate of Health Services, both Allopathy and Indian Systems of Medicines. On the basis of the guidelines fixed at the national and at the State level, the Department decides on the priorities and strategies which, as we discussed elsewhere, places added emphasis on the problems of weaker sections like tribals. The norms which guide the provision of facilities are often relaxed for the benefit of tribals. The National Health Policy was unambiguously emphatic about this and suggested a different set of norms for those unserved sections living in hilly and remote areas. The Sixth Five Year Plan also prescribed a different infrastructure in hilly tribal areas with a PHC for every 20,000 population against the general norm for every 30,000 and sub-centre for every 3000 against the 5000 for the general population. The additional resources required for augmenting the facilities are provided through the Tribal Sub-Plan against the physical targets to be realised during

the plan period. The Directorates of Health Services implement these programmes but under the guidance of the Tribal Development Department.

The distribution of medical institutions and beds per thousand populations which we discussed in the previous section clearly indicates the neglect of tribal areas despite their special status and the additional flow of funds. The four districts of tribal concentration, Wynad, Idukki, Palghat and Cannanore, which together constitute about 78 per cent of the tribal population account for only 29 per cent of the total medical institutions in 1980-81. The situation is not any better in the case of availability of beds in these districts. The Fifth Plan recognised this imbalance between regions and included it as a priority item. The Sixth and the Seventh Plans too continued with this objective and the situation improved marginally in these districts and the number of allopathy institutions increased from 286 in 1980 to 349 in 1990 but in terms of the percentage of the total number of medical institutions the increase is only one per cent from 29 to 30. This increase, though limited in magnitude, however, belies the existing disparity within districts between tribal and non-tribal areas. But it is likely that the tribals being inarticulate, ignorant and powerless in cornering benefits are discriminated against. The apathy and indifference

towards their health problems are obvious. Though the Directorate of Health Services spent a considerable amount on strengthening infrastructure in tribal areas it does not have a proper plan nor a monitoring system that can regulate and rectify these programmes. The interventions as a result are routine and mechanical.

The component of health in the Tribal Sub Plan in a broad sense indicates the importance assigned to health in tribal regions. During the Sixth Plan (1980-85) Rs.2410 lakhs or about 1.5 per cent of the total plan outlay of the State was specified for the Tribal Sub Plan. The flow of funds from Medical and Public Health was Rs.53 lakhs or about 2.2 per cent of the total Sub Plan outlay. The Sub-Plan provision has increased both in size and in percentage to the outlay in the Seventh Plan to Rs.3699 lakhs and 1.8 per cent respectively. Provision under Medical and Public Health was Rs.76 lakhs which as percentage to the Sub Plan outlay registered a marginal decrease to 2.0. The Eighth Plan estimates (1990-95) provide Rs.6637 for the Sub-Plan of which the flow of fund from Medical and Public Health is Rs.121 lakhs. As percentage to the total Sub-Plan outlay this shows a decline from 2 to 1.8 compared to the previous plan.

Table 6. Tribal Sub Plan and flow of fund from Medical & Public Health.

(Rs. in lakhs)

	VI Plan (1980-85)	VII Plan (1985-90)	VIII Plan (1990-95)
Provision for Tribal Sub Plan.	2410	3699	6637
Tribal Sub Plan as percentage to total Plan outlay	1.5	1.8	
Flow of funds from medical and public health to Tribal Sub Plan	53	76	121
Flow of funds from medical and public health as percentage to the total Tribal Sub Plan provision	2.2	2.0	1.8

Source: Draft Seventh and Eighth Five Year Plans, State Planning Board, 1985 and 1990.

The sectoral programmes under the Tribal Sub-Plan show only a portion of the spending in Tribal areas. The Tribal Development Department which co-ordinates the sectoral programmes envisaged in the Sub Plan also implements a host of other programmes some of which are assisted partially or sponsored entirely by the Central Government. Health forms an important component in this regard. In the Sixth Plan provision for health under 'special central assistance' was Rs.18 lakhs which accounts

for about 2.9 per cent of the total central assistance under this category. In the Seventh Plan flow of funds under special central assistance, centrally sponsored programmes and other assistance from Centre alone was Rs.76 lakhs of which Rs.59.15 lakhs was earmarked for a 'health project' in Wynad. A major chunk of these provisions is spent on strengthening the health facilities as well as opening of new Primary Health Units and mobile medical units. The total number of allopathic medical institutions in the beginning of the Sixth Plan in the four districts of tribal concentration - Cannanore, Palghat, Wynad and Idukki - is 286 (1980) which has increased to 349 (1990) by the end of the Seventh Plan. In Wynad alone the increase during this period was from 29 to 38. Another set of activities undertaken by the Department was the development of health manpower which included an innovative programme of training tribal youths as health guides. Voluntary organisations were also encouraged through financial assistance to carry out activities for improving the health of tribals. And now, by the end of the Seventh Plan, the Tribal Development Department runs 17 Ayurvedic Dispensaries, 1 Ayurvedic hospital, 2 allopathic dispensaries, 2 mobile medical units and 5 mid wifery centres. The allocation made for the Health Project in Wynad costing about 78.87 lakhs for providing treatment, prevention and control of T.B., Scabies,

Helmenthiasis and visual impairment among Tribes however did not take off during the Plan period for a variety of reasons ranging from inappropriate planning to lack of vision and apathetic attitude towards tribals.

The growth of expenditure on health and related activities and the resultant increase in health infrastructure was conspicuous during the last two Plans. However, assessing the impact of this on the health of tribals poses problems as we lack reliable data on their health problems and health status at secondary level. But the Survey conducted on the socio-economic conditions of scheduled tribes during the years 1976-78 provides a base for further comparisons about their health and sanitary conditions. The Survey concluded unambiguously that modern medicine or allopathic system had made deep inroads into the tribes and had influenced considerably their faith in traditional practices[10] According to the Survey 78 per cent of the households had availed of allopathic medical service either from Government or from private institutions. Traditional systems of treatment were popular but only one-third of the households reported that they had availed themselves of these systems. The pattern, in fact, was to avail different systems at different points of time by the same households. The Survey indicated that immunisation among tribals was popular but not the service of trained

midwives in handling deliveries in houses[11]. Out of a total of 21856 cases 80 per cent of the deliveries were conducted in households with the help of traditional or native midwives, only 6 per cent of the cases were conducted in hospitals and another 8 per cent availed the service of qualified midwives. The major diseases of the tribals during this time were gastroenteritis, dysentry, malaria, erruptive fever, TB and leprosy of which fever, dysentry and leprosy were acute. Another study conducted after a gap of few years by the Commission on the Socio-Economic conditions of Scheduled Castes and Scheduled Tribes under the Chairmanship of Dr. Babu Vijayanath, Government of Kerala also discussed the various aspects of health and sanitation among tribals in the State[12]. And, the findings were supportive to that of the earlier study conducted in 1976. The different aspects covered in this study were their attitude towards different systems of medicine, incidence of diseases, availability of service and mortality some of which will be discussed in the context of health care development in Wynad district.

Trends in Health Care Development in Wynad

The health situation of tribals in Wynad also conforms to the general pattern. The increase in medical institutions and expenditure on various health programmes in

the district are substantial. The number of Primary Health Centres in Wynad in 1980-81 was 13 which has gone up to 28 in 1990. The number of other medical institutions under allopathy has also increased. The total number of institutions under Indian Systems of Medicine is 23 (16 Ayurvedic and 7 Homeopathy) in 1989. Besides these health institutions run by the respective health Directorates,the Tribal Development Department runs 3 mid wifery centres, 3 Ayurveda dispensaries and one allopathy dispensary in Wynad exclusively for the tribal communities. Growth of medical institutions in the private sector too was remarkable and by 1986 Wynad had 88 allopathic, 77 Ayurvedic and 43 Homeo institutions. Altogether the number of medical institutions in the private sector in Wynad was about 219 with 250 doctors and 1594 beds. The increase of medical infrastructure in Wynad was thus remarkable during the post Independence period but its impact on the health of tribals was hardly explored either by the Directorate of Health Services or by the Tribal Development Department. The Report of the study by the Babu Vijayanath Commission, mentioned earlier, covered a wide gamut of socio-economic and other variables in this context and provided valuable insight into some aspect of their health problems and attitudes. The Report covered a total of 1517 households in Wynad belonging to six major tribal communities such as Adiyan, Kadan,

Kuruman, Kurichian, Kattunaickan and Panian and collected information about their attitude towards different systems of medicine, incidence of diseases, availability of services and mortality.

According to the Report, the influence of modern allopathic medicine among them was pervasive. In the case of Paniyans, the largest amongst tribes, 88 per cent of the households had availed modern medicines when there was a need. Even for backward and primitive tribes like the Kattunaickans and Kadars, the percentages were 73 and 100 respectively. This near total familiarity and use of modern medicine however, did not deter them from believing in their age old traditional practices based on resources available from nature. In fact, the trend was to combine different systems depending on the intensity and severity of diseases. 75 per cent of the Panians in the sample believed in the traditional methods of treatment; almost the same was the percentage for kattunaickans and other important tribes except for Kurichians and Kurumans. The details of their responses according to the dependence on medical system is explained in table 7. It was also felt that that the tribals overwhelmingly prefer government institutions to private institutions; in the case of Kadars and Kattunaickan the preference is total.

Table 7 Percentage of households (a) according to systems of medicine depended (b) belief in traditional treatment and (c) preference to institutions

Tribes	System of medicine depended			Belie- ve in tradi- tional treat- ment	Type of inst. preferred		
	Allo- pathy	Ayur- veda	Others		Govt. Disp- ensa- ries	Govt. Hosp- itals	Others
Adiyan	94.37	5.63	-	61.90	61.47	34.63	3.90
Kadar	100.00	-	-	30.00	21.67	78.33	-
Kattunaickan	73.27	26.73	-	73.76	66.44	33.56	-
Kuruman	87.19	12.81	-	54.22	59.45	27.67	12.88
Kurichian	99.58	0.42	-	42.50	37.92	48.33	13.75
Paniyan	88.49	9.35	2.16	73.50	53.00	36.21	10.55

Source: Commission on the Socio-Economic conditions of Scheduled Castes and Scheduled Tribes, Report. Govt. of Kerala, 1983 Vol.III, Part II, pp.84, 86-87, 93.

The Report also provided information about the incidence of epidemic diseases among tribals which varies considerably between them. While the Adiyans and Kurumans accounted for a very high percentage in this regard, 41 and 37 respectively others had shown only low percentages; less than 10 in all cases. With regard to child mortality during the last five years the Tribals in the district

record a comparatively high percentage. In the case of Kadars mortality was particularly high where 14 households of a total of 60 households surveyed reported incidence of child deaths during previous 5 years. This was about 23.3 per cent. Even among other tribes the percentages were high compared to other sections of the population. Preventive services such as immunisation through public health institutions did reach the tribals to a certain extent. In the case of Kurichians who are considered as advanced, 52 per cent of the households had utilised these preventive facilities while the percentage of beneficiaries among Kattunaickans was only 15. The pattern was almost the same in the case of households who availed of the pre and post natal services. The message of family planning did not percolate evenly among the tribals. Among kattunaickans the percentage of households who were aware of family planning was low while it was comparatively high among Kurumans.

The results discussed above are indicative of the nature of changes that are taking place in tribal areas. In the first place, the received notions about the 'irrationality' of tribals and hence their affinity to cling on to their 'primitive' ways which is often cited as the stumbling block of development proved to be a myth, especially in the case of their attitude towards different medical systems. The attitude, which undoubtedly favours the

Table 8 **Percentage of households (a) affected by epidemic diseases (b) having child mortality during last five years (c) getting preventive services (d) reported availability of pre and post natal care and (e) reported awareness of family planning**

Tribes	(a) Affected by epidemic diseases	(b) Child mortality	(c) Getting prevention services	(d) availability of pre and post natal care	(e) awareness of family planning
Adiyan	41.13	12.12	38.10	33.77	22.94
Kadar	-	23.33	28.33	26.67	30.00
Kattunaickan	5.45	9.41	14.85	12.87	4.95
Kuruman	36.51	1.09	38.15	13.62	35.15
Kurichian	4.58	15.00	52.50	29.17	32.08
Paniyan	6.47	16.31	46.04	27.10	14.63

Source: **Op. cit.** pp.94-105.

allopathic system, also suggests that they combine, without contradiction, their own traditional systems with other options. While they believe in modern medicine and depend on it in times of medical catastrophies they also have faith in their traditional systems which they choose rationally depending on the intensity of the illness and the need. However, those who are advanced like the Kurichians are moving away from traditional practices and depend

increasingly on allopathic or other systems. The preference for medical institutions, which is overwhelmingly in favour of government institutions and that too of certain categories is again significaint. Out of the six tribes mentioned in the Report only the Panians, that also an insignificant percentage of 0.24 among them, have shown preference for Primary Health Centres compared to other government institutions such as dispensaries and hospitals. The Report did not offer any explanation for this but it raises several questions concerning the availability of institutions within their reach, their general awareness of these institutions and above all the emphasis on health care, curative or basic health care oriented, that is expected by the tribals as well as what is provided for them. Infant mortality among the tribes, which broadly reflects the health status and also the efficacy of health institutions in the area, is considerably high. The tribals are also not appreciately aware of the facilities available in health institutions such as the pre natal and post natal care. Even family planning, for which the entire rural health is now oriented, failed to stir any enthusiasm among tribes which was evident from the low percentages in this regard. The trend that evolves thus is clear: that while the tribals on their part accept modern medicine and also express their faith in it the institutions are either

limited in number to meet their health problems and needs or are inadequate and poorly equipped and are apathetic to their needs. Or it can well be a combination of all these.

Conclusion

The trend and the level of health care development of tribals are intricately linked to their social and economic position as well as their relative status with other segments in society. The massive investment for improving their economic conditions and integrating them in the mainstream social culture has bypassed a large number of tribals. The development efforts after Independence, by and large, triggered off a process of pauperisation of tribals that gradually dispossessed them of their land and placed them in the labour market of unskilled labourers on unequal bargaining terms. The tribal situation in the State, thus, is characterised by extreme poverty and exploitation by non-tribals which pushed them to marginal categories in society. And, unlike the general communities the differentiation within them is also low. The number of communities among them showing an upward mobility is insignificantly small.

Wynad district, which is considered as the tribal district, is a microcosm in this regard. The tribal

communities, by and large, accept and use modern medical services and prefer government institutions to other categories. The institutions that are popular among them are hospitals and dispensaries where the services provided are primarily curative. The Primary Health Centres are either unpopular or non existent, as is evident from the use pattern, and this points to the relative neglect of basic health care on the pattern of 'primary health care' envisaged by the WHO. The increase in the number of institutions and facilities such as the provision of inpatient service does not per se indicate an improvement in the health status of tribals. Infant mortality is still considerably high among them. The awareness about pre natal and post natal services as well as of family planning is low which again indicates the exclusion of tribal communities from the focus of medical care.

The trend that evolves, after our committed efforts during the last three decades supported by the constitutionally guaranteed measures of protective discrimination and special programmes, is one of despair and exposes the inherent nature of our health care delivery systems that ignores the health problems and requirements of people. Its growth as well as its use is largely decided by the bargaining strength in the political system which is against marginal populations like tribals. The emphasis of

medical care which is in use is also contrary to the integrated concept of preventive, curative, promotive and rehabilitative health care.

Notes and References

1. Mathur. P.R.G. (1977). **Tribal situation in Kerala**, Kerala Historical Society, Trivandrum, p.4.
2. Bureau of Economics and Statistics (1979). **Report on Socio Economic Survey of Tribals in Kerala 1976-78**, Government of Kerala, Trivandrum.
3. **Ibid.**
4. Tribal Welfare Department (1985, 1982), **Tribal Sub-Plan of Kerala 1980-85 and 1981-82**, Government of Kerala, Trivandrum, 1981.
5. Mathur, P.R.G. (1977). **op. cit.** p.67.
6. The system of bonded labour in Wynad. Under the system the triabls who take loan from non tribal land lords pledge himself and his family at landlord's service. The relationship is customary and the bonded tribal families depend entirely on these landlords for their existence.
7. Government of Kerala (1983). **Commission on the Socio-Economic conditions of scheduled castes and scheduled tribes**, Report, Vol.3, Trivandrum.

8. Mathur, P.R.G. (1977) **op. cit.** p.77.
9. Institution of family among the Nair communities of Kerala. Large matriarchal families where the property is protected through matrilineal rights of inheritance.
10. Bureau of Economics and Statistics (1979), **op. cit.**, p.73.
11, **Ibid**, p.74.
12. Government of Kerala (1983). **op. cit.**

CHAPTER IV

HEALTH PROBLEMS: PERCEPTIONS AND PRACTICES

In Chapter four we shall analyse the nature of health care development among tribals in Wynad on the basis of the data we collected from field. Their 'health culture' as it manifests itself in certain health attitudes and behaviour is studied. In order to do this in the first section we draw a profile of the sample households of our study. In the next section we follow this up with their perceptions of health problems. This is followed by an analysis of their attitudes to health care development organised for them.

Health problems of populations are intricately linked to the environment in which they survive. The dimensions of this relationship are complex and cover an entire range of economic, social, cultural, political and ecological aspects which interact between them and attribute meaning to health and illness, mould perceptions and shape responses. It also determines the health status of people and indicates as well, the extent to which the institutions and opportunities that influence health are utilised by people. This interrelationship of various factors manifests

in a 'health culture' and reflects ultimately, in the health behaviour and attitudes of populations. The health culture, then, decides the success of interventions by Government intending to effect changes in the health standards. They, the interventions, in most cases represent a different culture,can succeed only if it can integrate and diffuse itself with the existing health culture which varies from group to group and community to community. In the case of dominant groups the contradictions between the imposing culture of the interventions, and the existing culture is minimum, but when it moves down in the social hierarchy, the conflicts magnify delaying integration and diffusion. It also betrays the goal of attainment of improved standards of health. The case of tribals, who are the lowest in the social hierarchy, illuminates this contradiction sharply.

The health problems of tribals and its origins, when considering their historical backwardness and isolation, are likely to be different and distinct. We now attempt to explore these problems in the larger context of understanding the nature of health care development and the contradictions that emerge. It begins with a discussion of the background in which the problems originate, the environment and the living and working conditions, and then moves on to the nature of these problems and the way they

are perceived by the tribals. The backward tribal response to health problems or broadly the health practices are then discussed to facilitate a comparison with the rational ways that are advocated through innumerable interventions since Independence. It will also attempt to examine health care development through the receiver's point of view who in our case belong to the lowest social strata.

Profile of the Sample households

The sample households, 179, includes all major tribal communities in Wynad district. The Paniyans, the largest of the total tribal population in the district, constitute about 35 per cent in the sample while the Kurumans, second in strength with 21 per cent of the total tribal population constitute about 31 per cent. The other communities represented in the sample are Kurichians, 10 per cent; Uralis, 10 per cent; Adiyans, 6 per cent; Kattunaickans, 4 per cent and Malai Arayans 4 per cent (Table 1). The discussion of the characteristics of these sample households so that a profile emerges is confined to variables that explain their living conditions and economic status. This is so because we consider that the other aspects, social, cultural or others, emanate from the economic base which, though interconnected at several

levels, determine the nature and extent of these other dimensions. They are also direct and visible and serves adequately to explain the social origin of illness among tribals.

Table I Distribution of households in the Sample: community wise

Tribal community	No. of households	No. of households as percentage to total households
1. Paniyan	63	35
2. Kuruman	55	31
3. Kurichian	18	10
4. Urali	18	10
5. Adiyan	10	6
6. Kattunaickan	8	4
7. Malayarayan	7	4
Total:	179	100

The economic conditions of tribal households in the sample are explained in terms of three indicators - land, occupaton and income - which are inter-related and inter-dependent. Land is still the main economic base for tribals. It had been abundant in the past and they had the

freedom to choose the land they wanted. The trend had been reversed in the course of two generations that witnessed waves of migration of non tribals to these regions and the enactment of several stringent laws that prevented the use of forest land and resources to the original inhabitants which resulted into a process of alienation of land[1]. The sample households clearly reflect this present predicament. Out of the 179 households in the Sample 49 per cent or nearly one-third are landless; the majority, have very little land not exceeding one acre. The rest 25 households or 14 per cent have reported that they own not more than one acre of land (Table 2). The disadvantage in the ownership of land is also reflected in the occupational pattern. Cultivators are few, only 14 per cent of the total households, while the majority, 78 per cent, are agricultural labourers. The non-agricultural occupations are insignificantly low with few among them in service either in government or in private enterprises. The dependence on land and land based occupations therefore, is near total whether they are agriculturalists or casual workers in plantations. The differentiation among them unlike in the case of larger communities is minimum; so also the differences between communities. The Kurichians and the Kurumans, however, are marginally better off than the rest in terms of ownership of land as well as of occupation.

Table 2 Distribution of households in the sample by ownership of land

Ownership categories	No.of households	Percentage to total
Without Land	49	27.4
1 - 50 cents	64	35.7
51 - 100 cents	41	22.9
101 - 300 cents	17	9.5
301 and above	8	4.5
Total	179	100.0

Table 3 Distribution of households in the sample by the main occupation: community wise

Sl.No.	Tribal communities	Total no.of house-holds	Occupation - Number of households			Total per-cen-tage
			Agricu-lturist	Agricu-ltural labour	Service	
1.	Paniyan	63	4 (6.3)	56 (88.9)	3 (4.8)	(100.0)
2.	Kurumban	55	10 (18.2)	40 (72.7)	5 (9.1)	(100.0)
3.	Kurichian	18	6 (33.3)	8 (44.4)	4 (22.2)	(100.0)
4.	Urali	18	3 (16.7)	14 (77.7)	1 (5.6)	(100.0)
5.	Adiyan	10	1 (10.0)	8 (80.0)	1 (10.0)	(100.0)
6.	Kattunaickan	8	-	8 (100.0)	-	(100.0)
7.	Malai Arayan	7	1 (14.3)	5 (71.4)	1 (14.3)	(100.0)
	Total:	179	25 (13.9)	139 (77.7)	15 (8.4)	(100.0)

(Figures in the bracket are percentages to total)

The average annual income of families, also corresponds to the situation explained above. The range of income in the sample varies from a little less than 1000 to 20,000 which indicates the plight of even the better off among them. Those who earn more than Rs.5000, the 5,000-10,000 and 10,000-20,000 categories, together constitute only 12 per cent of the sample while the majority falls in income groups of Rs.1000 - 5000. The differentiation among them in this regard is also insignificant except perhaps the marginal advantages enjoyed by certain communities like the Kurichians (Table 4).

Table 4 Distribution of households in the sample by average annual income: community wise

Sl. No.	Tribal communities	Total number of households	Income class (Rupees)				
			<1000	1001-2500	2501-5000	5001-10000	10000+
1.	Paniyan	63	3 (4.7)	26 (41.3)	30 (47.6)	3 (4.8)	1 (1.6)
2.	Kuruman	55	-	17 (30.9)	28 (50.9)	6 (10.9)	4 (7.3)
3.	Kurichian	18	-	2 (11.1)	9 (50.0)	4 (22.2)	3 (16.7)
4.	Urali	18	-	7 (38.9)	11 (61.1)	-	-
5.	Adiyan	10	2 (20.0)	4 (40.0)	4 (40.0)	-	-
6.	Kattunaickan	8	3 (37.5)	5 (62.5)	-	-	-
7.	Malai Arayan	7	1 (14.2)	3 (42.9)	3 (42.9)	-	-
	Total:	179	9 (5.0)	64 (35.7)	85 (47.5)	13 (7.3)	8 (4.5)

(Figures in the bracket are percentages to total)

The interrelationship between these three variables - landlessness, unskilled occupational status and low income - constitute the first level vicious circle that runs basic to many of the handicaps the tribals have. The relationship, however, gets complex as it includes other factors such as lack of education, low level of health and other aspects contributing to their marginalisation. In the case of education, which is considered as an important intervention in breaking the vicious circle of backwardness, the tribals are laging very much behind the general population notwithstanding their comparative advantage with their counterparts elsewhere in the country. The rate of literacy among tribals as per the 1981 census, in Wynad district was 14.2 which was the second lowest among districts. The situation, as reflected in the sample, has improved during the last decade. Of the total number of 829 persons above the age of five, 374 are literates which constitute about 45 per cent of the total. 327 persons are educated upto primary level and the rest are distributed among different levels but not above school level. The differences among various communities are not acute but certain communities are better off in this regard.

The living conditions of the tribals are depressing. They live in unhyginic surroundings, in poorly built houses having no facilities such as safety latrines,

Table 5 Distribution of households by the level of education: community wise

Sl. No.	Tribal communities	Total no.of households	Educatinal level of family members					
			Illiterates	Upto primary	Upto middle	Upto secondary	Upto college	total
1.	Paniyan	63	179 (63.2)	61 (21.6)	22 (7.8)	20 (7.1)	1	283 (100.0)
2.	Kuruman	55	130 (52.2)	76 (30.5)	19 (7.6)	21 (8.4)	3 (1.2)	249 (100.0)
3.	Kurichian	18	38 (43.2)	30 (34.1)	8 (9.1)	8 (9.1)	4 (4.5)	88 (100.0)
4.	Urali	18	45 (49.5)	29 (31.9)	7 (7.7)	9 (9.9)	1 (1.0)	91 (100.0)
5.	Adiyan	10	23 (53.5)	12 (27.9)	6 (13.9)	2 (4.7)	-	43 (100.0)
6.	Kattunaickan	8	24 (64.9)	9 (24.3)	4 (10.8)	-	-	37 (100.0)
7.	Malai Arayan	7	18 (47.4)	10 (26.3)	6 (15.8)	4 (10.5)	-	38 (100.0)
	Total	179	457 (55.1)	227 (27.4)	72 (8.7)	64 (7.7)	9 (1.1)	829 (100.0)

electricity or other aminities. The number of respondents having pucca houses are only 4.5 per cent and a large number of them live in Kutcha houses, 78 per cent. The rest have poor housing arrangements such as huts which are difficult to categorise as shelters. Drinking water is available to most of the households but not within easy distance for several families. The major sources are pits, natural

streams and rivers, ponds, wells and in few cases hand pumps too installed by public authorities for common use. The natural sources are always not safe and most of them use non-potable water for drinking. The distances to the source of water supply for the majority of households, 66 per cent, fall within one kilometre but the rest have to walk distances not exceeding 5 Kms. to fetch water. Use of safety latrines are neither popular nor compatible with their circumstances and consequently 98 per cent of them use open space leaving only 2 per cent having safety latrines in their compound.

The characteristics that are relevant in this context are their family size, male-female division and the number of children in the family. The tribal families are largely nuclear except among Kurichians who still practise the old matriarchial system of joint family similar to that of the Tharavads of Nairs. The change from joint family to nuclear family, in the case of several communities, gained momentum only during this generation but the clannish ties among them are still strong and influence decision making. The average size of a tribal family in Wynad is 5.6 and it varies substantially between communities. Kurichians are exceptional and invariably show a larger family size. Even the high figure we arrived at in this regard is due to Kurichian households who constitute about 10 per cent of the

total households in the sample. The total number of persons in all 179 households are 997 of which 377, or 38 per cent, are children below the age of 15. Those under five among this sub-group are 168 or 44 per cent of the total. The adult population, which is about 62 per cent, is divided almost evenly between male and female but the females(323) have a slight edge over the males (277).

Table 6 Profile of a Tribal family in the sample

Description	Quantity
1. Average size of land holding (cents)	60.5
2. Average annual income (Rs.)	3647.0
3. Major occupation-percentage of households:	
a) Agriculture	14
b) Agricultural labour	78.0
4. Average size of a family	5.6
5. Number of children under 15 per household	2.1
6. Number of children under 5 per household	0.93
7. Male-Female Ratio	2.7:3.2
8. Percentage of literates	45.0
9. Percentage of families having pucca houses	4.5
10.Percentage of houses having safety latrines	2.0
11.Percentage of households who have to walk more than 1 Km to fetch water.	34.0

The above indicators capture the quantifiable dimensions of the living conditions of tribals as well as

the extent of their backwardness in Wynad. However, the problems of poverty and deprivation are more complex and requires different methodologies to comprehend it. The field observations during data collection partly compensates this drawback and provides valuable insight in this regard. What strikes an outsider is the sight of children who are undernourished, undeveloped, poorly clothed and filthy. They are neither encouraged to go to school nor are they willing, which is only natural. A number of them are drop outs after a year or two of schooling. Infact, they, the parents, are indifferent to everything even to their struggle for survival. The tendency is more pronounced in the case of male members, particularly the middle aged and older people, who prefer to sit in their houses even when they are starving and when opportunities of employment are available. The womenfolk is different, and make up partly for this indifference among male tribals and work as casual labourers in tea, coffee and cocco plantations. The cultivating families to a certain extent, differ from this pattern and the work participation of male members is substantial. The tribals are apprehensive of outsiders even of those who are familiar and live among them. They give the impression of a hunted group and shy away from opportunities of mingling with others. This attitude is not unwarrented considering their past. It was conspicuous to us especially when the

elders talk about their affluent and happy past which they have lost for a variety of reasons, most of them treacherous, to the non tribals.

The image of the Government is an all powerful one for an average tribal and consequently it has developed a tendency of unhealthy dependence on government for all his needs. The Government has strengthened their attitude of inertia and indifference to work as there are assistance galore which, of late, have become a lucrative source of exploitation for contractors and middlemen and also for alcohol peddlars. The exploitation of tribals in fact recently acquired a different meaning and dimension and it is more subtle and veiled. Tribal development as a crash priority attracts huge funds to tribal areas under different heads which instead of improving their lot is shared by a caucus of exploiters at different levels in different ways. The failures, the non-performance and the pilferage are excused, even legitemised,on the ground that the tribals are ignorant, apathetic and hence are unprepared and inflexible for such development initatives. The net result of interventions, whatever the explanations, is the further deterioration of their conditions where they are reduced to helpless groups and also to a perpetural source of exploitation. They are also carefully excluded from the framework of mainstream culture. Field work provided

opportunities to encounter several such instances. The problems of health which is the focus of the study are linked to their present situation and to the interplay of various factors that generate this state.

Health problems: perceptions

The economic conditions and the living environment that are discussed above in normal circumstances lead to a variety of health problems. That is, the barely adequate income for survival, the lack of opportunities and lack of skill to improve this state of affairs and the resultant spiralling deterioration of their conditions, the added disadvantage of ignorance due to illiteracy, the unhygienic circumstances and personal habits, the contaminated water they drink and the lacks of basic aminities all make the tribals susceptible to a host of communicable diseases the outbreaks of which are frequent. The severity of these out breaks or health problems, however, does not strike the tribals harshly as they consider these problems as routine hazards, or one among the many in their survival. As a result, their perceptions of illness is also different; so are their responses which are directly linked to these perceptions.

The study made an attempt to record their views

about major health problems the respondent or his family members had faced in the past two years. The results are explained in Table 7. The manifestation of a health problem for the tribals is the attack of a disease which makes the individaul dysfunctional or make him incapacitated to do his routine work. They also associate continuous medication as evidence of health problems. The views about such problems, explained in Table 7 are their perception of diseases in the form of symptoms they could identify and the sufferings they had. Out of the 179 households in the sample 161, 90 per cent, have reported incidence of diseases or health problems during the reference period. The major category of symptoms are fever and associated sicknesses, 35 per cent, diaorrhoea/dystentry, 17 per cent, skin diseases, 5 per cent, T.B., 2 per cent and other assorted problems which they are unable to specify, 41 per cent. The incidence of sickness in all these cases were 225 of which 68 were for men, 34 were for women and the rest 123 for children.

Illness has a definite role and meaning in their life and most of them believe that it is a punishment for their sins or something destined upon them by god almighty. This fatalistic attitude towards illness gives them strength to face it stoically when compared with other categories of populations. Consequently, their efforts to prevent such calamities supposes a different set of actions

Table 7 Distribution of households in the sample by perceptions of health problems

Perceptions	Number of households	percentage to total
1. Fever, other related symptoms	56	35
2. Dysentry/Diarrhoea	27	17
3. T.B.	3	2
4. Skin Diseases	8	5
5. Other serious health problems	67	41
Total	161	100

and responses which in most cases aim at propitiating the dieties and spirits. The attitude also injects a sense of helplessness and therefore an indifference among them to combat diseases. This, surprisingly, does not make the tribal ignorant about the impact of the environment in which they live in generating health problems. To a direct enquiry about the possible reasons for diseases the respondents came out with a set of rational opinions which attributed the reasons of illness to inadequacy of food, unhygienic surroundings and contaminated water. However many of them were inarticulate in explaining these linkages.

Table 8 Distribution of households in the sample by their opinion about the reasons for health problems

Reasons	No. of households	Percentage to total
1. Lack of hygiene	6	5
2. Lack of food	15	11
3. Lack of clean drinking water	4	3
4. Do not know	108	81
Total:	133	100

Consistent with the fatalistic attitude towards illness, matters relating to health occupy a low priority in their scheme of things. Many of the health hazards therefore pass off unnoticed even if they are aware of its bitter consequences. And consequently, problems get fatal and catastrophic necessitating intensified action. This indifference or the apparent negligence towards their health problem is consistent with their living conditions where survival itself poses an uphill task. They have no other choice but to ignore these problems. The situation, as we could gather during the field visit, is similar to that described by Banerji in his study on health culture in India[2] "The consequence of extreme poverty, he writes, is that it tends to numb the senses of victims - it is just

like numbness due to destruction of nerves in leprosy. A highly anaemic, grossly malnourished and undernourished women, who carries all sorts of infections, still thinks that she is normal, because that is the sort of life she had been living for as long as she remembers. Why, her parents also lived such a life! And apart from 'what can be called diseases of poverty', which have become a 'normal' part of their 'normal' lives diseases also strike them in the form of medical catastrophes, and these strike them more often than they do other groups"[3] The tribals in Wynad fit very much in the above frame work.

Responses to health problems

The meaning of illness becomes more explicit in their responses to these incidences. The fatalistic dimension, as noted above, which makes the tribal indifferent and apathetic, however, does not prevent him from taking rational decisions when a situation gets acute. In the case of tribals in Wynad, the responses to medical problems present a definite range from a set of responses bordering on faith healing and traditional practices to a set of familiar responses that are described as rational in the modern context. And, both are linked organically, and rationally too, as a smooth continuum minimising

contradictions. The initial response to a health problem when it manifest itsef is to resort to the traditional practices which in several cases is a package of home remedies, the knowledge of which had been passed on from generations and therefore, are known to most of the adult members particularly the women of the family, magic or 'pooja' and other ways of propitiating the diety and then, the service of the medicine man who in majority of cases combines pooja and folk medicines. If thèse initial steps do not respond the tribals resort to the second set of responses leading them to avail of the services of medical institutions that are accessible to them. The first set of reactions, integrated in their culture, is giving way to the second set of rational choices which is evident from their reluctance to talk about it in the open. The younger generation is particularly conscious of this and discourages the elders during the course of our conversations.

With regard to the first response to medical problems 80 per cent of the sample households resorted to traditional practices where medicines prepared at home were administered, or patients were taken to the local medicine man who in several cases, combined pooja with herbal preparations. Witchcraft or blackmagic on large scale was rare and the pooja ceremonies were limited to simple

offerings to the diety. Significantly, the relationship between the tribal customers and the medicine man was not always exploitative as his charges were by and large, affordable and his demands simple. The medicines are generally useful and controls several ailments which are common among them. In certain settlements, the moopan or lineage headman of the tribal community combines the role of poojari, oracle (in fact in several cases of faith healing this forms an important part) and medicine man. Kattunaickans are particularly so in this regard where the moopan plays an important role in decisions concerning health problems. The response to illness in the form of specific steps taken in the sample are explained in Table 9.

Table 9 Distribution of households in the sample by steps taken at the time of illness

Steps taken	No. of households	Percentage to total
1. Given medicines prepared at home and nothing else	8	5
2. Taken to Medicine Man/to hospital		
a) Traditional medicine/pooja only	27	17
b) Traditonal medicine/pooja and then to hospital	107	66
3. Did not do anything	19	12
Total:	161	100

As seen from the table, the responses against illness can be broadly categorised into three patterns. The first, that gives medicines prepared at home, usually herbal preparations popular among them, and the illness gets cured either partly or wholly and the treatment is stopped with that. The second which takes the patient to the tribal traditional healer who generally combines medicine with customary practices of propitiating spirits. If the ailment is not cured with these steps the patients are then taken to hospitals, mostly allopathic hospitals located at considerable distances from their homes. The third set of behaviour generally ignores the symptoms as they do not come in the way of their routine. The percentage of households belonging to the first category is only five. Those belonging to the second category is about 83 per cent and those who stopped medicine at the level of traditional healer constitute about 17 per cent. The steps taken are further disaggregated in terms of symptoms which brings the above patterns more in focus. In the case of fever and assorted symptoms 70 per cent of the cases had to use hospital services, only 25 per cent resorted to traditional practices. In the case of dysentry, use of hospitals was considerably low, 52 per cent; so also was the case with skin problems, 50 per cent. For T.B. dependence on hospitals and modern health care was hundred per cent. In other

serious health problems too most of them, 70 per cent, have availed of the use of medical institutions.

Table 10 Distribution of households in the sample by steps taken: symptom wise

Symptoms	Steps taken				Total
	To hospital	Traditional practices	Home made medicine	Did not do anything.	
1.Fever,other related symptoms	39 (70)	12 (21)	3 (5)	2 (4)	56 (100)
2.Dysentry/Diarrhoea	14 (52)	7 (26)	1 (4)	5 (18)	27 (100)
3.T.B.	3 (100)	-	-	-	3 (100)
4.Skin problems	4 (50)	3 (37.5)	1 (12.5)	-	- (100)
5.Other serious health problems	47 (70)	5 (8)	3 (4)	12 (18)	67 (100)
Total:	107 (66)	27 (17)	8 (5)	19 (12)	161 (100)

(Figures in the bracket are percentages to total)

taken

The steps against medical problems also vary with patients. The health problems of adults, as reported by respondents, are generally serious and requires services of hospitals where as the problems of children are not always acute and for these traditional remedies are adequate. In our sample nearly 70 per cent of the problems of adult members, both male and female, required hospital services as

the traditional systems failed to improve the conditions. Among children the percentage was considerably low, only 30, (Table 11) and in most cases their problems are confined to diarrhoea or dysentry, fever and skin problems. The table also indicates a significant tendency among tribals in their response to the health problems of family members in that the problems of female, who outnumber men in the sample, receive a low priority compared to those of men and children. Out of the 225 incidences of illness only 34, or 15 per cent, have been recorded against females while it were 68 or 30 per cent against male members. Children constituted the largest percentage in this regard, 55 per cent. The relative negligence of women's health problems is ingrained in the social organisation and outlook that attributes a low status to women, in society and family, inspite of their major contribution to the survival kit. To a great extent, this active role as the major bread winner of family also imposes restrictions on them to take on the sick role, warrented through it is, as it affects the survival of all members. Consequenty, women generally live with their infections till it explodes to a debilitating state. The table also provides insight into this aspect that out of the 34 incidences of illness for females 24, or 70 per cent, had to be either hospitalised or had to receive its service.

Table 11 Distribution of households in the sample by steps taken: patient wise

Steps taken	Category of patient			Total
	Male	Female	Children	
1. To hospital	46(68)	24(70)	37(30)	107(48)
2. To traditional healer	12(18)	5(15)	32(26)	49(21)
3. Home made medicine	3(4)	1(3)	30(24)	34(15)
4. Did not do anything	7(10)	4(12)	24(20)	35(16)
Total:	68(100)	34(100)	123(100)	225(100)

(Figures in the bracket are percentages to total)

The tribals, by and large, indicate a clear preference for government medical institutions. This is inevitable partly because of the non-availability of other institutions and partly because of their inability to afford the expenses of private medical care even if it is available. In the sample, out of the 107 instances of hospital utilisation nearly 88 per cent have availed the services of government institutions whether they are district or taluk hospitals, primary health centres, dispensaries, sub centres or Ayurvedic dispensaries. 12 per cent of them however, utilised private facilities. The popularity and acceptance of allopathic practices are near total that they identify modern health care with these institutions. The reason again, is primarily familiarity in

that most of the institutions available in the region belong to this category. The Ayurvedic dispensaries are few and somehow, do not attract the interest of tribals probably because they do not see much difference between their traditional systems and Ayurvedic practices. The type of institutions is also important in their framework. A sub-centre or a dispensary even if it is well equipped ranks below in their preference hierarchy compared to a taluk hospital or a district hospital. The use pattern as explained in Table 12 also suggests this discrimination. And for tribals in Wynad, the primary health centres and hospitals cater to most of their needs but availing of these facilities invite more trouble and expense.

Table 12 Distribution of households in the sample by the type of hospital facilities availed

Type of facilities	No. of households	Percentage to total
A. Government Hospitals:		
1.Taluk/District Hospital	33	31
2.Primary health Centre	42	39
3.Sub-Centre	7	7
4.Dispensaries	9	8
5. Ayurvedic dispensaries	3	3
Total Govt. hospitals	**94**	88
B. Private Hospitals	13	12
Total:	107	100

There are several factors that influence their decisions concerning the choice of facilities. The main consideration, as indicated by several households in the sample, is the spatial accessibility. Distance is not only a hindrance that strengthens their general indifference but also a cost in terms of time and money. Consequently, an institution becomes attractive and availed properly when it is near their homes. 54 per cent of our sample households stated that distance is the chief consideration for availing a medical facility. The type of services comes next in their reasoning and the tribal is attracted to institutions where the services are free (24 per cent). The preference towards governmental institutions, which was overwhelming, is explained partly by this. The other factors that influenced the choice is the advice from others, mostly from their own people who have already availed the services or advice from government officials (7 per cent). The rest 5 per cent consider the encouraging behaviour from hospital staff as the chief motivating factor.

The traditional practices and customs in dealing with health problems are probed further to ascertain its role in the present context. The practices, as we have noticed in terms of the steps taken, are widespread and are combined with other options in a rational way. However, this rational mix of traditional with modern practices is recent

Table 13 Distribution of households in the sample by reasons for utilising a particular facility

Reasons	No. of households	Percentage to total
1. Nearness	97	54
2. Free services	43	24
3. Only available one	18	10
4. Advice from others	13	7
5. Good behaviour from hospital staff.	8	5
Total:	179	100

as their belief in supernatural powers was strong. Most of the tribals have different deities and spirits who are connected with various diseases. There are religious ceremonies and offerings to please these gods and godesses which gives special meaning to their life. The Kattunaickans still deeply believe in this evil spirits who influence their decisions concerning health and illness. The moopan exercises his control over others as he is the person who is responsible for appeasing these spirits. They also talk about ancestral spirits who are generally benevolent and protect them from calamities like Malaria and chicken pox. The traditional system where the supernatural spirits are evoked is known as 'Daivam Kanal' but its influence and popularity is declining. The tribals, particularly the

younger generation, are reluctant to talk about these traditional system and confines its practices to the barest minimum level. The traditional system as is practiced today, therefore gives weightage to its medical component that is centred around herbal preparations and other folk medical practices. Some of these preparations are extremely effective but its knowledge is guarded and passed on to next generations on the basis of certain customs. The medicine man commands respect from his community and offer advices on what to do when diseases occur. His other role as the poojari and the godman in this respect makes his authority more serious and maintains a healthy relationship with his people. Generally, he is aware of his limitations and urge people to seek other help when problems deteriorate further.

In terms of faith in traditional practices, more than half of the respondents admitted that they believe in such practices but the degree however, varies from tribe to tribe. Among the Paniyans, the number of households who admitted faith in traditional system were 36 or about 57 per cent. The percentage was low among the Kurumans, Kurichians, Malai Arayans and Uralis, 38, 33, 43 and 50 per cent respectively. Among the Kattunaickans faith in such practices was total and among Adiyans the percentage was 80 per cent.

Table 14 Distribution of Tribal communities in the sample by their faith in traditional practices of health care

Tribal community	Total No. of households	No. of households haivng faith	% to total
1. Paniyan	63	36	57
2. Kuruman	55	21	38
3. Kurichian	18	6	33
4. Urali	18	9	50
5. Adiyan	10	8	80
6. Kattunaickan	8	8	100
7. Malai Arayan	7	3	43
	179	91	51

The practice of performing pooja, black magic or other such ceremonies, though on the decline, is not confined to minor disorders or to any particular ailment. It is a custom and a natural response to all health complaints. The behaviour of the sample households in this regard is indicated in Table 15 that explains the symptoms or the manifestation of the health problems, for which the services of the poojari was sought. Out of the 91 households who admitted the practice of pooja or other such ceremonies, 30 per cent performed it for symptoms such as fever, body pain and other minor disorders. 15 per cent have practised it for diarrhoea or dysentry while 25 per cent

performed it against major illness where the patients were in acute condition. Mental problems, or as the tribals call it, 'Chekuthan koodal' which literally means possessed by evil spirit necessitated pooja for 9 per cent. Other instances where pooja was performed constituted about 21 per cent in the sample. The perception of symptoms as reported by the respondents cannot reflect the real medical problems, it indicates the pervasive nature of these practices which covered a wide range of health problems. In certain cases, 14 out of 23 households who performed pooja for major illness, conducted it as the last resort as they failed to get diseases cured through other means including the service of allopathic hospitals.

Table 15 Distribution of households in the sample who practised pooja against symptoms

Symptoms	No. of households performed pooja	Percentage to total
1. Fever, other symptoms	27	30
2. Dysentry/Diarrhoea	14	15
3. Major illness/acute condition	23	25
4. Mental problems	8	9
5. Others	19	21
Total:	91	100

The social role of the poojari as the person who commands respect and confidence of people in influencing their health habits is important in this context. In the system that is prevelent in Wynad, barring minor variations between communities, the poojari, as he combines the practice of tribal medicine, performs the role of a first level practitioner. He offers advice on what to do and his clients generally accept it on faith. The relationship normally is smooth and trouble free. The medicines and other faith healing practices he offers are useful but when it fails he himself advises the patient to seek other sources particularly that of the allopathic hospitals. Instances where he prevented or illadvised his community members against modern practices were also rare for, they themselves believe in modern medicines and availed it when required. The expenses incurred by tribals in this regard or the economic dimension of this relationship is also important. It can be exploitative if the system extracts substantially from the tribals of their already inadequate resources available and permitting the other sections to lead a parasitic existence. The evidence we have in this regard, however, does not strongly indicate this. More than one-third of the households in our sample have reported that they spent only affordable amount, less than Rs.25, in this connection. Nearly 29 per cent spent more than Rs.100. In

two cases, however, the ceremonies were so elaborate that the expenditure exceeded Rs.1000.

Table 16 Distribution of households in the sample by expenses incurred on performing pooja

Expenditure category (Rs.)	No. of households	% to total
< 25	29	32
26 - 50	26	29
51 - 100	16	17
101-500	11	12
> 500	9	10
Total:	91	100

The traditional practices as discussed above, therefore, functions as a dominant aspect of the health culture of tribals. These practices which evolved and shaped through generations now plays a different role, a supporting and complementary role, compared to the previous role as the sole operator on matters related to health. The change was gradual and non conspicuous but of late gathered momentum because of the increased interaction with other cultures. The interventions by Government as part of our effort to integrate tribals after Independence was one reason for this

acceleration in change. Education and introduction of medical facilities in tribal settlements are important components of these interventions. The diffusion of the two cultures - the one which we are trying to impose in terms of a set of 'rational' behaviour in preventing and curing diseases as well as other aspects such as birth control, and the other that was deeply ingrained in their life which grew along with them - do result in conflicts and contradictions but are getting minimised as time passes. As we have seen, the process of integration and diffusion of two cultures, so far, yielded a pattern that shows a mix of both practices, a rational and useful mix, that answers their health problems effectively. The prospects of survival of this blend, however, is bleak. The suggestions are loud and ominous as reflected in the responses of those who totally discarded the old practices and, in the long-run, it is likely that the process of integration which permits the co-existence of both practices be replaced by a process of displacement of the traditional by the modern. Perhaps it may be inevitable, as it happened in other cultures, but in the process we may also lose a wealth of knowledge that would have been otherwise utilised for solving people's health problems.

Conclusion

The tribal communities in Wynad live in a perpetual state of poverty and deprivation. They are either landless or with little land; many are unskilled agricultural labourers and earn incomes that are barely adequate for survival. The living conditions are wretched and conducive for communicable infections. This poverty leads to under nutrition and malnutrition and to innumerable health problems and consequently to high rate of morbidity and mortality particularly among women and children. The health problems were critical to a large number of families in our sample, about 90 per cent, during the reference period. The perceived symptoms were fever, diarrhoea/dysentry, skin infections, T.B. and others. The struggle for survival was so intense that the tribal families generally ignored these problems unless it reached a flash point. They are ignorant of diseases and consider their existence as 'normal' inspite of afflictions and suffering. The perception of health problems therefore, only indicates the medical catastroplies they faced during the reference period. The number of deaths of children below five during the five year period among the 179 families was 23 which is considerably high compared to the mortality of other population groups. Women and children together account

for about 70 per cent of the reported health problems but women when considered separately had fewer health problems compared to men. The tribals have a fatalistic attitude towards diseases. Some of them are aware of the impact of unhygienic environment and poor living conditions on health. The response to health problems combines both traditional and modern health practices. The initial response in most cases is to fall back on the traditional system of giving home made remedies, which proves effective in several instances, or to seek the help of local medicine men who provide more specific treatment of folk medicines and herbal preparations. He also practices the traditional methods of appeasing deities and spirits which are crucial in their belief system of supernatural agents causing illness. The faith in such practices and in the efficiency of medicines given by their community healer is still strong among a majority of the tribals but there are variations in this regard between communities. Some communities believe in it totally while some partially.

The perception of health problems and the responses to these problems, as discussed here, explains certain significant trends that throws light on the pattern of health care development among tribals. The interventions to improve the health status of tribals, mostly in the form of improving the availability of facilities have made deep

in roads into the exisiting health culture of tribals. Other forces, particularly those that are released due to the interaction with non tribals as well as other purposive interventions by Government, accelerated this process of transformation and the tribals are soon losing their traditional culture. They are now at a cross-road, at a stage in their development that is crucial, where they combine the elements of tradition with modernity. This is explicit in their health practices. Modern health care does not evocate any contradictions, atleast now, as generally feared. He accepts it, avails it, if it is provided. The traditional practices, considered as a deterrent in spreading the message of modern health care, co-exist peacefully in their scheme of things, again without generating conflicts. The mix he works out is useful and essential considering the resources around, and in this regard he is as rational as anybody else. The diseases he faces are mostly the diseases of poverty - of malnutrition and of poor living conditions. The situation worsens day by day and the health problems, which are many, recedes into the background, ignored and unattended. When it erupts, which is not infrequent, it is devastating. And, then he mobilises all resources, traditional and modern, that are at his command. The health care development of tribals situates in this context.

References

1. See for example: (1) Mathur, P.R.G. (1977). **Tribal Situation in Kerala**, Kerala Historical Society, Trivandrum; (2) Kunhaman, K. (1989). **Development of Tribal Economy**, Classical Publishing Company, New Delhi; (3) Bureau of Economics and Statistics (1979). **Report on Socio Economic Survey of Tribals in Kerala 1976-78**, Goverment of Kerala, Trivandrum.
2. Banerji, D. (1982) **Poverty, Class and Health Culture in India**, Prachi Prakash, New Delhi.
3. **Ibid**, pp.220-221.

CHAPTER V

HEALTH CARE SYSTEM AND THE TRIBALS

In chapter five, on the basis of the data we have collected, we shall discuss the nature and content of interventions planned for tribals; the organisation of health care delivery system; and the level of awareness of these facilities and the extent of its use.

Health care system is a function of several parameters. The form of economic and social organisation, and the political institutions that develop along with it, decides its shape and content. In the case of capitalist systems, where the division between capital and labour is sharply perceptible, the development of health care takes place with infinite contradictions between the pursuit of health and the pursuit of profit. This, in the process, has thrown up different medical provisions catering to the interest of different classes. A private market for medical care flourishes in such societies where the questions such as how much medical care should be produced, what type and who should receive the services are decided through the market process in which profit is the driving spirit. The content of health care, under such circumstances, becomes

more curative oriented and centres on after-event interventions rather than on prevention or conservation. Large sections of population in such societies are excluded from this arrangement as they were unable to afford the services in spite of their needs. Historically, these sections constituted the working class but they were getting increasingly organised as societies progressed and began to bargain, collectively, for improved health care. This in several societies, necessitated the emergence of a delivery provision, the public or nationalised health care system, to co-exist with the private system. Capital also required such accommodations for, its survival and growth depended upon a particular level of reproduction of labour for which health is an important component. Market for health care services, as a result, widened permitting accelerated capital accumation in the production of health care. It also developed vested interests that supported the existence and expansion of public health care system. The arrangement or the system that evolved out of these interests, however, breeds several contradictions. The state expenditure on public health and the subsidies to reduce the cost of health to poor sections requires mobilisation of resources from the rich and influential. This generally leads to resentment among these sections who demand reduction in public health system. However, this is against the interest of the capital

in health care production which had grown gigantically over the years. This contradiction, which is basic and inherent, assumed different dimensions in different societies depending on the equations of various interests. But the pursuit of profit, which is basic to the contradictions, resulted in unprecedented inflation of medical care, uneven geographical distribution of services and resources and discrimination of populations denying services to them. The pursuit of health care, in the process, was eclipsed by the pursuit of profit. This is inevitable in societies that permit the co-existence of both public and private medical provisions.

Developments in India, like in several other developing societies, followed the logic that encouraged the co-existence of private and public medical provisions. The private sector which functions on market considerations and on the maximisation of profit developed a mammoth system concentrated mostly in developed regions and in urban centres. The orientation is unmistakably curative and treatment centred using sophisticated equipments and drugs that are costly and hence affordable to only a few. The catchment area and populations in this case are well-defined and confined to the centre excluding large sections of people living in the periphery. The public health system, in this context, was designed to step in and cater to the

health needs of these people. It was given a different orientation which stresses preventive and promotive health care that take into account the health problems of people in peripheries. The system over decades has grown more gigantic than its private counterpart in terms of number of institutions and utilisation of resources but predominantly complying with the interest of capital in medical care production. This reflects the nature and pattern of development of the health care system, the emphasis it places and above all the orientation it subscribes to. The uneven distribution of facilities, the discrimination of populations, the dependency on drugs and other curative techniques and the interest in maintaining the cost at high levels are only affirmations of this interest.

The micro level existence of health care system, particularly that which is sponsored by the State for the larger sections of populations is now discussed here in order to understand its characteristics. The nature of government interventions and the programmes organised, its present state of affairs, the delivery system as it is evolved to execute these programmes and the special arrangement for tribals are considered in this context. Additionally, the section deals with the perception of tribals on health care delivery system as such and on the various activites it implemented to solve their health

problems. In other words, it is an attempt to sketch the character of the provider of health care through the impressions of the beneficiaries as it provides a more faithful reflection of the emphasis and intentions of the health care system.

The nature and content of interventions for tribals

The tribals, as we discussed elsewhere, occupy a special position in our developmental effort. They are protected discriminatively through constitutional provisions which has resulted in substantial resource mobilisation in their midst. The programmes were, quite often, designed and delivered as packages adopting a multi-pronged approach to solve their problems. Health, in this scheme of things, was always a priority item and attracted substantial resources for improving the facilities as well as educating them in using these facilities. The thrust was in reaching out to them which, however, posed difficulties as they were isolated spatially and culturally. The strategies naturally required ingenious modifications taking into account these special factors. These problems were recognised at the planning level and ammendments were added in the general framework. The usual steps were the relaxation of norms for strengthening the medical infrastructure. The Sixth Five

Year Plan gave definite shape to such norms which still continue without major modifications. The National Health Policy also endorses this special thrust and norms.

The Tribal Sub-Plan was an outcome of the special concern to their problems. As a planning solution it ensured minimum resource flow to tribal regions and to tribal populations and encouraged a number of activities under different heads. The flow of resources from medical and public health during the last two plan periods in Kerala was 123 lakhs. This, as the norms prescribe, is spent in tribal regions or for tribal populations under the supervision of a district level body. The Tribal Development Department, as the apex agency responsible for the welfare of scheduled tribes, plays a crucial rule in this regard particularly in deciding the locations and the target group. The responsibility for implementation lies with the Health Services Department; so also the responsibility of its management. Along with this set up, the Tribal Development Department also implements health care activities directly under its supervision and management. Health care delivery system for tribals combines both these arrangements.

The Directorates of Health Services, of allopathy and Indian Systems, undertakes the overall function of planning in health care development. They also supervise, and co-ordinate programmes which are several ranging from

the delivery of primary health care to management of large hospitals. Family Planning forms an integral part of the organisation but functions with considerable autonomy because of its nature of funding. Major chunks of the activities of the Directorate centres around the development of rural health services which acquired a new dimension after the introduction of Minimum Need Programme(MNP) where health care is conceived as an integrated component in improving the conditions of rural poor. It envisages the provision of basic health care through a network of institutions such as Primary Health Centres and Sub Health Centres. The programme, as it is implemented in the State, therefore, places utmost priority on strengthening the infrastructure or expanding and upgrading the net-work. A target is also fixed in this regard setting 2000 AD as the focus. This net-work in turn, is expected to promote primary health care through a variety of programmes that are entrusted upon them. Prevention and control of major diseases occupy an important position and the PHCs and SHCs function as end level implementing units for several national programmes such as the control of T.B., blindness, filaria, malaria and leprosy. Prevention of water borne diseases like chlorea, gastroenteritis, diarrhoea, poliomyletis, infective hepatits and enteric fever receives special attention. The other activities implemented through

these institutions are health promotion through education and conscientisation and family planning of which the latter takes away most of its time and resources. It is also the most vocal activity of a Primary Health Centre.

In the organisation of health care delivery system the Primary Health Centre is conceived as the basic health unit responsible for planning and implementing programmes at grass-root level on the basis of their intimate knowledge about the health problems of people. However, in the present set-up, which is hierarchial and centralised, and where the planning is done at the top, their role is reduced to realising the targets thrusted upon them. This has resulted in inappropriate use of resources and on priorities irrelevant to local problems. The pattern of functioning of a PHC in terms of the emphasis it gives on programmes and the use of its resources is revealing in this context. In all three major PHCs that are covered in the study, nearly 30 per cent of their activities are devoted to clinical and curative functions, 50 per cent to activities on family planning including awareness generating programmes where family planning is the main agenda and the rest 20 per cent on activities connected with immunisation, school health, nutrition and other such programmes. The variation between PHCs in this regard is minimum which perhaps can well be considered as the pattern throughout Kerala. The lack of

freedom at grass root level to decide on objectives and on targets relevant to the local realities and constraints has other implications also. Primarily, this has resulted in lack of innovation and enthusiasm among medical and paramedical staff who are steeped in routine tasks often inconsistent with the concept of primary health care.

The problems that arise out of the lopsided organisational emphasis on programmes become more vivid when it comes to the specific interventions designed for the tribals. Such interventions, most of the time, are routine repetitions or extension of existing programmes. This is inevitable in the absence of a comprehensive plan of health care development for tribals either at the Health Services level or at the Tribal Development level. The only guidelines existing in this regard are the norms suggested by the Planning Commission and the State Planning Board that pertains to the provision of facilities, institutions and manpower, to tribal regions and to populations. This coupled with inherent rigidities of the organisation that disallows grass-root level planning denies the advantages of preferential resource flow to them. The interviews with the medical officers and paramedical staff in the three PHCs in Wynad are revealing in this context. A majority of them are ill informed and ill exposed to the tribal specificities and culture and hence they are also unprepared to shoulder the

special responsibilities connected with their development. The Medical Officers, for instance consider the tribals as primitive, superstitious and inflexible groups who are difficult to work with. They are of the opinion that health care activities will be fruitless unless they are educated and brought to a level where they can understand the rationale of health. And accordingly, the preferential treatment of tribals as a separate category in matters relating to health till then atleast, is unwarrented and fruitless. The attitude, in summary, was one of cynical indifference to tribals and their problems. There is also another built in factor in the health care system that strengthens this attitude. The undue emphasis on family planning, and also the method of assessing the efficiency in terms of their performance in family planning, does not encourage the health personnels in giving any special attention to tribals. For, the tribals are considered to be indifferent or even negative to family planning, a belief that was circulating for long among medical and para-medical personnal, and which is often used as an excuse for justifying their failures in performance. Though the belief lacks evidence to substantiate, it prompts the health care set-up to exclude tribals from their main focus.

None of the Primary Health Centres covered in the study plan for tribal populations; instead, they implement

general programmes which they are directed to do in such a way that the tribals will also get an opportunity to benefit from these programmes. They organise Family Education Centres, OT Camps, immunisation camps and sometimes special medical camps for tribals, but in most cases as a one-shot affair. In the absence of follow-up and constant interaction with the tribals such initiatives prove fruitless. Not only this, the messages that are attempted to be put accross through Family Education Centres and OT Camps on health, nutrition and hygiene are meaningless, hollow and inappropriate for the tribals in the context of their environment and living conditions. This again frustrates the health personnel and they feel defeated in their efforts. It is, in fact, this incomprehension of the social origin of illness, the role of physician and the emphasis of health care needed that perpetuates the indifferent attitude of medical personnel and the health care system. The physicians in Primary Health Centres of Tribal concentrations, as they perceive their role, consider treatment of diseases as their prime concern; the concept of primary health care, the comprehensive package which requires a wider and intimate social role has yet to impress him or convince him. This attitude, or his lack of conviction, influences decisively the nature and content of health intervention.

Organisation of Health Care Delivery System

The health care delivery system for tribals has two streams; the first, that functions as part of the Directorate of Health Services and the second, that operates under the Directorate of Tribal Development. The first setup is vast and comprehensive and covers the district through a net-work of hospitals, health centres and dispensaries. But, as we mentioned elsewhere, the network is not exclusively meant for tribals but for the whole population where tribals form only a portion. Theoretically, tribals are entitled for special privileges or attention from these institutions, particularly in their location and in out-reach services. The second setup is almost exclusively for tribals and locate in places where they are concentrated. The facilities are few in number and therefore, serve as supporting service to the other network closing the gap in terms of its coverage. In addition to these two streams, the private sector with an equally developed network of hospitals and dispensaries in Wynad attends to their health problems though in a limited way. A segment of this, however, the voluntary sector, which is fortunately active in Wynad, almost exclusively devotes their attention to the problems of tribals and work closely with the Government.

The first stream which is part of the state level

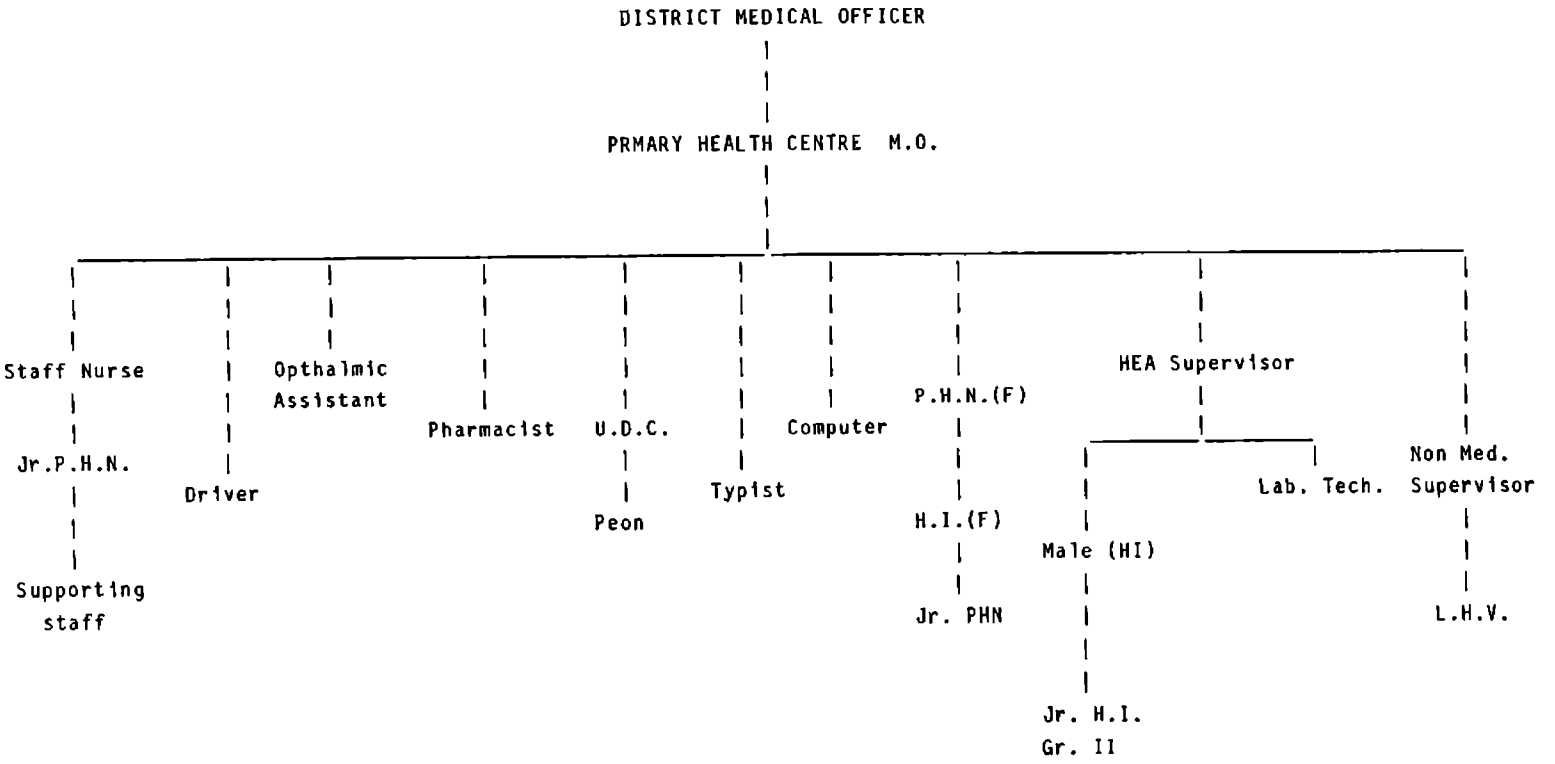
health care system operates in a hierarchial framework. The structure envisages a controlling centre, the Directorate, which supervises and coordinates all programmes of health and family planning in the State. At the district level the same functions are taken care of by the District Medical Office which controls and distributes resources and responsibilities to lower levels, Taluk Hospitals and then to PHCs. The PHCs are visualised as grass-root level institutions and exercise control over Sub Centres and government dispensaries through which they realise the objectives. The hierarchial arrangement in this way is expected to provide health care service at several levels according to the requirement. At the grass root level, the PHCs and Sub Centres form the first tier and provide primary health care which is more preventive and promotive for a population of 20 to 30 thousand population. The Sub Centre with one male and one female helath worker covers a popualtion of 3000 in tribal areas. The Community Health Centre as the next tier serves a population of one lakh and provides in-patient facilities with specialised services in medicine, surgery, paediatrics, gynaecology and public health. The Taluk HQ hospitals and District Hospitals exist at the next level functioning as referral centres for all peripheral units in the Taluks or district. Then, there are apex institutions exclusively for specialised treatment of

cases of leprosy, T.B., mental illness etc. along with medical colleges where curative services of complex nature is provided. The organisation of the district level arrangement under the District Medical Office is explained in the following chart.

The organisational arrangement of the health care system under the Tribal Development Department is simple and not hierarchial. It does not have any central authority which coordinates and supervises the activities but the various Integrated Tribal Development Projects (ITDP) or Tribal Development Project (TDP) exercise administrative control over the institutions in their region. Most of these institutions are dispensaries and midwifery centres. Ayurveda occupies an important place in this setup and they constitute more than 50 per cent of the total institutions. The Department also runs two mobile units in the State, in Idukki and Trivandrum which they plan to extend to other regions. In Wynad the number of institutions under this arrangement are seven of which three are midwifery centres, three are Ayurvedic dispensaries and one is an allopathic dispensary.

The logistics, its organisation and the programmes of health care delivery system, as discussed above, explain its supply dimensions. The factors that influence this aspect, its magnitude and nature, are several. The political

Organisation of District Health Care System



UDC - Upper Division Clerk; PHN Public Health Nurse; HI Health Inspector; HEA Health Education Activities
LHV Lady Health Visitor; MO Medical Officer

bargaining of different social and economic groups, the economic interest of capital involved in the production of medical care, the monopolistic interest of medical professional and the whims and fancies of medical administrators are prominent in this regard and they form an interacting whole striking out a balance between interests. The health care delivery system that is operating among tribals also reflects this interrelationship of various interests. The perception of tribals about the health care system, its programmes and services in this context is relevant as it explains, ultimately, the real nature of the system. We now move on to discuss these aspects to complete the picture.

Health Care System: Level of awareness and extent of use

There are several factors that determine the extent of use of a health facility. The basic factor, the prerequisite, however, is the awareness of the facility which itself is a function of several factors. The historical backwardness of tribals and the isolation they experience, both spatially and socially, are particularly relevent in this context and influence their level of awareness. It requires special efforts to overcome these backwardness and to raise their level of awareness and more importantly, to kindle interest and to generate demand

leading to consumption. The location of a particular facility among them without such deliberate effort is unproductive. More over, this awareness which leads to acceptability and then to consumption, serves as an index of assimilation and integration which ultimately is the goal for interventions among tribals.

The tribal households in the sample display a high level of awareness. Nearly 93 per cent of the households are able to identify the nearest medical institution in the area which can be reached when in need. This high degree of awareness, as it should be, then leads to a high degree of utilisation which in our case is around 78 per cent of those who were aware. The nature of awareness is also elaborate in that a significant number among them were able to distinguish institutions by their type, whether as a PHC, a Sub Centre or a hospital, and by systems of medicine that is practiced, whether allopathy, Ayurveda and homoeopathy. The variations in the level of awareness between communities are marginal but those who are educated and better off economically, and also those who live near townships and with non tribal populations show a better degree of awareness amd use facilities as well. The level of awareness of Kurichians and Kurumans are evidence of this trend.

Table 1 Distribution of Households in the sample by awareness and use of health facilities: community wise*

Sl. No.	Communities	Total number of households	No. of households who are aware	No.of households who uses facilities
1.	Paniyan	63	58(92)	43(74)
2.	Kuruman	55	54(98)	46(85)
3.	Kurichian	18	18(100)	14(78)
4.	Urali	18	18(100)	12(67)
5.	Adiyan	10	8(80)	6(75)
6.	Kattunaickan	8	4(50)	4(100)
7.	Malai Arayan	7	7(100)	5(71)

* Figures in the bracket are percentages,Column 4 to total number of households and column 5 to total number of households who are aware.

The use pattern of medical facilities by tribals vis-a-vis the health problems they faced in the past two years was already discussed in Chapter IV. The above table, in this context, as it is not limited to any specific reference period, presents a wider picture of the extent of the use of these institutions. Moreover, the use of institutions are not always restricted to diseases and a number of tribal households utilise them, particularly these days, for midwifery purposes which is getting to be accepted increasingly among tribals. The number of households who reported the use of hospital facilities in this regard

during the last five years is 68 in our sample which against their background and outlook is significant. The number of deliveries conducted at home during the same period however, was more, 94. The variations between communities show almost the same pattern as in the case of the extent of utilisation where advanced communities like the Kurichians and Kurumans show a comparativley favourable response towards the use of hospitals.

Table 2 Distribution of households in the sample by use of hospitals for child birth: community wise

Sl. No.	Communities	Total No. of house-holds	Given birth in hospi-tal	Given birth in house	Total births in the last 5 years
1.	Paniyan	63	23(40)	35(60)	58(100)
2.	Kuruman	55	20(39)	31(61)	51(100)
3.	Kurichian	18	10(63)	6(37)	16(100)
4.	Urali	18	9(64)	5(36)	14(100)
5.	Adiyan	10	2(20)	8(80)	10(100)
6.	Kattunaickan	8	-	7(100)	7(100)
7.	Mala Arayan	7	4(67)	2(33)	6(100)
			68(42)	94(58)	162(100)

The reasons that influenced the utilisation of a medical facility, within the rationals of tribals, are not many. Awareness about the facility and the type of services

it offers, as we noted earlier, are necessary conditions but they alone are not sufficient to make him use the facilities. The physical accessibility is a crucial factor in this regard and exert a direct bearing on the frequency of use. If they are inconveniently located and posing problems for them to reach the services, they switch over to other services, mostly to their traditional systems or sometimes to expensive private health facilities. There were several incidents of this nature which we could record in the course of our field work where the patients were denied medical care in spite of the seriousness of the problem. The spatial inaccessibility also add to the costs such as transport and other expenditure connected with it. Distance also makes the institutions alien and unfamiliar. This makes them apprehensive and tempt them to avoid such encounters. The PHCs and Sub Centres who are located near tribal settlement stand a definite advantage in this regard. Another factor which is decisive in influencing the utilisation of facilities is the out-reach services of institutions, especially that of the PHCs. It deepens their familiarity with the system and induces them to accept the services. The medical officers and other health personnels from the three PHCs covered in the study subscribes to this view point strongly and opines that it develops a healthy interaction between the health system and the tribals. The

attitude of the personnels towards tribals or the way the tribals are treated in these institutions is also important in this regard. The reasons which they consider as important to influence the use of facilities are explained in Table 3. Out of 130 households who used the facilities, 108 or 83 per cent consider availability within reasonable distance as an important aspect that influenced their decision in availing the facility. Next in their reasoning comes cost which is an overriding factor for 75 per cent of households. The lack of interest in private facilities even if they are available within easy distance explains this.A considerable number among them attaches importance to the way they are treated by the hospital staff as reasons for using it again or advising others to use the institutions.

Table 3 Distribution of households in the sample by reasons influencing the use of facilities

Reasons	No. of households	Percentage to total
1. Availability within managible distance	108	83
2. Considerate behaviour from hospital staff	73	56
3. Intensity of disease	56	43
4. Cost free services	98	75

Impact of the health care system:perceptions about programmes

The health care system unfolds itself to tribals through a set of activities or programmes. The nature and content of these activities, as visualised by the providers to bring about changes in the health culture of tribals, were discussed in the beginning. We will now discuss the impact of these activities, not in terms of measured improvements or standards fixed by the providers, but in terms of the impressions it created among tribals. In other words, it suggests the image of the health care system that it has developed over the period. The perceptions of the programmes, for this purpose, are arranged into three broad categories: perceptions on the outreach activities which establish the links between communities and the providing system, on the preventive activities especially mother and child health programmes and on family planning activities. Though the categorisation of programmes into clean, water tight compartments are difficult as its components overlap but it helps to analyse the emphasis of activities that are implemented.

The outreach activities are designed as the crucial steps in reaching out to the tribal mass. The grassroot level delivery system is also designed accordingly which envisages a male and female multi-purpose health worker for every 3000 tribal populations. Between them and

the medical officers at PHC there are supervisory staff who support and co-ordinate the activities of health workers, especially the Public Health Nurses. The linkage is well thought out, and in ideal circumstances, the arrangement functions effectively to serve the purpose. In fact, the concept of primary health care itself is incompatible without this arrangement. The field staff performs the crucial role of generating demand through education and other awareness building activities. They are expected to function as part of the community, not as 'working among them' but 'with them' gaining their trust and confidence. The attitude is particularly important for those who works among tribals as they face a group who are unserved for centuaries. And, to withstand the adverse circumstances that are abundant in their works, they require conviction and committment to the tasks they are entrusted with.

The commitment and seriousness the field level health worker attribute to their role, to a great extent, reflect in their pattern of interaction with the tribals. By and large, the health worker is a familiar entity for tribals in Wynad and practically all households in the sample acknowledge their familiarity with them. This is evident from the number of households in the sample who reported visits of field staff to their houses. The visits are frequent and mostly varies between one in every month

and one in three months. In few cases the number of visits are infrequent and the contact is maintained only once in six months. The reasons that influence the frequency according to the Public Health Nurses, are mainly, the distance and the workload in terms responsibilities. The house-to-house visits however, is only one method of maintaining contact with people as they are equally engaged in other community focussed activities such as Family Welfare Centres, Orientation Training Camps and other special camps. Among the field staff, the Public Health Nurse is more popular which is evident from the sample that 87 per cent of the personal contact at household level are done by them, the Lady Health Supervisors and Health Inspectors together form only 6 per cent in this regard. Significantly, the Anganwadi teacher plays a crucial role in health education and awareness generation in this context and several tribal households perceive them as part of the health care setup.

Table 4 Distribution of households in the sample by the frequency of visits by field staff

Sl.No.	Frequency	No.of households	% to total
1.	Once in a month	44	25
2.	Once in every 3 months	43	24
3.	Once in every 6 months or more	27	15
4.	Never visited	65	36
	Total:	179	100

The house visits are conducted with specific purposes. The perception of these purposes is explained in Table 5. Accordingly, more than one-third of the households, 33 per cent, in the sample consider that the visit was intended to explain and motivate them about family planning. 18 per cent consider the purpose was to encourage them to take their children to camps or PHCs for giving immunisation. Few in the sample spoke about nutrition and hygiene as the principal purpose of these house visits. The majority however, are inarticulate to specify the exact motives but reported that the health worker discussed and explained several problems concerned with health, diseases and of course, family planning too. The perception about the motives of community oriented programmes also show the same pattern. According to households who participated in such camps, but their number are only few, 33 per cent of the total households, the theme of discussion in such gatherings were family planning (27 per cent), immunisation(5 per cent) and hygiene and sanitation (12 per cent). Here again a majority of the households could not explain the exact theme or the purpose of these camps (56 per cent).

The availability of the health care system among tribals and particularly its operation through the field staff initiated changes in their outlooks and practices. This is evident in their changing preference or acceptance

Table 5 Distribution of households in the sample by perceptions towards house visits.

Perception about the purpose	No. of households	Percentage to total
1. Family Planning	38	33
2. Immunisation, especially for children and mothers	21	18
3. Hygiene, Nutrition, health habits	3	3
4. Cannot specify, but about several things concerning health	52	46
Total:	114	100

of hospital system for conducting child birth. Until a decade ago the practice was to confine to houses and to take the help of elderly women who are specialised as Ayas. The practice now is giving way to chosing hospitals or accepting the service of trained nurses. The trend was discussed in Table 2 in the context of discussing the extent of use of facilities. The percentage of those accepted the modern practices in this regard was 42 which in the face of not so favourable conditions such as difficulties in reaching the facility, expense and unfamiliar circumstances to tribals is a significant indication of the impact of the health system, particularly the field level activities, in changing their health habits. The details about distance and cost incurred by the sample households are explained in Table 6.

Table 6 Distribution of households in the sample by distance to hospitals and cost incurred in conducting child birth

A. Distance(Kms.)	No. of households	% to total
< 1	3	4
1 - 5	19	28
6 - 10	28	41
More than 10	18	27
Total	**68**	**100**
B. Cost (Rs.)		
< 10	1	1
11 - 25	4	6
26 - 50	9	13
50 - 100	19	28
100 +	35	52
Total	**68**	**100**

The second set, the preventive activities, are restricted, more or less to immunisation drives against major diseases, particularly those that affect the survival of children and ranks second in the priority of field staff, next to family planning. The performance is closely monitored and as in the case of family planning the level of achievement against targets are accounted for in deciding the efficiency of PHCs. The house-to-house visits and the community centred programmes are vehicles in this regard to propagate the message and educate people about the diseases that can be prevented through immunisation. The impact of these programmes in Wynad is summed up in Table 7. Nearly 80 per cent of the households in the sample are vaguely

familiar with immunisation just as an activity initiated by health authorities, but are unable to explain the details. In fact, the tribals, as we observed during field investigation and informal discussions with them, are indifferent in this regard. The percentage of households in the sample who have availed this service for children or for pregnant mothers is 48 but in most case without any systematic follow up. Two third of the households are aware about diseases against which immunisation measures were taken but are not convinced of the inevitability of taking such measures.

Table 7 Distribution of households in the sample by immunisation practices

	No. of households	Percentage to total
1. Number of households who have taken immunisation steps	86	48
2. Number of households who are aware of the diseases against which immunisation measures were taken.	56	65(Percentage to those who availed)
3. Number of households who have given booster doses as	7	8(percentage to those who have taken immunisation steps)

The family planning activities undertaken through the PHCs have two components. The first relates to the educational activities which aim at motivating eligible sections to accept family planning methods. The outreach programmes discussed above are largely oriented towards this. The second relates to the actual provision of family planning services. Both components are thus, complementary; one generates demand and the other satisfies it. The impacts of these activities among tribals are discussed here on the basis of their awareness, their perception about the need and their responses in terms of acceptance of practices. The awareness about family planning, as far as the responses of the sample households or concerned, is near total. They are aware of the message and the concept but many of them are not convinced of its need that they have to practice it in their life. However, they do accept family planning measures for reasons that do not correspond with the spirit of the concept. This, to a certain extent, is evident from the number of households, 72 households out of 179, who reported acceptance of family planning techniques for one of its members. Women among them constitute about 61 per cent. The distribution of these households by type of practices accepted are explained in the following table.

Table 8 Distribution of households in the sample by type of family planning techniques accepted

Type of techniques	No.of households	% to total
1. Sterilisation(Male)	19	26
2. Contraceptive users(Male)	9	13
3. P.P.S.	16	22
4. Laproscopy	11	15
5. I.U.D.	17	24
Total:	72	100

The attitude of tribals towards the concept of family planning is crucial in this regard. The small family norm and its advantages which the health care system is trying to put accross, surprisingly, is not inconsistent to their beliefs and their framework of reasoning. This is explicit that there were not many in our sample who preferred more than five children. By and large, they do not consider children as an asset who can contribute to family income if he survives his infancy. Nor are they worried about the high mortality rate of children that tempt them to have more; so is the argument that more children means more security and support at old age. Interestingly, this does not always means that they have strong reasons, within their limitation ofcourse, that supports their liking for fewer number of children. The tribals, generally, are indifferent

to this issue but some of them have expressed their difficulties in rearing children with the limited resources they have. The reasons expressed by those who accepted family planning techniques in our sample is suggestive of this trend that there are only few households who accepted family planning out of conviction that they have enough number of children. The major set of reasons that influence them to accept the techniques are economic, the difficulties they face in their survival, and the monetary incentives they receive as a reward for acceptance.

Table 9 Distribution of households in the sample by reasons for accepting family planning

Reasons	No. of households	Percentage to total
1. Economic difficulties in brining up children.	21	29
2. Monetary reward/other incentives	13	18
3. Had enough number of children	3	4
4. As advised by others	7	10
5. Cannot specify	28	39
Total	72	100

Conclusion

The special consideration of the health needs of tribals permitted favourable resource flow to regions of tribal concentration. This has resulted in improvements in physical facilities and manpower, both medical and para medical. The organisation of these facilities or the health care delivery system is hierarchial and centralised and allows very little freedom for planning and innovating at grass-root level. The Primary Health Centres which are considered as the basic health care unit and which are designed to cater to the health needs of people at primary level are now reduced to mere implementing units of programmes decided at the national or state level. It also makes the health care system incapable of accomodating the local needs and priorities. This leads to lop sided emphasis on activities and programmes defeating the purpose of providing primary health care. This is also reflected in the way the PHC organises its major functions. In the present setup it devotes nearly 30 per cent of its time and resources on clinical and curative activities, 50 per cent on family planning and the rest 20 per cent on preventive and other programmes. The undue emphasis on family planning is glaring and in the pursuit of achieving the target, for which they are rated of their efficiency, the PHCs tend to

neglect other aspects of health care that are more immediate and relevant. It also encourages the health staff to exclude communities or groups who are difficult to motivate or who are reluctant to accept family planning practices. Tribals are a victim of this tendency as they are believed to be negative in their attitude to family planning.

The health care system in Wynad does not provide the preferential consideration the tribals are entitled to in view of their historical backwardness and acute poverty except in terms of providing institutions or other physical facilities according to the national norms. Neither the PHC, nor the District Medical Office nor the Directorate has any comprehensive plan, nay, or even an information system on their health problems and needs. They are not considered distinct and their problems are insignificant and routine at operational level. Programmes are implemented haphazardly and that too by health personnels who are ignorant of tribal culture and their specificities and who consider the tribals as hopelessly irrational and superstitious. The tendencies are, thus consistent with the interest of those who control the system and it nutralises the initiatives that can bring change either in the orientation or in the style of functioning.

In terms of awareness and use of facilities, the tribals as a group are not backward. They accept and utilise

the facilities if these are available within accessible distance and also if the services are affordable to their economic conditions. The tribals are also influenced by the type of services and feel encouraged by sympathetic and reassuring treatment from the institutions and staff. The mere presence of these institutions and the interaction of tribals with these institutions brought about changes in their health culture and traditional practices. Their acceptance of modern medical facilities for giving birth is an indication of these changes. On other matters too, the tribals are increasingly drawn to modern health systems for their health needs.

The programmes implemented through the PHCs, for analytical purpose, are grouped into three categories - field centred activites, preventive activities and family planning - though they are inter related and complementary to each other at the operational level. The field level activities that are intended to create demand and to maintain link between the PHC and the target group have created favourable impressions among tribals. The field staff, particularly the public health nurse, is familiar to them. The activities undertaken by them also substantiate our earlier observation about the lop sided emphasis of the health care system. The orientation here too is heavily tilted towards family planning in which they have made

measurable progress. The concept of a small family is acceptable to tribals as is consistent with their outlook and frame of reasoning. The main reasons, however, that force them to accept family planning practices are economic compulsions and the attractions of benefit they receive as reward or incentive. This sums up the progress and also exposes the interest, concern and orientation of the health care system towards the problems of marginal groups such as tribals.

CHAPTER VI

NATURE AND TREND OF HEALTH CARE DEVELOPMENT AMONG TRIBALS

In this chapter we attempt a synthesis of the findings discussed in previous sections. The factors that determine the accessibility to and availability of health care are discussed first; followed by a discussion of these aspects in the context of Wynad. The chapter concludes with the emerging trends in health care development among tribals.

The foregoing discussions on the health care system and its interaction with tribal communities in solving their health problems and needs can now be analysed in a framework to understand the nature and trend of health care development for tribals. The discussion on the social production of illness, or what makes people ill and also how much of it is avoidable, outlines the linkage between the organisation of societies, the working and living conditions of tribals and their health problems. The social production of illness along with the forces that control the production of health care, decides the nature and pattern of health care development. The interaction of these during the post Independence period generated several contradictions and

evolved a health care organisation in accordance with the interest of the dominant classes. The system, at the beginning of Independence, was committed to the task of eliminating poverty, ignorance and ill health and to provide adequate nutrition and public health facilities to all within the framework of equality and justice. It assigned a privileged status to tribals and their health problems based on their backwardness and historical isolation. But the health care system that evolved during the last forty years, as evident from the discussions, was unsuccessful in internalising this spirit envisaged in the constitution. Instead it developed a pattern and a structure that is subservient to the interest of those who control the production of medical care.

This imbalance in the user-provider relationship where the interest of those who control the production of health care takes an upper hand is engendered with contradictions as it comes in conflict with the extent and pattern of utilisation of health care facilities. These contradictions are glaring at the micro level where the two interests manifest and interact when programmes are implemented. The process of this interaction and the forms it assumes, particularly at the microlevel, can be explained in terms of two sets of factors - the availability and accessibility - which together determine, at the primary

level, the nature and extent of utilisation of health care facilities and then, the contradictions it develops with various interests that control production. Each of these aspects represent a system or a set of factors that are internally coherent but interact between them and shape the directions of health care development. This section focuses on these two aspects and the way it explains and determines the dynamics of change.

Availability and Accessibility: the conceptual framework

The aspect of availability manifest itself in the provision of health care institutions and services. Two sets of factors or considerations operate in this context that decide the nature and size of provision: the market considerations which evaluate the individual's or investor's benefits and costs in terms of profit, and the social considerations which evaluate the social benefits and social costs. Health care development in the private sector subscribe to the spirit of the former and locates institutions in regions, and for groups of population, where profit can be maximised. The concentration of such facilities in metropolitan centres explains this logic. They will have a well-defined constituency of clients that can sustain the requirements of investment and operates on the principles of supply and demand. The pursuit of profit, the

motive behind the growth of health care in this setup, however, leads to a series of conflicts or market imperfections that manifest themselves in the form of inflation of medical care, uneven geographical distribution of facilities between centre and peripheries and disparities in the consumption of medical care between different income groups. These imperfections often assume grave proportions affecting large sections of population who do not have the required level of purchasing power. This in turn, can generate conflicts between groups that may even threaten the system.

The development of health care in the public sector subscribes to the latter logic which compares social benefits with social costs in deciding its nature and size. The evolution, relevance and justification of public health care, however, varies between societies depending on their social and economic organisation and their social philosophies. In certain developed capitalist societies, market imperfections and the conflicts it generates between groups of populations justify state interventions either in the form a parallel public health system or in the form of subsidies and other concessions that enable the poorer sections to avail themselves of medical care. In some other developed capitalist societies, it evolved out of organised struggle by the working class that extracted this concession

from the ruling classes which over the years has developed into mammoth systems, such as the National Health Service of Britain, having new orientations, contradictions and logic. In fact, the accumulation of capital in medical care production also requires such changes and expansion of health care net-work as it opens up new market irrespective of the nature of control of these net-works. In India, and in several other developing countries with a colonial background, the public health care system grew out of a different logic. The national liberation movement, though initiated and controlled by the privileged classes, necessitated the mobilisation of vast majority of under priviliged sections, and to ensure their participation the leadership had to promise a better social order and improvement in living standards which included, necessarily the provision of basic health care. The democratic system that evolved after Independence continued with this commitment and embarked on attempts to develop a public health care system. The considerations were the social benefits and the principles of equality and justice. The problems of the poor and the under privileged in this scheme of development assumed special significance and emphasis.

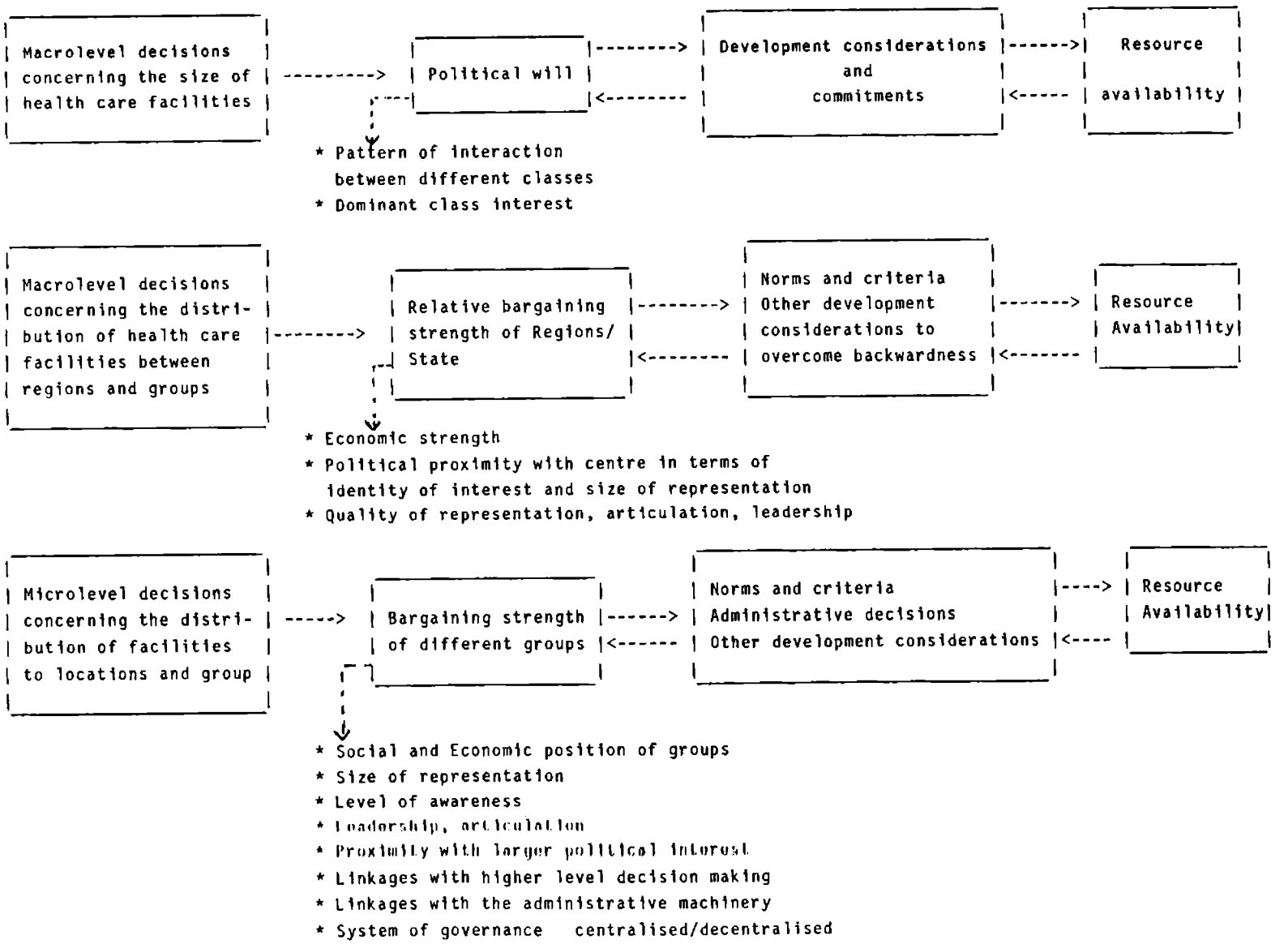
At the national and State level, in a democratic society such as ours, decisions on the availability of facilities, its nature, magnitude and its distribution to

regions and groups, are a function of political will. In other words, it depends upon the equations of various class interests and the bargaining strength of different groups. Development considerations such as the constitutional commitments to protect the interests of weaker sections like the tribals and considerations of social justice which cannot be ignored as they form a powerful vote bank as well as the resource considerations play an important role in accomodating the various interests. The process repeats at the micro level where the bargaining strength of different groups decides primarily, the location of health care facilities. Those who are powerful and articulate, which depends on a number of factors like their economic strength, level of awareness, quality of leadership and numerical strength, prevail over those who are weak and inarticulate. However, at this level the bargaining has to take place within the broad framework of development which sets norms and other criteria for protecting the interest of underprivileged sections. A schematic representation of the factors that influence the availability of health care facilities is explained in chart 1.

The aspect of accessibility belongs to the realm of consumers of service. It manifest itself in two forms - the spatial and the social - and ensures the utilisation of facilities and therefore, in conjunction with availability,

Chart I

Schematic representation of factors influencing the size and distribution of health care facilities



decides the health status of populations. The spatial dimension of access to health care pertains to the location of facilities which, as we explained above, is decided by a set of relationships that are social economic and political. And, the availability of facilities within approachable distance is a prerequisite and influences directly the decisions concerning their utilisation. The social dimension of accessibility is more complex and precipitates in different forms but originates out of the unequal character of society and its hierarchial categorisation of populations on the basis of income, caste, customs and practices. The income, as the basic factor that generates and sustain the inequalities, acts upon populations which discriminate the poor income groups and limits their access to health care. It accentuates their, difficulties in availing the facilities that are distantly located or that which extort a price for the services even if it is minimal. Income is the expression of ability to avail a service. The social and economic differences in a hierarchial society also discriminates populations in such a way to perpetuate the dominance - dependence relationship between privileged and the underprivileged on the basis of wealth, education and other attributes of power. The method of domination of the privileged over others may either be direct and brutal like physically restricting the poor from using a facility or

indirect and subtle such as denying information, evoking traditional beliefs and practices and providing indifferent and unsympathetic services. In fact, the latter category of subtle mechanism are more successful in creating a social distance between poorer sections and the facilities. In the case of illiterate and backward tribal communities the traditional beliefs, customs and practices paly a crucial role in availing facilities that are different from their traditional framework.

Awareness about facilities, their location, the type of services offered, the advantages and disadvantages of these services, forms a distinct set that influences the accessibility aspect. As a prerequisite, like availability, it ensures the utilisation of a facility and is determined by the level of literacy, the information activities on health care and the physical presence of institutions. The level of literacy is the basic ingredient and prepares people for receiving and synthesising information. It comes along with development and in hierarchial societies it varies from group to group depending on their level of development and their social and economic position.

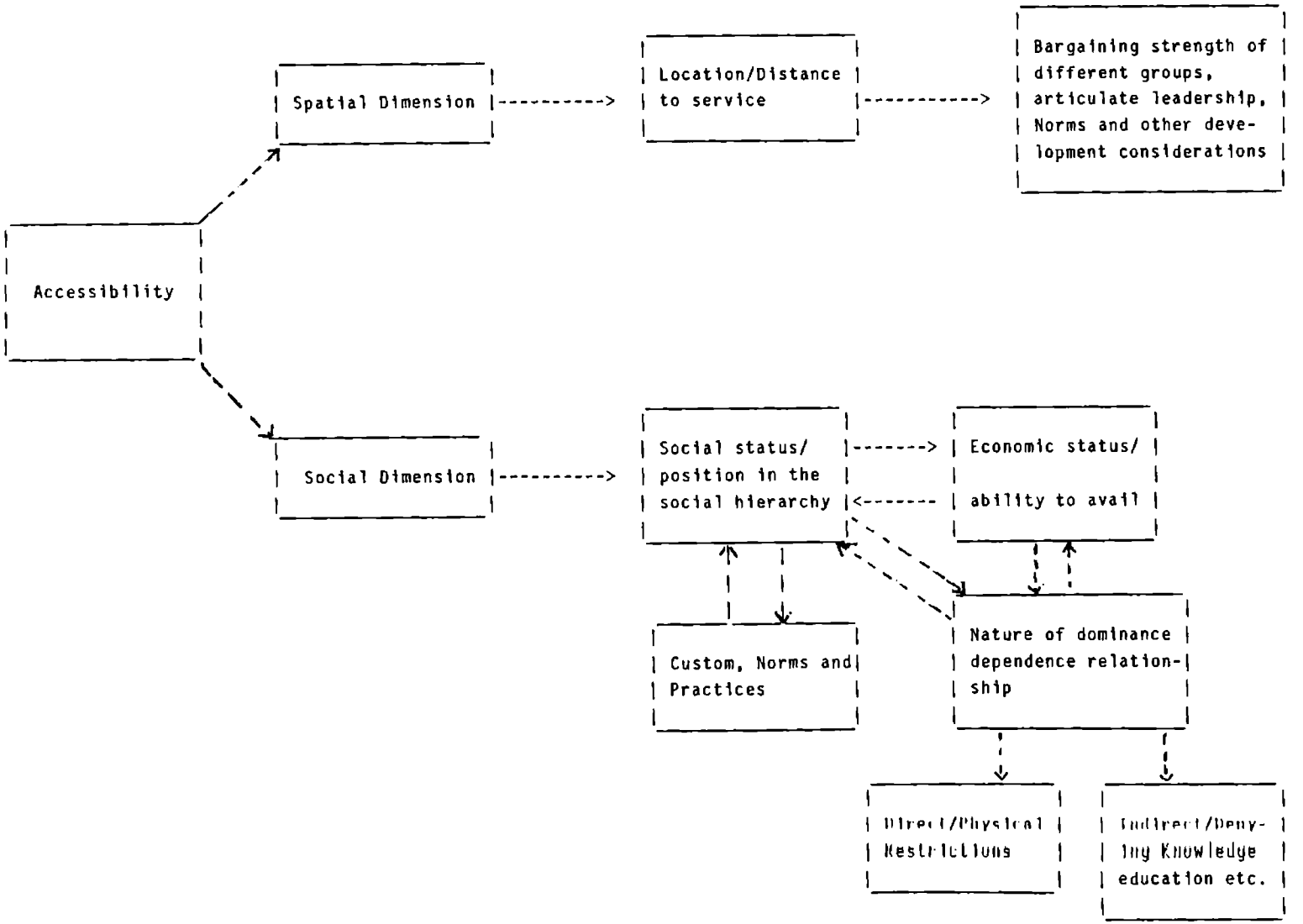
The social dimensions of accessibility goes even deeper discriminating individuals on the basis of gender and restricts access to health care for them. Though it varies from society to society, the accessibility to health care

for women depends on their status in the society including the society's response to the health needs of women, their income level and the availability of health institution within approachable distance. These factors operate in terms of 'need', 'permission', 'ability' and 'availability'[1]. Need denotes the extent of ill health among women, perceived and otherwise, but indicating the extent of health care required by them whereas permission refers to the familial, communal and societal norms that allows women to seek health services. Ability reflects on the economic status decided by her employment status, income, control over income and her household responsibilities[2]. Availability pertains to the supply of health care services which is an extraneous factor compared to the other three. The interaction between availability and other factors decides the extent and use of health care which in the case of women generally falls short of their needs or requirement. This relationships are explained in Chart 2.

The various factors that determine the availability of and accessibility to health care form an interactive whole and decide the pattern of utilisation of health care facilities. In ideal situations this necessarily reflects the health needs of people. But in unequal societies, in spite of the interventions by the state to protect the interest of those with near-nil purchasing

Chart 2

Schematic representation of relationship between factors affecting the accessibility to health care facilities



ability through the provision of free services or subsidies, the pattern of consumption is always one-sided or skewed in favour of the richer sections. This results in a pattern of growth of health care system that caters to the richer sections ignoring the health problems and requirements of the poor that stems, basically, from their living and working environment. The interest which controls the production of medical care too requires such a trend for furthering their position. The manifestation of this is reflected in the concentration of medical institutions in locations advantageous to the better off sections, development of curative health services that neglect the promotive, preventive and rehabilitative aspects of health care, the uneven emphasis on programmes that do not consider the health needs of people, the provision of services through personnels who are ill equipped and ill informed of the local culture and needs and in the discouraging attitude of medical system as such to the health problems of people. If no structural changes take place the present pattern shall only continue further reinforcing the inequalities.

Availability and Accessibility: the context of Wynad

The availability of facilities in terms of medical institutions and manpower had always been deficient in Wynad. The formation of the district as a separate

administrative unit itself was an attempt to overcome this backwardness. The number of medical institutions in Wynad during 1980-81, immediately after the formation of the district, was only 29 or about 2.9 per cent of the total institutions in the State. This number over a period of 10 years has gone upto 38 constituting about 3.3 per cent of the State's total. In 1980-81 a medical institution in Wynad therefore, was catering to population in an area 73.5 sq.kms. while the corresponding area for the State as a whole was only 39.9 sq.kms. The situation improved remarkably by 1990 to 56.1 sq.kms. in Wynad and to 33.6 sq.kms. in Kerala. The eighties also witnessed a comparatively impressive rate of growth in both the number of institutions and of beds available. In the case of the former the annual rate of growth was about 3.1 and 1.8 per cent respectively for Wynad and Kerala; in the case of availability of beds, the rates were still more impressive, 5.3 and 1.13 per cent for Wynad and Kerala respectively during the period between 1980 and 1990. The number of beds available per thousand population in Wynad was 0.69 in 1980-81 and it has gone upto 0.91 in 1990-91 while for the State as a whole it was 1.2 in 1980-81 and it remained unchanged during the decade. Notwithstanding the improvement in medical care facilities during the eighties, especially after 1985, Wynad still lags behind other districts in the

State. The 80's, however, was a turning point for the district because of the introduction of India Population Project which concentrated on improving the infrastructure in medical care. This is evident from the pattern of growth of institutions and availability of beds before and after 1985.

Table 1 Rate of growth of medical institutions(allopathic) and number of beds available in Wynad and Kerala - 1980-85 and 1985-90.

Institutions/Beds	Average annual growth during the period (Percentages)			
	VI Plan(1980-85)		VII Plan(1985-90)	
	Wynad	Kerala	Wynad	Kerala
1. PHCs- Beds in PHCs	13.31	2.50	92.00	73.20
2. Hospitals- Beds in hospitals	00.00	3.00	313.30	15.80
3. Dispensaries- Beds in Dispensaries	2.60	0.70	5.00	1.40
4. Total Medical Institutions	0.69	0.49	5.33	3.18
Total beds available	7.43	0.24	2.35	1.99

Source: Computed from data provided by the Directorate of Health Services, Trivandrum.

There are several reasons that contributed to this low level of availability of health facilities in Wynad. Some of the reasons are historical and pertains to the

geographical seclusion of the region from the mainland and its specificities in the composition of its population. The geographical seclusion insulated the region from the developments that were taking place elsewhere in the State during and after Independence. The absence of large scale participation of the region in the social and political movements restricted social leadership in the hands of few enlightened groups and communities. They controlled the society, both politically and economically, and therefore, were able to divert what ever development that took place during the post Independence period to their advantage.

The composition of the population in which the tribals constitute a significant percentage facilitated this process as the tribals were undemanding and voluntarily excluded themselves from the mainstream. They are largely untouched by development initiatives such as education and remain in the background without a leadership or a perspective. However, in spite of their desire to be excluded from the mainstream culture, they were drawn more into it because of the developing economic relationships which controls property and production. The large scale migration from the mainland and their conquest of land and other resources once enjoyed by the tribals resulted in new relationships in which the tribals now depend heavily on these sections for their survival. Differentiation in

society has become sharp with plantation owners, irrespective of the size of land, on the one hand and the pauperised tribals who are now unskilled plantation labourers on the other. The position of the tribals in terms of ownership of land, income and employment as analysed in Chapter III testifies this. Their income is appallingly low as 85 per cent of the families earn an average annual income of Rs.5000 or less; the land they owned are inadequate with 75 per cent of them owning 1 acre or less. This also reflects in their employment pattern where 78 per cent are unskilled agricultural labourers. The resultant economic exclusion along with the social and cultural exclusion of tribals due to the lack of education and their beliefs in traditional customs and practices is still continuing almost uninterruptedly in the absence of an effective leadership from among them who can bargain and bring in development initiatives such as health care facilities to tribals. This was explicit from the sample which shows a complete vaccum in terms of leadership or political participation. There is not a single individual in the sample households who holds, or held, a position in the party or in local bodies like the Panchayat or a Co-operative. The outcome was the continuous neglect of the region as well as its tribal population. The process has also resulted in uneven development in the availability facilities within the region which

discriminates the tribal populations. The privileged classes through their economic dominance and political proximity were able to wrestle out health facilities in developed centres and townships that are advantageous to them. To supplement this private investment in health care was also encouraged which further resulted in the neglect of interior regions in Wynad where the tribals are concentrated.

The number of institutions under private sector in Wynad during the mid eighties according to the Survey of private medical institutions was 219 compared to 59 institutions in the government sector for the year 1988. Most of these institutions are located in three township of Kalpatta, Sultan Battery and Mananthody.

However, the process of extreme exclusion of tribal communities from the benefits of health care began to weaken in the eighties because of some unintended consequences of migration. The migrants who had completed their conquest by this time started consolidating their base by demanding several infrastructural developments such as education and health care facilities to the interior regions of the district where they displaced the tribals. During the Seventies and Eighties they were functioning as efficient pressure groups and were successful in bringing about improvement in the availability of health care services. The tribals too were benefited out of these developments as the

facilities, for the first time, became accessible to them. Another outcome of migration and the resultant interaction with the nontribal settlers was the change in their outlook towards modern institutions such as education and health care system and the developing acceptance of their advantages. In fact, education is gradually making in roads among them and the position has changed considerably during the eighties. This has helped in the emergence of a leadership which, though nascent and ineffective in the present context, nevertheless, is aware of the reasons of their backwardness and the importance of political actions and bargaining. The unprecedented rate of increase in health care institutions in Wynad during the 80's is largely due to these developments, but there are also important extraneous factors like the change in emphasis, and therefore norms about provision, at the national level due to initiatives such as the Alma Ata Conference and the National Health Policy, as well as the introduction of special programmes to rectify the imbalances and to ease tensions and contradictions. The India Population Project funded by the World Bank was one such programme which changed, dramatically, the backward status of the district in terms of the availability of health care institutions.

The perceptible increase in the availability of institutions, especially during the last decade, does not

explain the extent to which they were beneficial to the tribals in fulfilling their health needs. The data available in this regard is extremely inadequate if not non-existent, as there is no system, so far, to monitor the progress in the health status of tribals. The pattern of utilisation of health care facilities by the tribals in the sample, their perception about the factors that influence the choice of a facility, the responses of these institutions such as the services they provide and the attitude of health personnels together reveal how these facilities have been unfolding to them. These dimensions also explain the factors that determine the access to health care in the case of tribals. A direct indication of these factors and its implications on accessibility in Wynad reflects on the perceptions expressed by the tribals about the reasons that influenced their decisions to avail a facility. The tribal households in this regard are guided by considerations such as distance, cost and attitude and behaviour of health personnels. The distance, or the availability within approachable distance, ranks high in their reasoning and about 54 per cent of them considered this as the chief reason which prompted them to use an institution. Cost consideration is also important and about one-fourth of them regard this as the main reason. These perceptions and the weightage they attached to each of these reasons evolves from the social realities which

ultimately decides the nature and extent of accessibility of health care institutions in the district.

A crucial element of accessibility in the case of tribals in Wynad is their historical backwardness and cultural seclusion from the mainstream. Historically they constitute a distinct group isolated from the mainstream and maintaining discrete contacts with the rest. This has resulted in an outlook and value system that was consistent to their living environment and survival. The process of integration of tribals that began with the exploitation of forest resources and land for plantation purposes, largely by migrants, and with government interventions to improve their standard of living resulted in certain positive changes that improved their level of awareness. But unlike other categories, tribals carry a stigma of their aborigin background which, inspite of their preparedness to adopt the mainstream culture, subjected them to an attitude of ridicule and neglect from other communities. This was evident from our interactions with a cross-section of nontribal populations in Wynad who included health personnels and development bureaucracy and they consider tribals as a 'social burden' and a group of population who take away the benefits which otherwise could have been used for the 'general welfare' of the community and not for any 'particular sections'. The attitude expresses itself in the

style of their interaction with tribals who in the course of time develop a total mistrust of nontribals among whom they survive.

The traditional customs and practices of tribals are another set of factors that influences their decisions in availing of the services of health care institutions. In the case of Wynad the influence of these practices is pervasive and it encompasses all aspects of life. Disease is one such occassion which induces them to observe these practices and, as seen from the sample, a sizable percentage, 51 per cent, of them do resort to these practices which are partly rational and partly irrational and superstitious. The dividing line between the two is extremely thin and they are often branded as irrational superstitious practices. As seen from our earlier discussions the immediate response of tribals in the context of disease is to take the patient to the medicine man who is accessible and affordable. The medicine man combines tribal medicines with customary ceremonies and if proved ineffective advices the tribals to seek the help of modern medicine. The practice, therefore, enables them to overcome to a certain extent, the other difficulties like distance, cost and the unfavourable response from health personnels. The attitude of tribals towards modern medicine, as we have seen from the responses, opinion and the pattern of

utilisation of health care facilities, proves this point that the tribals accept modern medicine and utilise the health care institutions if they are located within their reach. However, few among them, like Kattunaickans and Paniyans, are sceptical about unfamiliar practices and rely heavily on their traditional system. But even among them there are no norms or taboos that prevent individuals from using modern health care facilities. The belief in the efficacy of these practices however, is on the decline and many of them are unwilling to accept openly that they practice traditional customs.

The social and economic inequalities in Wynad in the absence of any structural changes apportions the gains of economic development to the benefit of richer sections resulting in the perpetuation of dominance-dependence relationship between various categories of populations in society. The relationship manifests in different forms. In its blatant and direct expression it uses physical force to restrict the poor sections from using public funded facilities like a Public Health Centre or a Sub Health Centre. Wynad is relatively free of such incidents largely because of the high level of political consciousness in the State. The indirect manifestations of this relationship is strong and operates subtly through advantages such as control over education and knowledge and especially the

institutions that provide knowledge. The educational superiority of the upper classes and the advantages they appropriate for themselves is an obvious phenomenon that does not require explanation. But in Wynad this takes a different turn in the form of a campaign which characterises tribals as hopelessly anti-change and unwilling to get educated or utilise the government 'concessions' that are offered to them. It points out that the development efforts are useless and mere 'waste of resources'. This belief about the tribal inferiority, about their indifference to changes, the superstitions, customs and practices is pervasive and is even shared by the bureaucracy who are responsible for implementing development projects. The result is disastrous. Projects are not taken seriously; schools, hospitals and other public institutions are poorly located; inadequatley staffed and badly run, offering inadequate services. The failure in achivement targetted for these officials are often justified on the ground that tribals are apathetic, non co-operative and resistant to change. This also helps to siphon off large funds into the hands of privileged sections who have vested interest in perpetuating this image about tribals. Also, it develops barriers, especially at the level of attitudes that discourages tribals from utilising modern health care facilities and to fall back upon traditional health care practices for their immediate needs.

The emerging trend

The post Independence developments in health care among tribals does not follow a linear path. The committment given in the beginning that they will be treated differently, though it facilitated a favourable flow of resources to them failed to produce the desired results. The remote and hilly regions where the tribals are concentrated were ignored consistently in spite of the emphasis and priorities it received in our Five Year Plans. This realisation about the non achievements periodically resulted in the launching of new programmes and schemes hoping to clear backlogs and making up for failures. But, there had been a qualitative change in the attempts towards health care development during the eighties after the Alma Ata Conference of 1978 which declared a new commitment to provide 'health for all by 2000 AD' and also after the enactment of National Health Policy in 1983. The norms for providing health care facilities in remote, hilly and tribal areas were revised and fixed. The delivery system was also geared up to fulfill this commitment.

These developments that have been taking place since Independence towards improving the health status of tribals were discussed in Chapter III in the context of Wynad. The pre-Alma Ata period, as is the case elsewhere,

neglected this region and its tribal population and thereby widening the gap between the region and the State. The catchment area served by a medical institution as well as the availability of bed per thousand population, the two indicators used to discuss the regional disparities clearly explain this gap. There was a concerted effort after the eighties that grew out of the realisation about the disparities to narrow the gap in terms of provision of facilities. The district received a special boost in the later half of eighties with the introduction of IPP which facilitated an accelerated growth in medical infrastructure.

The study focuses on these developments in a historical and empirical perspective to expalin the trends that are emerging in the context of health care development for tribals. The preceding discussions therefore concentrated on various aspects such as the tribal situation or the social, economic and cultural dimensions of their existence and the changes that is occuring over time; the environment and its implications on their health; the nature of interventions initiated by the Government its changing emphasis and priorities; the delivery system that had evolved over time, its organisation and the structure; the orientation of health personnel and especially that of medical officers; the programmes implemented and the importance they receive while implemented; the nature of

interaction between health care institutions and tribals and the messages that are propagated which together explains what and how health care had been operating as an extraneous system in the tribals setup and the perceptions of tribals about their health problems and needs; their nature of response to these problems they face with the new health culture and their strategies of combining tradition with modernity which combinely explain, on the other hand, how it had been received by the tribals. The trends that are emerging out of this discussion can be summerised in the following order.

The tribal situation evolving out of the social and economic changes in Wynad can be characterised as one which pushes the tribal communities to the status of pauperised and marginalised groups who constitute the lowest rung in the social hierarchy. The process of pauperisation began with the large scale migration of non tribal communities and the eventual appropriation of their resource base initially, through direct and forceful methods and then, through subtler ways of neo-feudal exploitation or through market, credit, knowledge and other dependency generating methods which were increasingly getting stronger during the later years of Independence. The differentiation between tribals and other sections of population, especially the privileged sections perpetuated a dominance-dependence

relationship that places the tribals in an extremely vulnerable position in relation to their access to health care. This runs basic to their backwardness and therefore to their low health status. Consequently, mere provison of health care facilities without structural transformation of the society and without altering the exploitative relationship, may prove the task of providing primary 'health care to all' an uphil task. The trickle-down effect of more growth and more facilities in an unequal society can only sharpen the differentiation and hence the contradictions. Health care development is impregnated with these contradictions.

Development in health care during the post Independence period follows an uneven pattern where regions and groups of populations are treated differently in the provision of health care. During the initial three decades, till the 1970's, the disparities between regions were growing at considerable pace, but thereafter it slowed down due to certain concerted actions. The interdistrict disparities in the availability of health care institutions and health manpower are still sharp and it may assume unmanagable proportions again, as it engenders the tendency of further deterioration, if no deliberate steps are taken. The intra-region and intra-district disparites are also growing where facilities are located in developed centres

rather than on places selected on the basis of giving maximum advantage to the underprivileged sections. The development of health care institutions in Wynad substantiate these tendencies which again arise out of the unequal social structure and the weak bargaining positon of tribals.

The social and eocnomic backwardness of tribals reflect equally on their living environment and working conditions. Both are mutually reinforcing and explains the health status as well as the pattern of diseases. The diseases of tribals are largely diseases of their living and working conditions and of poverty and malnutrition. The provison of health facilities without touching these basic maladies therefore, proved ineffective or at best, it could provide only a temporary solace. The emphasis and priorities of health care programmes implemented through the vast network of institutions indicate this. The undue emphasis on curative health care and family planning of PHCs is only increasing over the years irrespective of the commitment to provide primary health care to all by 2000 AD. The Minimum Need Programme or the integrated concept of 'primary health care' which is accepted world over after the Alma Ata Conference failed to make any impact at the operational level. The development of this tendency, is deeply entrenched in the organisation of production of health care

and the interest of those who control it. The undue emphasis of family planning also reflects the interest of the privileged classes who feel threatened by the growth of population and its uneasy consequences. In this relationship between the social production of illness, ie., the complex relationship of living and working environment and health and illness; and the organisation of production of health care which decides the nature of health care development the latter always exerts its dominance in controlling the environment for its benefits. The tendency is strongly visible in Wynad where the PHC, the grass-root level organisation responsible for the over all development of health status of tribals, engage themselves mostly in family planning and clinical services.

The medical officers and other health personnel lack conviction and commitment due to their inadequate understanding about tribal culture and their historical specificities. They consider tribals as irrational and superstitious and therefore, as negative in their attitude to modern health care practices especially family planning activities. This results into routine implementation of health care activities which exclude tribals from the focus. The concept of 'primary health care' itself which promote integrated health care with medical officer as the group leader is unpopular and unacceptable to medical officers.

The field level activities that are intended to generate effective demand for the services and to maintain the interaction between tribal societies and health care system also reflects the same orientation. The activities are unabashedly centred around family planning and of late, on immunisation and other vertical programmes imposed upon them. The attitude of paramedical staff towards tribals is again one of contempt and indifference that results in detachment and mistrust on the part of the tribals.

The responses of tribals as receivers of health services also corroborate the social realities and conflicts expressed above. Their responses against diseases and their pattern of use of health care institutions reveal considerable divergence from the point of view of the providers. Tribals show an indigenous and ingenious sense of rationality in their response towards illness where he combines his traditional medical practices with modern systems at an appropriate time considering his limitations and availability of resources. He believes in the efficacy of modern medical care but poverty, social distance observed by others, nonavailability within accessible limit and the unfavourable attitude of the medical system restrict its use.

The health care system as it is evolved over the years till now lacks a strategy or comprehensive plan in tackling the health problems and improving the health status

of tribals who form a distinct category of population that require preferential attention. This again boils down to the social and economic realities and the inequalities that exist in society. Any concerted effort to improve the health status of tribals, therefore, requires structural changes in society. It should permit people to have access to health care, socially and spatially, and it should involve people in the planning and management of health care. The acceptance of 'primary health care' as a philosophy and strategy is appropriate but its implementation in an unequal and hierarchial social structure where the interest of those who control the health care production dictate the pattern of growth, as well as a health culture, restricts its effectiveness and it is even bound to fail. The pattern of development in the post Independence period and the contradictions that are highlighted indicate this predicament.

References

1. Chatterjee, M. (1988). **Impementing Health Policy**, Manohar, New Delhi, p.73.
2. **Ibid**, p.75.

CHAPTER VII

SUMMARY AND CONCLUSIONS

Social and economic organisation determines the pattern of health and illness, as well as the type of medical care available in societies. The present study is built on this premise and examines the nature and growth of health care development among tribals in Kerala with special reference to Wynad.

In differentiated societies where economic organisation is profit centred the development of health care assumes certain inevitable patterns. These societies, in the first place, encourage health care systems that perpetuate the existing social and economic relations with its concern for profit. This results in the growth of a medical practice that is heavily curative, thus undermining the importance of preventive and promotive functions. Individuals develop a health culture in such situations that makes them depend debilitatingly on medicine and other medical interventions. The specialisation and the sophistication which medical care acquires in this pattern of growth then pushes the cost upward restricting the benefits largely to the richer sections. The poorer sections inevitably become victims of this growth. The curative

orientation of medical care, in the second place, in conjuction with its bias favouring the richer sections, results in an uneven growth of health care facilities discriminating backward rural regions against urban centres. This further distances the poor who are concentrated in rural areas from the health care system.

The health care system in India during the Post Independence period conforms to this pattern.

There are two distinct phases in the history of health care development in India. The first phase begins with the five year plans and spans over a period of twenty five years. It ends with the fifth five year plan which coincides with the international conference on primary health care at Alma Ata in 1978. The conference and its declaration on primary health care provided a new orientation and commitment to health care the world over. The second phase imbibes this spirit and begins with the sixth five year plan. The National Health Policy in 1982 also marked the beginning of this phase.

The developments during the first phase, the pre Alma Ata phase, were confined largely to developing medical infrastructure for reaching out to the people. The initial thrust was on providing basic health care which was defined as a comprehensive package of preventive, promotive and curative health care to all on an equitable basis. The

achievements, to a certain extent, were remarkable. Curative facilities such as hospitals and other medical care institutions grew several fold during this period; so did trained man power both medical and paramedical. Growth in the production of drugs and medical equipments was even more remarkable. Several communicable diseases such as small pox and plague were eradicated and others were brought under check. Consequently, indicators on health status especially life expectancy and infant mortality rates began showing improvement at the macrolevel.

The achievements, though remarkable in the above respects, fall short of expectations. The commitment given in the beginning ensuring basic health care to all remained unrealised even after two and a half decades. Instead, the health care system alienated itself from the masses and concentrated in developed urban centres. The orientation was curative and it permitted a lopsided growth in medical technology which favoured sophistication and specialisation. This further widened the gap between the rich and the poor. The problems of the poor such as nutrition, water supply, sanitation and unhygienic health habits were consistently ignored by the health care system. Indigenous health systems were discouraged and a new health culture was promoted that forced the individual to depend on modern drugs and other medical interventions. The marginal populations such as the

scheduled castes and scheduled tribes were increasingly eased out of the framework of health care except in the case of family planning.

The crisis of the health care systems, reflected mostly in its inability to solve the problems of the rural masses, reached its zenith towards the end of the fifth plan period. Several initiatives such as the Community Health Volunteers Scheme and the Minimum Need Programme were introduced towards the end of the phase. The Alma Ata conference ultimately provided a break and put primary health care once again at the centre of health care systems. The sixth five year plan and the National Health Policy imbibed the spirit incorporating these changes and a concerted effort was planned to correct the imbalances created in the past.

The development of health care in Kerala followed the national pattern though it enjoyed a unique historical advantage in terms of health infrastructure and health status. The pre Alma Ata phase in the state was marked by growing imbalances among regions and populations, lopsided emphasis on curative practices, neglect of indigenous medical systems and the growth of a medical culture that depended on expensive drugs and sophisticated hospitals. The inequalities between regions were particularly pronounced because the growth in health care facilities during this

phase was confined largely to the districts of Travancore and Cochin. Malabar region with a concentration of marginal communities like the Scheduled Tribes was consistently ignored. The disparities between regions reflected the disparities between groups of populations also.

The changes during the second phase beginning with the sixth five year plan drew inspiration from the approach suggested by the Declaration of Alma Ata. At the planning level the concept of 'health for the people' was replaced with the concept of 'health by the people'. Regional disparities received special attention and were brought down considerably during the two plan periods. The infrastructure as a result grew substantially improving accessibility to all categories of populations. The emphasis on curative health care, however, persisted without change. There was also disproportionate emphasis on family planning activities which, at the primary health centre level, eclipsed the importance of other activities. The effort undertaken during this phase, thus largely aimed at consolidating the gains of the past. The indicators on health status like the life expectancy and infant mortality rates therefore, continued to remain at a commendable level. The achievements in this regard, however, conceal the neglect of the poor sections.

Health care development among tribal communities assumes significance in this context because it brings to

sharp focus the nature and content of health care system.

The tribal communities in Kerala constitute only one per cent of its total population. They are concentrated in the hilly and backward districts and are historically isolated from the mainstream populations. The tribal situation in the state is characterised by extreme poverty and exploitation by non tribals. The developmental efforts initiated during the post Independence period facilitated a favourable resource flow to tribal regions but its benefits however, bypassed them.

Wynad district which is the focus of the study provides a microcosm of the tribal situation in the state. It has the highest concentration of tribals among the districts and is regarded as a tribal district. The tribal situation here is characterised by poverty, exploitation and deprivation. They are either landless or owners of little land. Many are unskilled agricultural labourers and earn poorly for their survival and are thus caught in a vicious circle of landlessness, low income, illiteracy and low health.

The economic conditions and living environment of tribal households in our sample is miserable. They earn income that is barely adequate for their survival. They also lack opportunities and this coupled with lack of skill pulls them down into a perpetual state of poverty. The added

disadvantage of ignorance due to illiteracy, along with the unhygienic circumstances and personal habits, the contaminated water they drink and the lack of other basic amenities make the tribals susceptible to a variety of health problems. This is reflected in the high incidence of disease among the sample households (90 per cent). The major health problems on the basis of the symptoms reported by the tribals are fever, diarrhoea, skin diseases and T.B. The relationship between poverty, living environment and diseases is obvious and the tribals, especially the women and children, are conspicuously undernourished and malnutritioned.

Illness has a definite role and meaning in their life. The tribals perceive illness as a state where he becomes disfunctional, that is, he is unable to perform his routine work. They also associate continuous medication with illness. Tribals are mostly fatalistic and believe that illness is a punishment for their sins. This attitude to diseases results in a set of responses that are superstitious and bordering on faith healing. The belief also develops a sense of helplessness and indifference towards diseases. This coupled with the pressures of poverty and struggle for survival force the tribals to ignore their health problems unless it reaches an exploding level. They are also ignorant of diseases and consider their existence

as normal inspite of intense suffering.

The responses of tribals to the health problems combine both traditional and modern health care practices. The initial response in most cases is to fall back on the traditional system of giving homemade remedies or seeking the help of a medicine man who provides more specific treatment of folk medicines. He also practises traditional methods of appeasing deities and spirits which are crucial in their belief systems. If the illness persists the tribals seek the help of modern medical institutions even if they are distantly located and involve expense. Traditional practices, considered as a deterrent in spreading the message of modern health care, coexist peacefully in their scheme of things. The intensity of their faith in traditional systems however is on the decline.

The health care delivery system for tribals has two streams, the first that functions as part of the Directorate of Health Services and the second, that operates under the Directorate of Tribal Development. The first set-up which is comprehensive and covers the entire district is hierarchical and centralised and allows little freedom for planning and innovating at gross-root level. The primary health centres which is considered as the basic health care unit and which is designed to cater to the health needs of people at primary level are reduced to mere implementing

units of programmes decided at national or state level. This tends to ignore local needs and priorities resulting in lopsided emphasis on activities and programmes. The second set up which supplements the first concentrates entirely on tribal communities but, like the other arrangement, functions in a routine way without direction and planning. Most of the facilities under this category are Ayurvedic dispensaries which are involved mainly in curative activities.

The activities undertaken by the primary health centres are indicative of the emphasis the health care delivery system places on the problems of tribals. In the present setup it devotes nearly 30 per cent of its time and resources on clinical and curative activities, 50 per cent on family planning and the rest 20 per cent on preventive and other programmes. The undue emphasis on family planning is glaring. This is inevitable in the present arrangement where the primary health centres are rated for their efficiency on the basis of their achievement in family planning. The primary health centres faced with the pressures to fulfill the targets on family planning, ignore other aspects of health care that are more immediate and relevant. An attitude has also developed among health staff to exclude from their focus communities or groups who are considered to be negative to family planning. Tribals are a

victim of this attitude as they are believed to be indifferent to family planning.

The attitude of health personnel in primary health centres and other medical institutions towards tribals is unsympathetic and negative. They are ignorant of tribal culture, its specificities and the historical reasons for their backwardness. They consider the tribals as irrational, superstitious and hence as a category who are apathetic to modern medical practices. This attitude again works against the tribals and distances them from the health care delivery system.

The nature of interaction of tribals with the health care facilities, however, contradict many of the above accepted assumptions about them. The tribal households in the sample display a high level of awareness about health care facilities available around them (93 per cent), so also the degree of utilisation (78 per cent). They accept and utilise facilities if these are available within accessible distance and also if services are affordable to their income status. They are also influenced by the type of services and feel encouraged by the reassuring responses from institutions and staff. The presence of institutions in their midst and their various activities, even if centred around family planning, brought about changes in their health culture and traditional practices. Their willingness

to accept modern medical facilities in deliveries is an indication of these changes. Tribals, contrary to the belief expressed by the health personnel, accept the concept of family planning. But the immediate reasons that forced those in our sample for accepting the methods are basically economic compulsions.

To sum up, the health problems of tribals, their responses to those problems and the interaction with the health care delivery systems reflect clearly their unique backwardness and their relative position in society. The diseases are largely diseases of poverty and they arise out of inadequate income and other social and economic disabilities such as lack of skill, lack of education and lack of political consciousness. These factors form a vicious relationship and pulls the tribals down to a state of perpetual backwardness of which illhealth is a natural outcome. These conditions also force them to treat illhealth as normal till it explodes as a medical catastrophe. They are crippled further when they confront an indifferent if not a hostile health care delivery system. The modern health care system has several inherent tendencies such as its curative orientation undue concern on family planning and the urban bias of health personnel that force it to exclude the tribals from their focus. The tribals on the other hand, are evolving a health culture that make them depend

increasingly on modern health care delivery system.

These observations about the health problems of tribals and the health care delivery system in the study are suggestive of certain trends that explain the nature of health development among tribals in Kerala.

The pattern of utilisation of health care facilities in a society is a function of two sets of factors: availability and accessibility. Each of these aspects represent a system that is internally coherent but shaped by a number of factors that interact with each other. Availability manifests itself in the provision of health care institutions and services. The nature and extent of availability of health care facilities at the national level is determined in accordance with the equations of various interests and their relative bargaining ability. Even at the micro level the magnitude and distribution of facilities to a group or a location is largely a function of their economic and political strength, the level of awareness, the ability to articulate and the quality of leadership. Accessibility which reflects the extent of utilisation of facilities is also decided by a set of variables that are economic, social and cultural. It varies between groups in a hierarchical society, such as ours, on the basis of income, caste, customs and practices. Availability and accessibility favours those at the top while those at the bottom are

deprived in both respects. The tribal communities who rank the lowest in the social hierarchy are one of the worst affected in this regard. These communities in Wyanad are socially, economically and politically weak. They lack awareness and above all lack a sensitive leadership to bring in facilities to their locations. The accessibility on the other hand is limited by the lack of availability, lack of income, cultural practices and the various expressions of dominance-dependence relationship which discourages them to use the health care system. These constraints expressed through availability and accessibility evolved a health care system over the years that was indifferent to the health needs of tribals.

The inequalities in health status which is a reflection of the social and economic inequalities is accentuated under the present system which emphasises after-event interventions using expensive drugs and sophisticated equipments. The production of health care, primarily of drugs and equipments, and its inherent concern for maximising profits exerts pressure on the health care system to expand according to the logic of profit. Curative orientation at the cost of preventive and promotive health is the inevitable outcome of this. It also promotes a differentiated social arrangement to have a constituency among the richer sections. The public health care system

which was introduced to overcome the economic and social disabilities of poorer sections to enable them to have access to medical care was also a victim of this orientation. The health care institutions in this set up confine themselves largely to curative and family planning activities. This ignored the health problems of the poor and the social conditions of their origin.

The inequalities in society and the inability of the poorer sections to bring facilities to their regions and to their advantage has resulted in a tendency that promoted uneven development of health care facilities benefiting the influential sections. In Wynad this tendency was conspicuous in that the health care facilities are concentrated in towns and developed regions without considering the intensity of the problems faced by tribals. The curative orientation of modern medicine reinforced this uneven development.

The health care system has developed a health culture in society, irrespective of divisions within it, that made individuals depend exceedingly on modern medicine and medical facilities. In the case of tribals, the eventual growth of health care facilities around them visibly disturbed their traditional health culture. The use of tribal medicines though popular as first level interventions is gradually declining in importance. This destruction of indigenous systems is inevitable in the present system

because of its orientation to profit.

The low status of health among tribal communities thus reflects mainly their social and economic disabilities. The public health care delivery system that was developed after Independence concentrated mainly on improving the infrastructure among them. The growth in terms of number of institutions and number of health personnels was remarkable both in Kerala and in Wyanad, especially during the post Alma Ata phase. But this improvement without any structural change in the society did not yield the desired results. The health problems in all probability, increased several-fold consistent with their poverty and deprivation. The health care delivery system was largely irrelevant to these problems as it did not address the basic reasons from which these problems originated. Structural changes abolishing the existing social and economic disabilities of tribals are, therefore, essential prerequisites and unless it takes place the tribals shall remain continuously out of the present health care framework.

APPENDIX I

Interview Schedule (For Tribal Households)

1. General Information

1.1 Taluk

1.2 Village

1.3 Primary Health Centre

1.4 Name of the person interviewed

1.5 Relationship with other Family members

1.6 Tribal Community to which he belongs

1.7 Details of family

Name of persons	Sex	Age	Education	Main occupation	Income				Total income
					Agriculture	Agricultural labour	Govt. service	Others	

1.8 Details of land owned and cultivated

a. Land owned by family

b. Land under cultivation (specify if there is leased in/out land)

II. Availability of health facilities

2.1 Are there any health facilities or hospitals in your locality? Yes/No

If 'yes' give details

Type of Hospital	Distance from house
1. Government (specify PHC, SHC, Dispensary)	
2. Government Ayurvedic/Homeo Dispensary/hospital	
3. Private hospitals/clinic/ dispensaries etc.	
4. Private Ayurvedic/Homeo Dispensary/hospital	
5. Others (specify)	

2.2 Did you or your family members avail these facilities during the last year? Give details

Which hospital	For whom	What was the disease	When was it	Whether admitted or not	Who asked you to go to this hospital	Was there any reason to select this hospital

2.3 What you said above was about hospitals/health facilities available in your locality. But apart from these, are there any doctors/vaidyans/or any other health practitioners in your locality. If so give details

Name of the doctor/ practitioner	How far is his place of practices from your house	What system of medicine he practices	Have you ever visited him	What was the diseases	Generally for what illness do you go to him

2.4 If you have access to hospitals as well as to medical practitioners as descried above which one would you like to go in case of illness, Why?

III. Health Problems in the family

3.1 Did you or anybody in the family fall ill during the last two years

Who	What was the illness

3.2 What did you do when he/she fell ill?

3.2a What was the treatment given to her?

3.3 How much time it took for the patient to recover (If the situation deteriorated what did you do?)

3.4 If taken to hospital/doctor please give the following details (for each major incidents)

1. Which hospital/doctor?
2. Who advised to take him there?
3. Distance from house
4. What was the cost of transport?
5. Expenditure in the hospital

For doctor	Nurse	Other persons	Medicine	Any Other expense (specify)

IV Health Problems of Children

4.1 How often did the children fall ill during last year?

4.2 What was/were the illness(es)?

4.3 Does this illness occur to most of the children in your area?

4.4 What do you think are the reason for these illness?

4.5 What do you do when it occurs?

(1) Local medical person, Vaidyan or traditional healer who practices indigenous system of medicine (specify who, his practice and treatment. Also how much he charges)

(2) Doctors/qualified medical personnel (specify who, system of medicine, charges etc.)

(3) Resort to traditional treatments at home (specify what treatment, etc.)

(4) Any other method of treating the illness, Specify the details. (eg., going to temples and offering prayers etc.)

(5) Do not do anything.

4.6 If you have different options like local medicine man, qualified medical practioner, hospital, etc., which one would you prefer when illness occurs

(1) Prefer home made medicine to other options

(2) Prefer qualified doctors

(3) Prefer local vaidyans

(4) Prefer to appease God by offering Pooja;

(5) Others (explain)

4.7 What are the reason for this preference?

V. Government facilities of health

5.1 What are the government health facilities in your locality? Give the following details.

What type (PHC/SHC/ Taluk hospitals etc.	Where	How far from your house	Does it have facilities for inpatients

5.2 Did you ever utilised these facilities? If 'yes' give the following details

(a) When	What purpose	What was your experience

5.3 Do these facilities have any advantage over others?

5.4 Are you satisfied with the service they provide? Explain in terms of your experience.

5.5 Did any health worker from these government hospitals, male or female, ever visit your house.

Who	How often	What did they explain	How much time did they spend	Did they help you in any other way

5.6 Did you ever participate in any camp/meeting organised by he hospitals/health authorities? If 'yes' give details

5.7 Do you know the Public Health Nurse in your locality?

5.8 Did she ever visit your house? Did she visit other houses?

5.9 What did she discuss? Give details

5.10 Does she charge anything from you? If so for what service? List specific incidents.

5.11 If you have children in the family of below 5 years how many of them were born in the house and how many in the hospital.

5.12 If they are born in house, Who helped you?

5.13 In the case of birth in hospital, please give the following details.

Which hospital	How far is it from your house	How did you take her to hospital	How much it cost you on what items	Do you consider it necessary to have child birth in hospital	Do you face any problems in this regard explain

5.14 If you have children below 5 in your house are they vaccinated?

5.15 Do you know for what diseases they are vaccinated against?

5.16 Who informed you about this?

5.17 Where did you take your child for vaccination?

5.18 Did you pay anything? If so to whom and how much

VI Family planning

6.1 How many children do you have?

6.2 In your opinion, how many children a family should have?

6.3 If you have many children, say more than 3, do you find it difficult to feed them and rear them.

6.4 Did anybody, from the government or otherwise, advise about the number of children you should have?

Who	How often	What did he say

6.5 Did you accept any family planning method? If so What?

Why did you accept family planning?

Who suggested it?

Did you get any reward?

Would you advocate it to others?

VII. Community practices

7.1 Do you, or your community have a Moopan? If 'yes' what are his function?

7.2 Does he practice 'pooja' for treating diseases? If 'yes' explain.

7.3 Who else practice pooja in your community?

7.4 If you practice pooja, please give the following details

1. What rites for what diseases?
2. What will be the cost?
3. Is this the practice with other families also?
4. What do you think of the effectiveness of these rites? Do you think that he got magical powers to cure?

VIII. Drinking water/sanitation

8.1 Where do you get water to drink?

8.2 How far is this (source of water) from your house?

8.3 Do you get water throughout the year?

8.4 What will you do when this source is dry?

8.5 Who fetch the water and how?

8.6 Do you boil the water before you drink?

8.7 Is the water you drink is clear or not contaminated?

8.8 What will you do if it is contaminated?

8.9 How often do you and other in the family take bath?

8.10 Details about housing and sanitation

1. Type of housing
2. Latrine systems: Yes/No If available,type of facility, When onward is he using?
3. Other facilities:

   Electricity

   Tap water

   Others (specify)

APPENDIX 2

Interview Schedule (For Medical Officer-in-charge, Primary Health Centres)

1. General Information

1.1 Name of the PHC

1.2 Taluk

1.3 Name of the
Medical Officer-in-charge

1.4 Number of doctors in PHC

1.5 Details of other staff

2. Details of population covered under the PHC

2.1 Total population

2.2 Scheduled tribe population

2.3 Scheduled caste population

3. Programmes of PHC

3.1 What are the major programmes, undertaken at this PHC

3.2 What are the special programmes initiated specially for the improvement of health for tribals? Explain the

(1) Objectives

(2) Target fixed

(3) How was it organised

(4) Achievement

3.3 What are the problems you faced when initiated and implemented these programmes for Tribals?

3.4 What are the health problems of Tribals?

Why are they prevalent?

What actions did you take to solve them?

3.4 What is the attitude of Tribals towards disease, health workers.

APPENDIX 3

Interview Schedule (For Public Health Nurses in Primary Health Centres)

1. General Information

1.1 Name of the PHN

1.2 Name of the PHC

1.3 Name of the sub-centre

1.4 Number of years spent in

(a) Wynad

(b) Present sub-centre

2. What are your functions? List them according to their importance.
3. Which are the prominent tribes in your area? What are their major health problems?
4. What is the attitude of tribals towards illness; and what do they do when it occurs? What do you think are the reasons for these disease?
5. What do you think is their attitude towards modern health care facilities and health personnel?
6. What are the problems you face in delivering health care to tribals?

BIBLIOGRAPHY

Aakster, C.W. (1986). "Concepts in Alternative Medicine", Social Science and Medicine, Vol.22, No.2.

Abelin, T., Brzezinski and Carstairs Vera, D.L. (1987). "Measurement in Health Promotion and Protection", WHO Regional Publications, European Series No.22, Copenhagen.

Adlakha, A. and D. Kirk (1974). "Vital Rates in India, 1961-71", Population Studies 28, 381-400.

Ahluwalia, A. (1974). "Sociology of Medicine", in A Survey of Research in Sociology and Social Anthropology, Vol.2, Popular Prakasan, Bombay.

Banerji, D. (1973). "Health behaviour of rural populations: Impact of Rural Health Services", Economic and Political Weekly VIII, 2261-2268.

Banerji, D. (1974). "Social and Cultural Foundations of Health Service Systems", Economic and Political Weekly IX, Special Number, 1335-1343.

Banerji D. (1976). "Family Planning in India" Peoples Publishing House, New Delhi.

Banerji, D. (1977). "Formulating an Alternative Rural Health Care System for India: Issues and Perspectives," in J.P. Naik, ed. "An Alternative System of Health Care Service in India", Allied Publishers, Bombay.

Banerji, D. (1978). "Health and Population Control in the Draft Plan", Economic and Political Weekly XIII, Special Number, 1385-1390.

Banerji D. (1982). "Poverty, Class and Health Culture in India", Vol.1, Prachi Prakasan, New Delhi.

Banerji, D. (1983). "National Health Policy and its Implementation," Economic and Political Weekly XVIII, 105-108.

Banerji, D. (1989). "Class Inequalities and Unequal Access to Health Services in India", Social Action, Vol. 39, No.3, 215-227.

Battacharjee, P.J. and Shastri G.N. (1976). "Population in India: A study of Inter-state variations", Vikas Publishers, New Delhi.

Berkman, L.F. and Breslow, L. (1983). "Health and Ways of Living", Oxford University Press, New York.

Bose, Ashish (1982). "Health Policy in India: 1947-1981", in K.D. Madan et al. eds., "Policy Making in Government", Government of India Publications Division, New Delhi.

Bose, Ashish and Desai P.B.(1983). "Studies in Social Dynamics of Primary Health care", Hindustan Publishing Corporation, New Delhi.

Caldwell, K.C. (1975). "Population growth and Socio-Economic Change in West Africa", Columbia University Press,

New York.

Caldwell, J.C., P.H. Reddy and P. Caldwell (1982). "The Cause of Demographic Change in Rural South India A Micro Approach," Population and Development Review 8, 689-702.

Cassen, R.H. (1978). "India: Population, Economy and Society", MacMillan Press, London.

Central Bureau of Health Intelligence (1976). "Health Statistics of India 1971-75", Ministry of Health and Family Welfare, New Delhi.

Central Bureau of Health Intelligence (1978). Health Statistics of India, Ministry of Health and Family Welfare, New Delhi.

Central Bureau of Health Intelligence (1982). Health Statistics, New Delhi.

Central Bureau of Health Intelligence (1983). Health Statistics, New Delhi.

Central Bureau of Health Intelligence (1976, 1977, 1978). Mimeo Reports, Ministry of Health and Family Welfare, New Delhi.

Chatterjee, Meera (1983). "Women's Access to Health Care A Critical Issue for Child Health," Paper presented at ICMR Conference on Child Health, Nutrition and Family Planning, Bangalore, November 1983.

Chatterjee, Meera (1985). "Transferring Medical Technology through an Umbilical Connection," Socialist Health Review 2, 17-22.

Chatterjee, Meera (1988). "Implementing Health Policy", Manohar, New Delhi.

Chaudhuri, B. (1989). "Social Science, Health and Culture: The Tribal Situation", Social Action, Vol.39, No.3, 243-253.

Chaudhuri, B. (1986). "Social and Cultural Aspects of Health", Journal of Social and Economic Studies (ns) 324, pp.379-388.

Chaudhuri, B. (1986). "Tribal Health: Socio-Cultural Dimensions", Inter India Publications, New Delhi.

Chaudhuri, S. (1989). "Mother-based Management-Paradigm for Holistic Health Care as a Participative Model for Rural Development", Social Action, Vol.39, No.3, 255-274.

Committee on the Status of Women (1974). "Towards Equality: Report of the Committee on the Status of Women in India", Government of India, New Delhi.

Coyaji, Banoo (1980). "Women and their Health The Indian Scenario," Paper prepared for the International Symposium, Equity Policy Centre, Washington D.C., June 1980.

Dandekar, K. and V. Bhate (1978). "Maharashtra's Rural Health Services Scheme An Evaluation," Economic and Political Weekly XIII, 2047-2052.

Department of International Health, The John Hopkins University (1976). "The Functional Analysis of Health Needs and Services", Asia Publishing House, Bombay.

Djurfeldt, G. and Lindberg, S. (1975). Pills Against Poverty: A Study of the Introduction of Western Medicine in a Tamil Village", Oxford-IBH, New Delhi.

Djukanovic, V. and Mach E.P. Ed. (1975). "Alternative Approaches to Meeting Basic Health Needs in Developing Countries, WHO-UNICEF, Geneva.

Doyal, L. (1979). "The Political Economy of Health", Pluto Press, London.

D'Souza, S. and A. Bhuiya (1982). "Socio-economic Mortality Differentials in a Rural Area of Bangladesh", Population and Development Review 8, 753-759.

Dubos, R. (1959). "The Mirage of Health", Harper and Row, New York.

Dyson, T. (1984). "Excess Male Mortality in India, "Economic and Political Weekly XIX, 422-426.

Ehrenreich, J. (1978). The Cultural Crisis of Modern Medicine", Monthly Review Press, New York.

Engels, F. (1969). "The Conditions of the Working Class in England', Panther, London.

England, R. (1978). "More myths in international health planning", American Journal of Public Health, 68, 153-159.

Foundation for Research in Community Health (1981). "Our Story 1975-1980", Bombay.

Freire Paulo (1972). "Pedagogy of the Oppressed", Penguin Books, London.

Ghosal, B.C. and Bhandari, V. (1979). "Community Health Workers Scheme: A study" Central Health Education Bureau, New Delhi.

Goel, S.L. (1981). "Health Care Administration: Policy Making and Planning", Sterling Publishers, New Delhi.

Golladay, F. (1980). "Health Problems and Policies in Developing Countries", Staff Working Paper No.412, World Bank, Washington, D.C..

Gopalan, C. (1983). "Development and Deprivation The Indian Experience", Economic and Political Weekly XVIII, 2163-2168.

Government of India (1946). "Report of the Health Survey and Development Committee"(Bhore Committee), Manager of Publications, New Delhi.

Government of India (1961). "Report of the Health Survey and

Planning Committee", Ministry of Health, New Delhi.

Government of India (1980). "Report of the Working Group on Population Policy", Planning Commission, New Delhi.

Government of India (1982). "Statement of National Health Policy", Ministry of Health and Family Welfare, New Delhi.

Government of Kerala (1958) "Second Five Year Plan", Trivandrum.

Government of Kerala (1960) "Third Five Year Plan", Trivandrum.

Government of Kerala (1981). Tribal Sub Plan 1980-85 and 1981-82, Tribal Welfare Department, Trivandrum.

Government of Kerala (1983). "Commission on the Socio-Economic Conditions of Scheduled Castes and Schedule Tribes", Trivandrum.

Grosse, R.N. (1980). "Interrelation between Health and Population: Observation Observations Derived from Field Experi-ences," Social Science and Medicine, 14C, 99-120.

Gulati, Leela (1976). "Age of Marriage of Women and Population Growth, The Kerala Experience", Economic and Political Weekly XI, 1225-1234.

Horatio, F. (1972). "Medical Anthroplogy" in Bernard J.

Siegal, ed., Biennial Review of Anthropology, 1971, Stanford University Press, 167-223.

Illich, Ivan (1975). "Medical Nemesis: The Expropriation of Health", Marion and Boyars, London.

ICMR (1980). "Evaluation of Primary Health Care Programmes", Proceedings of the National Conference held in April 1980, New Delhi.

ICMR-ICSSR (1977). "Alternative Approaches to Health Care", New Delhi.

ICSSR-ICMR (1981). "Health for All - An Alternative Strategy", Indian Institute of Education, Pune.

Jeffery, Roger (1978). "The State and Primary Health Care in India," Paper presented at the IX World Congress of Sociology, Uppsala, August 1978.

Jeffery, Roger (1979). "Recognising India's Doctors The Establishment of Medical Dependency, 1918-1939," Modern Asian Studies 13, 301-326.

Jeffery, Roger (1982). "New Patterns in Health Sector Aid", Economic and Political Weekly, XVII,1495-1503.

Jeffery, R., P.H. Jeffery and A. Lyon (1984). "Only Cord-cutters? Midwifery and Childbirth in Rural North India", Social Action 27, 1-37.

Jesani, A. and Prakash, P. (1984). "Political Economy of Health Care in India", Serialist Health Review Vol.I, No.1.

Jesudasan, V. and M. Chatterjee (1979). "Health Status and Behaviour of Two Rural Communities", Council for Social Development, New Delhi.

Joseph, S. and S. Russell (1980). "Is Primary Health Care the Wave of the Future?", Social Science and Medicine, 14C, 137-144.

Khan, M.E., Gupte, R.B., Prasad, C.V.S. and Ghosh Dastidar, S. (1988). "Performance of Health and Family Welfare Programme in India", Himalaya Publishing House, Bombay.

Kleczkowski, B.M., Elling, R.H. and Smith, D.L. (1984). "Health System Support for Primary Health Care", WHO, Geneva.

Kosa, J., Antonovsky, A. and Zola, I.K. (1969). "Poverty nad Health A Sociologiical Analysis", Harward University, Cambridge.

Krishnaji, N. (1984). "Family Size, Levels of Living and Differential Mortality in Rural India," Economic and Political Weekly, XIX, 248-258.

Krishnan, T.N. (1976). "Demographic Transition in Kerala-Facts and Factors," Economic and Political Weekly XI, Special number, 1203-1224.

Kunhaman, M. (1984). "Development of Tribal Economy: Development of Underdevelpment", Classical Publishing Company, New Delhi.

Luft, H.S. (1978). "Poverty and health-economic causes and consequences of Health Problems", Ballinger publishing Company.

Kurup, R.S. and S. Cecil (1976). "A Note on Birth and Death Rates in Kerala Sample Registration Report", (Trivandrum, Bureau of Economics and Statistics) Mimeo.

Kurup, R.S. and A. Shamala Devi (1982). "Trend in the Growth of Population of Kerala,"Paper presented at the VII Annual Conference of the Indian Association for the Study of Population, New Delhi, January 1982.

Marmor, T. and Christianson (1982). "Health Care Policy: A Political Economy Approach", Sage Publications, Beverly Hills.

Maru, Rushikesh (1976). "Policy Formulations as a Political Process - A Case Study of Health Manpower 1949-1975", Indian Institute of Management, Ahmedabad.

Maru, Rushikesh (1976b). "Health Manpower Strategies for Rural Health Service India and China, 1949-1975", Economic and Political Weekly, XI, 1253-1268.

Mathews, CME (1979). "Health and Culture in a South Indian Village, Sterling Publishers, New Delhi.

Mathur, P.R.G. (1979). "Tribal Situation in Kerala",

Historical Society, Trivanrum.

Mckeown, T. (1976). "The Role of Medicine: Dream, Mirage or Nemisis", Nuffield Provincial Hospitals Trust, London.

Ministry of Health and Family Welfare (1981). "Report of the Working Committee on HFA by 2000 AD", New Delhi.

Mohandas, M.(1983). "Kerala Model-Relevance to Development", Economic Times, 26 November 1983.

Murthy, Nirmala (1982). "Reluctant Patients - The Women of India", World Health Forum, 3, 315-316.

Nag, Moni (1983). "The Equity-Fertility Hypothesis as an Explanation of the Fertility Differential Between Kerala and West Bengal," CPS Working Paper No.96, Population Council, New York.

Nair, P.R. Gopinathan (1974). "Decline in Birth Rate in Kerala. A Hypothesis about the Interrelationship between Demographic Variables, Health Services and Education", Economic and Pliitical Weekly, IX, 323-336.

Nair, P.S.G. (1980). "Regional Variations in Infant and Child Mortality vis-a-vis Rural Health Services A Case Study of Kerala, "Paper presented at the IASP Conf-erence, Bombay.

Narayan, R. (1989). "Towards a People-oriented Alternative

Health Care System", Social Action, Vol.39, No.3.

National Institute of Health and Family Welfare (1977). "Health Sector in India: an Overview", New Delhi.

National Institute of Health and Family Welfare (1978). "An Evaluation of Community Health Workers Scheme - A Collaborative Study", New Delhi.

National Planning Committee (1940). "Report of the Sub-Committee on National Health", Government of India, New Delhi.

National Planning Committee (1948). "National Health", Vora and Co., Bombay.

Navarro, V. (1986). "What is Socialist Medicine", Monthly Review, Vol.38, No.3.

Navarro, V. (1987). "Work, Ideology and Science: The Case of Medicine", Radical Journal of Health, Vol.2, No.1.

Pai Panandiker, V.A. and others (1983). "People's Participation in Family Planning", Centre for Policy Research, New Delhi.

Panikar, P.G.K. and Soman C.R.(1984). "Health Status of Kerala - Paradox of Economic Backwardness and Health Development", Centre for Development Studies, Trivandrum.

Panikar, P.G.K. (1975). "Fall in Mortality Rates in Kerala An Explanatory Hypothesis", Economic and Political Weekly X, 1811-1818.

Panikar, P.G.K. (1978). "Employment, Income and Food Intake Among Selected Agricultural Labour Households", Economic and Political Weekly XIII, Special Number 1361-1372.

Panikar, P.G.K. (1979), "Resources not the Constraint on Health Improvement A Case Study of Kerala,: Economic and Political Weekly XIV, 1803-1809.

Panikar, P.G.K. (1980). "Inter-Regional Variations in Calorie Intake", Economic and Political Weekly XV, Special Number, 1803-1813.

Panikar, P.G.K. (1984). "Fertility Decline in Kerala", Economic and Political Weekly XIX, 571-572.

Parston, G. (1980). "Planners, Poltics and Health Services", Croom Helm, London.

Patel, M.S. (1987). "Evaluation of Holistic Medicine", Social Science and Medicine, Vol.24, No.2.

Paul, B.D. (1955). "Health Culture and Community", Sage Foundation.

Perlman, M. (1974). "The Economics of Health and Medical Care", Macmillan.

Piachaud, D. (1979). "The Diffusion of Medical Techniques to Less Developed Countries", International Journal of Health Services 9, 629-643.

Planning Commission (1952). "First Five Year Plan", Government of India, New Delhi.

Planning Commission (1956). "Second Five Year Plan", Government of India, New Delhi.

Planning Commission (1961). "Third Five Year Plan", Government of India, New Delhi.

Planning Commission (1968). "Fourth Five Year Plan", Government of India, New Delhi.

Planning Commission (1974). "Fifth Five Year Plan", Government of India, New Delhi.

Preston, S.H. (1975). "The changing relation between mortality and level of economic development", Population Studies 29, 231-248.

Ramprasad, Vanaja (1979). "A Design for Self-sufficiency in Health Projects A Case Study of the Mallur Health Cooperative," (Bangalore, Indian Institute of Manage-ment.

Rathwel, T. and Phillips, D. (1986). "Health and Ethnicity", Croom Helm, London.

Rayappa, P.H. and N.R. Prabhakara (1983). "Patterns of Population Growth in Southern States," Economic and Political Weekly XVIII, 2018-2031.

Rosengren, W.R. (1980). "Sociology of Medicine: Diversity, Conflict and Change", Harper and Row Publishers, New York.

Saksena, D.N. (1978). "Health Care and Education for Rural People - An Indian Experiment", Demcgraphic

Research Centre, Lucknow.

Segall, M.M. (1983). "Planning and Politics of Resource Allocation for Primary Health Care Promotion of Meaningful National Policy," Social Science and Medicine, 17, 1947-1960.

Soman, C.R. (1982), "Interrelationship between Fertility, Mortality and Nutrition - The Kerala Experience," in P.V. Sudhatme, ed. "Newer Concepts in Nutrition and Their Implications for Policy", (Pune, Maharashtra Association for the Cultivation of Science).

State Planning Board (1974). "Fifth Five Year Plan", Trivandrum.

State Planning Board (1980). "Draft Sixth Five Year Plan", Trivandrum.

State Planning Board (1981). "Report of the High Level Committee on Social Infrastructure and Services, Trivandrum.

State Planning Board (1984). "Draft Seveth Five Year Plan", Trivandrum.

Sukhatme, P.V. (1982). "Newer Concepts in Nutrition and their implications for Policy", Maharashtra Association for Cultivation of Science, Pune.

Vidyarthi, L.P. (1977). "The Tribal Culture in India", Concept Publishing Co., New Delhi.

Visaria, Leela (1985). "Infant mortality in India - Level,Trends and Determinants," Economic and Political Weekly, XX, 1352-1359.

Virchow. R. (1962). "Disease, Life and Man", Selected Essays Translated by Lelland J. Rather, Collier Book, New York.

Walsh, J.A. and K.S. Warren (1980). "Selective Primary Health Care An Interim Strategy for Disease Control in Developing Countries," Social Science and Medicine, 14C, 145-163.

Waitzkin, H. (1981). "The Social Origins Illness: A Neglected History", Journal of Health Services, Vol.11, No.1.

Waitzkin, H. "A Marxist View of Medical Care", Socialist Health Review, Vol.1, No.1.

W.H.O. (1980). "Sixth Report on the World Health Situation", Geneva.

WHO & UNICEF (1978). "Primary Health Care" Report of the International Conference on Primary Health Care, Alma Ata, USSR September, 1978, Geneva.