CHAPTER I

INTRODUCTION
THE PROBLEM
Health is an important indicator in assessing the well-being of any population. An examination of health status in India reveals that it has been doing well in some respects. Though mortality levels are substantially controlled, this decline is inadequate particularly in comparison with many developing nations. The mortality levels have not slumped to the extent of registering major gain in survival chances of either general population or vulnerable segments like pregnant mothers, infants aged one year and below. Undernutrition and morbidity levels continue to be unabated. Mortality levels in some of the India’s states are comparable to the poorest regions in sub-Saharan African Countries (Das Gupta and Chen, 1998). Apart from this general national level outcrop, characteristic disparities between various segments within the country are glaringly visible. The gains achieved in health are not homologous to the disparities in health between various segments. In addition to the rural-urban divide, the caste, class and gender disparities in health also persist. Thus the overall gains surfaced at the national level do not reveal a true picture. Different socio-economic segments within the country exhibit highly skewed health status which shows a paradoxical situation.

Health status among the adivasi communities (administratively known as the Scheduled Tribes or STs) is a matter of obscurity and reconcidence. On one hand, the adivasi are said to lead a well adapted life and enjoy good
levels of health and nutrition and on the other, abject poverty and high incidence of morbidity conditions are said to pervade these communities. As the health status of these communities is not adequately examined, arriving at veracious conclusions warrants careful analytical studies. Being primordial, autochthonous, autocephalous and are also being able to survive into the contemporary times, these communities have devised their own health cultures in order to cope up with the risks threatening their health as well as survival. What constitutes this health culture and how do the adivasi negotiate with the conditions of morbidity and mortality continue to be elusive issues. Information on health status pertained to the scheduled tribes at the national level are woefully scanty. Anthropologically, it is tempting to examine the health culture and its interface with the induced changes for assessing the health levels or states of these adivasi communities.

The adivasi are distributed throughout India excluding the states of Panjab, Haryana, Jammu & Kashmir and union Territory of Delhi. These communities vary in their socio-economic conditions. While a majority of them practice agriculture, a few of them are still leading a life of food-gathering and hunting.

In the initial period of India’s contact with the Western nations, the terms ‘caste’ and ‘tribe’ were used as synonyms. The difference between many castes and tribes was perceived in terms of social status. The synonymy was finally cracked through a legal intervention by the Colonial Rulers when
an official list of communities was prepared by them in 1872 as the List of Tribes. Since then the “tribes” are perceived as a distinct social segment of the Indian society.

Most of them inhabit isolated pockets of forest zones which are administratively termed as Tribal sub-plan Areas or Scheduled Areas. These Areas can be conceptualised as a sort of ‘culture area’ in contradistinction to non-scheduled areas predominantly inhabited by peasant caste Hindus and other religious groups. The adivasi have distinct cultural traditions and lifestyles which are significantly different from the “mainstream” population of the Indian sub-continent.

In the past 50 years of Independence, various development programmes have been launched to bring the adivasi into the mainstream. These developmental measures have differential impact on various adivasi groups. While some adivasi communities have benefitted, the experience of several other groups has been that of dispossession, deprivation, despondency and alienation. Consequently in 1975, the Government of India has identified most downtrodden adivasi communities for special drive for their amelioration. In Andhra Pradesh, a total of 9 communities out of 33 adivasis were identified as “Primitive Tribal Groups” (PTGs). These groups are identified owing to their pre-agricultural level of technology, low literacy levels and demographic decline or stagnation (Rao, 1984). A brief overview of health status of tribal people of Andhra Pradesh is discussed below.
The tribal sub-plan areas in the State of Andhra Pradesh are spread over 9 districts including 33 tribes comprising 22 lakh population of the total 42 lakh ST population in the state (Rao, 1998). Since the First Year Plan, an amount of Rs. 894.18 crore was so far spent in these Scheduled Areas by the Tribal Welfare Department (Tribal Welfare Department, 1995). There is no comparative data available to assess the extent to which these efforts have helped in the alleviation of poverty levels among the tribes. While some progress is said to have been achieved in terms of slight increase in income and literacy levels, the health status of the tribal communities has not improved satisfactorily. The following statistics reveal the gravity of epidemiological status in tribal areas in Andhra Pradesh and adverse variation in comparison to more developed parts of the state. Maternal mortality is eight per 1000 (going upto 25 among some tribal groups) as against 4 per 1000 for the general population of Andhra Pradesh. Infant mortality rate is 120-150 per 1000 compared to 72 per 1000 in the state. It may be pointed out here that according to the accepted goal of the Indian National Health Policy, the infant mortality rate is to be lowered to below 60 (per 1000 live births) by the year 2000. The crude death rate is 9 per 1000 with 30 per cent mortality to children aged 5 years and below for the state. Among some of the major tribal groups such as the Savara, the Gadaba, the Jatapu, the death rate is as high as 15-20 per 1000 with over 50 per cent of deaths to children under five.
Longevity of life is lower. The sex ratio is declining very fast during the decades 1981-91 and 91-2001. The incidence of Pulmonary Tuberculosis (TB) among the tribes is twice as much as the incidence among the general population. About 75% of total deaths due to malaria in the state is accounted from the tribal areas alone (ibid). Few mortality rates for the state of Andhra pradesh and India, showing the differentials between STs and other social groups are given in tabular form in Appendix I and II.

One interesting aspect with tribal areas compared to non-tribal areas is the creation of health infrastructure in relation to population size. There is one primary health centre (PHC) for every 7,772 tribal people as against one PHC for every 40,000 people in the plains areas. Likewise, there is one Sub-Centre for every 1251 tribal people as against every 7000 persons in the plains areas. However the positive aspects of this impressive spread of infrastructure is invalidated by the high spatial dispersion of the tribal populations. The PHCs and the Sub-Centres have been so located that the distances to be covered (mostly by foot) go up to an average of 272 kms and 37 km, respectively. Similarly the average number of villages/habitations that have to be covered by a PHC and Sub-Centre are about 73 and 10 respectively. Thus physical access and distance of the infrastructure are the major barriers for the utilisation of health care services (ibid).
Further, a survey of the health care service facilities in tribal areas, conducted by the Department of Family Welfare during 1994-95, revealed that none of the 29 Mobile Medical Units (MMU) are functioning; 66 per cent of the PHCs require repairs to make them usable, 30 per cent have no electricity, 62 per cent have no labour rooms or water supply and 19 per cent are located in thatched huts; 53 per cent of PHCs do not have operation theatres and in 22 per cent of the remaining operation theatres have no equipment and therefore unutilised. There is also substantial number of vacancies among the doctors, Male Health Workers and Female Health Workers which result in virtual non-utilisation of the health care services.

It can be seen clearly from the above account that tribals as a community are most at risk. Such a condition prevailed inspite of launching special programmes. It is very difficult, however, to trace out precise reasons for the precarious conditions. Firstly, detailed studies are not many; the health status survey conducted by the Tribal Research Institutes are not informative; adivasi culture itself is too diverse to draw any meaningful insights. Epidemiological conditions and etiological factors differ from one adivasi group to the other. The degree of variation in epidemiological conditions and etiology is also adequately not known.
The general model of health care intervention involves introduction of a limited number of simple, cost-effective health technologies. The prominent strategies employed is GOBI which emphasised the interventions of Growth monitoring, Oral rehydration, Breast-feeding and Immunisation. This intervention is specifically aimed at reduction in infant and child mortality. Similarly, other health programmes are also launched for controlling maternal mortality, adult mortality and various infectious diseases. Largely the interventions are technical in nature and are based on the scientific, Western etiology of disease namely germ theory or theory of causal necessity or theory of eradication (Chapin, 1934) as opposed to the theory of causal sufficiency or multicausal theory of disease. Further health status of any population/community or region/nation is gauged by means of mortality and morbidity levels and trends. The link between mortality/morbidity and health is so plausible that health inevitably conceptualised to a state of body free from any sickness. Naturally the emphasis got focused on health technologies. Further, ‘epidemiological transition’ is sought to be effected as a by-product of economic growth and rising incomes. Thus, economic programme are also emphasised.

Taking into notice the weak and slow influence of “income effect” on epidemiological transition and more strong influence of basic education particularly female education, the government has launched massive
educational programmes. Residential - cum - boarding schools, locally known as Ashram schools, were established. Apart from this, other types of schools such as Mabadi, single teacher schools, are also established. Several crores of rupees have been invested under the aegis of Integrated Tribal Development Agency (ITDA), a statutory bureaucratic monolithic institution set up for the overall integrated development of the adivasis. It is rather surprising to know that all these efforts have not improved the health status of adivasis.

History has indeed been extremely harsh to the tribal features and its people. The whole load of the logic and the rhetoric of modernisation has only strived to detribalise the vast and varied cultural traditions of the tribal populations. There is a disseminated disdain exhibited by the caste populations and the middle class and a class of intellectuals against the tribal cultures. All that the free India have so far doled out in the name of tribal policy is but an attempt at extermination of tribal culture and identity. In modern India, the expression ‘tribal identity’ has sharp political resonance. But that resonance is largely curtailed in ethnic-social terms. The cultural and cognitive salience that underlie the tribal sense of unique distinctness and possibility remains dim and almost invisible. The fact, however, is that there is so much in the tribal way of life that the country needs to emulate. Particularly the medical systems and therapeutic styles of the tribal people
deserved to be a topic for scholarly exposition. In the recent past, medicinal plants have acquired economic and political importance. Several ethno-botanical studies have however merely confined to develop inventories of medicinal plants. Not much effort is made to expand the knowledge systems of therapy practised among the adivasi communities.

That health and disease regimes of any population or ethnic community are culturally constructed has also not received attention it deserves. As a matter of fact health culture among the adivasi is little understood and explored. While some broad generalisations are readily advanced relating health to the socio-cultural realm, their relevance to policy formulation and usefulness to chalk out meaningful interventions are largely unexplored. Even though allopathic medicine is no longer a phobia, there is a gap in the way tribes perceive medical systems in their own terms from that practised by the allopathic practitioners. There are differences in the very expression of the symptom complex, understanding of the causation of illness and even the language used for communication.

It is also essential to understand health from an anthropological perspective. Each adivasi society is unique with its own peculiar cultural determinants of health. The health, illness and healing traditions of these communities have both biological and cultural bases and evolutionary significance.
Each cultural setting is replete with a traditionally derived ethnomedical knowledge with specific ideologies concerning health, disease and worldview. Unless different genres of health and healing systems are critically researched, developing macro-level generalities with implication for intervention may remain elusive. It is also not true to say that tradition always acts as an impediment in the promotion of modern medical/health care services. However, adoption of modern medicine does not mean giving up old medical practices. When the advantages of modern medicine are not convincingly apparent, ethnomedical praxis provide a ready frame of reference. Modern medicine and traditional medicine coexist in tribal India just as elsewhere.

The present study is envisaged against the above backdrop to understand health, disease and treatment practices in a primitive adivasi community namely the Chenchus of Andhra Pradesh. The Chenchu is one of the nine primitive Tribal Groups identified by the Government.

REVIEW OF LITERATURE

Medical Anthropological studies have gained popularity only in the recent past. In India these studies are at a formative stage. In the following account an attempt is made to trace out broad subject interests in the field of Medical Anthropology. It is followed by a review of research trends in India. It is hoped that such a review would facilitate a status report as well as provide
an opportunity to have a cross-cultural understanding of various practices concerning health and disease so that the focus of the present study can be sharpened and defined more clearly.

Medical Anthropology is an important developing branch of Anthropology and Anthropological research. The term Medical Anthropology has come into focus only in 1960's and since then cultural anthropologists have started emphasising the importance of social and cultural aspects of health and medicine in their studies. The new label 'Medical Anthropology' permits the researchers in studying both theoretical and applied aspects of the field.

The field of Medical Anthropology has been viewed from a wide range of perspectives. For example, Weaver (1968) consider it as a branch of applied anthropology. Alland (1970) emphasises its potential contribution to basic research on human evolution. Medical anthropology also brings the biological, behavioural and socio-cultural aspects together in order to gain holistic perspective of health and disease.

Ackerknecht (1947) defines the situation, “disease and its treatment are only in the abstract purely biological process...such facts as whether a person gets sick at all, what kind of disease he acquires and what kind of treatment he receives depend largely on socio-cultural factors”.
Medical anthropology had a strong basis in the intersecting interests of physician and anthropologists. Health and disease are not only subjects of biology but also of social sciences and behavioural sciences. Because of this premise, the interests of the subject of Medical anthropology is varied. In the following, lines a brief idea is given regarding major problems that are addressed in Medical anthropology.

One major concern was to understand how human behaviour affects the states of health and disease. An opposite corollary of this concern is to discern human behaviour in response to a particular state of health and disease. In these studies, emphasis was given to the manner in which people perceive their world, the characteristics of human social system, and social values. Lieban (1973) succinctly summarises this dual interests in the following lines: “Medical anthropology, then, encompass the study of medical phenomena as they are influenced by social and cultural features and social and cultural phenomena as they are illuminated by their medical aspects”.

Another major concern was to understand how a disease is part of complex ecosystem and how culture influence the disease occurrence in ecosystem. A corollary of this ecological approach is to focus attention on eliciting medical consequences on account of multiple effects of human action on the ecological system.
The classification given by Lieben (1973) divides Medical Anthropology into four major areas: (i) ecology and epidemiology; (ii) ethnomedicine; (iii) medical aspects of social system; and (iv) medicine and culture change.

**Ecology and Epidemiology**

Ecology and epidemiology as major areas, are concerned with the examination of the occurrence of disease as a part of complex ecosystem. This area also addresses the health ramifications as the effects of cultural practices of adaptation of human groups to their environment. Epidemiology is currently seen as a method of studying disease and illness phenomenon of all types in a given environment. It is based on the assumption that the cause, distribution, conception, and treatment of particular diseases are result of combined biological, environmental, social and cultural factors.

**Medical Aspects of Social System**

Landy (1977) writes that Athere is an intimate and inexorable linkage between diseases, medicine and human culture. Illness is considered to be a punishment for breach of conduct on moral order. The cultural concept of disease includes all the aspects related to disease - like etiology, diagnosis, prognosis, treatment. Disease and health are also conceptualised and treated according to cultural values and cultural perception of the natural world. In every culture, there is a substantial and integral body of beliefs, knowledge
and practices built around the major life experiences of health and illness. Broadly speaking, a medical system constitutes a constellation of beliefs, knowledge, practices, personnel, facilities, and resources, the structure and patterns of care and treatment of diseased persons of a social cultural group.

Various social prescriptions are linked to the etiology of disease. People are expected to conform to moral values or ritual obligations, social etiquette which in turn ensures welfare of the society. Thus the existing social, moral and religious orders are defended by medical phenomena and punitive sickness. Lieban (1967) also points out that "others may suffer punishment for one's own transgression" and such an etiology "fosters the value of social interdependence". Social prescriptions also prohibits the pressures of change as these changes are viewed as perilous.

Illness itself may be treated as a form of deviance in its own right. Society considers that certain compartments are undesirable and hence people are reticent about their health. However the society distinguishes such compartments from those illness which need to be medically attended.

Ethnomedicine

The term ethnomedicine is used to refer to "those beliefs and practices relating to disease which are the products of indigenous cultural development and are not explicitly derived from the conceptual framework of modern
medicine” (Hughes, 1968). Besides, this label is also used to refer to several other terms that indicate “non-scientific health practices”, such as folk medicine, popular medicine, and popular health culture, as used by Polgar (1962). He distinguished the “professional health culture” of medical practitioners from the “popular health culture” of the unspecialised lay practitioners. He included folk-healers among health professionals so long as they were recognised as specialists by others in their society. A crucial distinction was made between professional health cultures and popular health cultures by Leslie (1967). The first term refers to the institutions, roles, values and knowledge of highly trained practitioners and popular health cultures includes the health values, and knowledge, roles and practices of laymen and of specialists in folk medicine.

Foster (1983) defines a medical system as “the pattern of social institutions and cultural traditions that evolves from deliberate behaviour to enhance health”. Ethnomedicine includes disease classification, pharmacopoeia and therapy and preventive measure that an ethnic group devised as an aspect of its culture. Ethnomedicine also addresses medical phenomenon in the background of cultural setting. Culturally interpreted relationship between the sick person and the environment provide explanation for the occurrence of disease.
Medicine and Cultural Change

A majority of societies in the developing world are undergoing profound technological and socio-cultural changes. Modern allopathic medicine has been one of the most important intervention. As a major area, 'Medicine and Cultural Change' examines the interface between modern medicine and indigenous medicine, reclassification and redefinition of diseases, cognitive influences on the choice of medical treatment, and how traditions change or reorient vis-a-vis technological changes and interventions, the receptivity of people to change their medical behaviour and other factors influencing medical behaviour. It also examines the practice of modern medicine in hospitals, interaction between the patients and hospitals, public and community medicine and nursing.

It is evident from the above account that health, disease and therapy are complex subjects interlinked to various aspects of the society, culture and environment.

In the past two and half decades, emphasis has been shifted to the analysis of the thought process which underlie the medical systems. This paradigm focuses on "labelling" in which a disease or health phenomena is named or labelled which facilitates social reaction to that condition. These studies viewed human behaviour as a response - either behavioral or symbolic - to medical situations. Human behaviour is expressed or revealed through
culturally coded verbal expressions or mere actions which may have meanings underlying them.

Understanding sickness as a thought process has evolved in two distinct fashions. The first one is called formal analysis of ethnomethodic data and the second is called explanatory model of illness approach. In the first approach, sickness is organised by cognitive structures just as other phenomenological domain (Frake, 1961). Here human sickness is deemed to be semantic and the clinical practice is inherently interpretive. Basing on a set of defining symptoms, a sickness is given a term and hence a sickness term is equated with a set of defining symptoms.

In the second approach, though human sickness is deemed to be semantic, each sickness term has a distinct configuration of meaning and must be understood in the context of being sick (Good 1977). Illness is considered to embody a "network of words, situations, symptoms and feelings" and these together give meaning about the disease to the diseased person. Good's work is different from earlier anthropological works on sickness. Good emphasises that informants' statements need to be interpreted in the context of his illness experience over a given time period. To Good, the illness is an individualised process.

Kleinman (1988) uses semantic illness as a part of comprehensive framework. He made conceptual distinction between disease, illness and
sickness. His approach to medical beliefs and practice is clinical and he views that clinical process is a way for individuals to adapt to certain worrisome circumstances. He says that systems of medical knowledge and practice underlie in the formation of psychosocial concept of disease, health care seeking process, managing illness episodes, healing activities and managing therapeutic outcomes.

In India, medical anthropology is in a formative stage. Buddhadeb Chaudhuri (1986) wrote that "The absence of any worth-mentioning publication (book) clearly reflects the lack of interest of anthropologists in the field of medical anthropology". Commenting on the status of medical anthropology in India, Joshi (1985) remarked that though a modest data base is available in the form of ethnographic note, it is not systematically appraised. Buddhadeb Chaudhuri (1986) has classified the medical anthropological studies in India into the following categories: (1) Theoretical, Conceptual and methodological issues; (2) Fertility - mortality and socio-cultural issues; (3) Health, food-habits-nutrition and environment; (4) Health, treatment and socio-cultural aspects; (5) Health, medicine and community; (6) Interaction of traditional and modern system of medicine; and (7) Traditional health care system and medicine. This categorisation provides broad areas of interests and future direction.
Studies pertained to health and illness were first initiated by the western scholars like Elwing, Mekim Marriott, Moris Opler, Oscar Lewis. Most of the early studies were conducted in Indian rural societies.

Paul's (1955) publication of *Health, Culture and Community* was an important compilation of various studies. It had opened new vistas of research in medical anthropology.

In 1950, the major interest was to elicit the contradictions between the modern medical systems and folk medical systems. (Marriott: 1955; Carstair: 1955). The relation between indigenous medical system and modern medical system and traditional medical system as a barrier for improvement in the health status were the topics that attracted considerable attention in India. Most of the early studies have addressed these issues (Carstair: 1955; Marriott 1955; Opler : 1963; Khare : 1963). Apart from this, anthropologists have tried to understand how social systems and religious systems have health implications. Elwin (1955) has tried to describe medical beliefs in terms of conceptual systems such as religion, social sanctions, ritual and symbol, witchcraft, morality and magic. Enlisting various gods connected with different diseases in the Saora pantheon, Elwin observed, "there are gods associated with children's disease like cough, cold, sore throat, blindness, rheumatism, boils, madness, disease of pregnant woman and diseases of
animals. Most of these diseases can be cured by supplicating and propitiating these gods, directly or indirectly through shamanism”.

Khare (1963) in his article "Folk Medicine in a North Indian Village" argues that the medical beliefs held by residents of Indian villages are at variance with the modern medical systems. He stressed the fact that these beliefs were quite often linked with contrasting medical systems. This article explicitly showed the influence of these beliefs on the implementation of modern medical programmes.

Opler (1963) says that, "different diseases found among tribes and peasant people are due to the malfunctioning or imbalances of forces, which control health, lack of moderation or inappropriate behaviour in physical, social and economic matters". He has tried to give a cultural definition of illness in India village emphasising the role of cultural factors in the acceptance of medicine and understanding of the nature of diseases.

Djurfeldt & Lindberg (1980) in their book Pills Against Poverty: A Study of the Introduction of Western medicine in a Tamil Village, found eight different types of practitioners in indigenous medicine. The folk medical knowledge is marked by a dualist conception of the universe. Further, he has elaborated the reasons for the survival of indigenous medicine.
Carstairs (1955) shows how traditional local beliefs acted as barriers to the attempts by a western trained doctor to treat the villagers in rural Rajasthan. As both the systems had different premises, misunderstandings erupted. The author summarises that the doctor and other health personnel have to adapt to the local cultural settings in order to go about introducing modern medical practices.

Marriott (1955) had critically examined the socio-cultural factors that operate in a situation of introducing medical techniques. He used social structure as the primary frame of reference. His analysis revealed the existence of contrasts and conflicts between the roles assumed by indigenous and western medical practitioners. He suggested that the successful implementation of modern medicine depends upon the adaptation to the local cultural conditions.

Goel, et al., (1984) has emphasised the realities of tribal health problems and has established that the success of any health programme depends much upon the modification of human behaviour and careful consideration of the socio-cultural dimensions of health. Ali (1994) comments that it is not true to say that medical systems of traditional societies are based on blind beliefs, irrational principles and superstitions. He states that "Intensive anthropological research has shown to the entire world that every society has its own methods of conceptualisation, diagnosis and treatment of diseases.
based on rational principles and objective factors. The author had compiled various studies conducted on ethno-medicinal practices among the Indian tribes. Avanti (1967) and Ahluwalia (1974) have reviewed studies on social science research on health in India.

Other important issues are etiology, diagnosis and therapy. A majority of the works have dealt with these issues. The major findings of these studies point out that most of the diseases are caused due to the action of supernatural forces, that the diagnosis involves divination and the therapy involves both herbal application and supernatural rites and rituals. The major inference drawn from these studies is that health and illness are in some important senses, culturally determined and culturally constructed. (Gould, 1957; Khare, 1963; Hasan, 1967; Madan, 1969; Kakar, 1972 & 1977; Karna, 1976; Gurumurthy, 1987).

The ICMR Bulletin (1990) points out that "while several well known technical and operational reasons, including resource constraints have hampered the antimalarial programme, socio-economic conditions and cultural beliefs and practices have also contributed to the persistence of malaria in many places".

Bhat (1978) described the indigenous medical system in a multicastr village in Dharwad district of Karnataka state by focusing mainly on ideas
regarding concept of health, illness, causation of diseases, method of
diagnosis, classification of symptoms, materia medica and remedies and
indigenous medical practitioners.

Kakar (1977) in his book 'Folk and Modern Medicine' has done several
in-depth studies on the socio-cultural aspects of health and illness. He points
out to the existence of three different types of medical systems at three
different levels. They are primitive medicine, folk medicine and modern
medicine. He also studied food habits, beliefs and practices and the socio-
cultural aspects of malnutrition in different villages of Ludhiana.

Kurian and Bhanu (1980) have explained how disease was attributed to
wrath of gods, invasion of the body by evil spirits. They had shown that the
treatment of diseases involved appeasing gods by prayers, rituals and sacrifice,
driving out evil spirits from the human body by noise or violence, and using
charms and amulets. Thus, medicine is intermingled with superstition,
religion and magic.

Joshi's (1980) study on medical system of the Silogoan of Jaunsar-
Baur', has shown the normal state of existence between humans and the
outside natural / super - natural forces. In relations of human with natural
world, humoral ideology (interaction of 'hot' and 'cold' forces) appears to be
the underlying base.
Rajpramukh (1993) has investigated the causes, transmission and treatment of diseases among the tribal populations of Andhra Pradesh.

Studies conducted by Basu (1990), Kar (1986 & 1990) Rizvi (1986) and Sahu (1986) reveal that socio-economic factors like food habits are interrelated with socio-biological norms such as preferential marital alliances, age at marriage, etc., and have tremendous impact on the fertility and morbidity pattern. Some of the studies (eg Basu, 1990 and Kar, 1986) have revealed that non-availability of safe drinking water, proper sanitation and hygiene was the main reason for higher mortality and morbidity. The situation was further deteriorated due to primitive health practices.

Basham (1976), Kutumbaiah, (1962) and Zimmer (1948) asserted that the cognitive system underlying the Indian Health System originated from the opposition between 'hot' and cold and 'dry' and 'wet' humors and Charaka's Ayurvedic theory of harmony or balance between three primary doshas (flaws, irregularities or defects). The primary doshas include bile or gall (pitta), gas or wind (vata) and phlegm or mucus (kapha). While what constitutes good health or illness may vary from region to region, the etiology of illness is traced to an imbalance or disharmony in the bodily doshas or humours. It is axiomatic in the world view of the Indian villages that the
doshas and humours should be kept in homeostatic balance in order to avoid illness and restore health.

Roy Burman (1999) vividly explains the traditional medicinal practices among the Bhutia - Lepchas of Sikkim. The traditional medicinal practices of Tibet includes not only psychosomatic healing process but also physical process of healing like messages and acupuncture. Further it incorporates the principles of ethno-science and political dynamism. The revival of traditional medicinal process is interpreted by the author as ethnic revival in the context of large scale influx of Nepalese migrants from Nepal.

Another class of studies have addressed socio-economic and ecological factors and their influence on health status of populations.

Mahadevan and others (1991) have attributed favourable dietary conditions, frequent exercise through prolonged work, low levels of tension, stress, limited ambition and religious attitudes to the higher longevity and good health among the Kurichias of Waynad forests. Behura (1991) points out that "social and cultural distinctions associated with differences in age, sex, occupation, class, ethnicity and community do have significant effects on epidemiological phenomena."
Of late there is perceptible interest among Anthropologists as well as Botanists and others in studying plants used for health care by various tribal populations in different parts of India (Jain, 1962; Jain et al., 1973; Jain and Rao, 1983; Saxena and Dutta 1975). These studies have brought to light numerous medicinal and other useful plants. The wealth of knowledge on medicinal plants among the tribes appears to have been developed through their age-old trial and error methods and transmitted orally from generation to generation. There is some secrecy regarding phytotherapy practised by the tribal medicine men (Nagaraju and Rao, 1989). Mathur (1982) in his study on Irular science and superstition records phytotherapy for various diseases. Devarapalli and Kumar (1998) have discussed the ethnomedical practices among the Chenchus. They reported that the "ethnomedical system of the Chenchus is a complex one in the sense that it encompasses a variety of practices that employ magic, religion, physical pressure, plant and animal products, and even the allopathic medicine representing medical pluralism".

From the above discussion, the following inferences can be elicited:

1. The health status of the tribal communities in Andhra Pradesh reflect inequality in health status, even after spending huge amounts for various development purposes;
2. Tribal areas have peculiar physical features; creating health care service facilities in these areas is not only arduous but also troublesome to sustain and

3. Epidemiological status in tribal areas differs from one area to another area and from a group of tribal populations to another population; in one context, infectious diseases (like diarrhoea) may account for the toll whereas in others it may be maternal deaths or degenerative disease are the reasons for death.

4. Indian studies on medical anthropology fall under a type that is unamenable to systematic appraisal. Most of the studies are community based, that is, studies conducted on specific ethnic groups. The early studies were mainly conducted in rural areas inhabited by Hindus Castes. In India, Medical Anthropological research among the tribes has a recent beginning. Possibly for this reason, the number of ethnic groups studied so far is very small. Most of the studies are confined to Bihar and West-Bengal. In the rest of the states, the studies are sporadic. The empirical details in most of the studies are scanty.

5. A majority of the studies have focussed on treatment aspect, that too on magico-religious practices and use of plant material. One very conspicuous weakness of these studies is lack of adequate inquiry into the nature of the diseases as related to its treatment procedures, choices and decision-making.
6. These studies are not addressed in the actual practice and context. Most of the information were collected by recall method. Information other than the name of diseases and name and part of the plant used are usually not given. The literature is replete with statements that diseases are cured by means of magico-religious means. There was little effort to provide the substantive content of these means.

7. Concept of disease was another popular research topic in many Indian studies. However detailed studies with critical analysis are scanty. Quite frequently the health or disease notions end up in broad statements focussing on supernatural causation of disease. Very rarely these are explained in detail. As Buddhadeb Chaudhuri (1986) had pointed out that "The anthropologists, in many cases, have overemphasised the superstitious health beliefs and practices, but did not care much to examine the reasons for decay or degeneration of traditional health culture". He pleads for studies that brings out the bases of this traditional health cultures. Sociologists have made substantial contribution to the field of sociology of medicine. Only in the recent past, Anthropologists are addressing wide ranging topics in Medical Anthropology.

The present study attempts to delineate health culture in a single tribal population namely the Chenchus in the state of Andhra Pradesh. It does not
claim to make a substantial contribution in the light of the above observations. In fact, the study proved how difficult it is to gain deeper insights of the cultural principles, meanings embedded in the traditional health practices and to portray contextualised disease/health episodes.

METHODOLOGY

The present study intends to understand social, cultural and behavioural aspects pertained to health and disease among the Chenchos. The overall goal is to arrive at a comprehensive picture about health status, morbidity, mortality and cultural construction of health and disease among the Chenchos. This research work is basically explorative in its design.

THE OBJECTIVES

1. To understand the cultural perceptions, ideas, theories and explanations of health and disease;

2. To record the prevalence of morbidity and mortality and elicit their causes; and

3. To understand the organisation of therapy, therapeutic institutions, modes of treatment and to appraise the problems in availing the modern health care services.
CONCEPTUAL FRAMEWORK

For a critical appraisal of health among the tribal communities theoretical models and conceptual frameworks are essential. However it is very difficult to generate well defined, models of universal applicability. In medical anthropology, two elementary models can be elicited. The first model is premised on the proposition that socio-cultural regime influence the health regime. The second model is premised on the proposition that medical aspects influence socio-cultural phenomena. Yet another theoretical model is concerned with the relationship between ecology and the health-disease regime. Infact, culture, health and ecology influence each other. The nature of relationship and casual linkages between them are not only complex but also assume specificity depending upon the individual community and specific ecological conditions. Tribal population in India are characterized by variability (Vidyarthi and Roy 1976). They differ in terms of ecological conditions, occupational specialization's, social organization, and cultural features. They also differ in the intensity of contact. Keeping these constraints in view, an elementary conceptual framework is generated in order to make a systematic analysis of the substantive content of health and disease among the Chenchu and to fulfil the objectives of the present study.
Diagram – 1 gives the conceptual framework adopted for the present study. This framework is based on the proposition that health and disease are influenced by:

1. Society and culture;
2. Traditional health and disease regimes;
3. Modern interventions; and
4. Attitudes and perceptions.

These four components are taken as the major bundles influencing the health/ill-health of the Chenchus. Each bundle in turn consists of sub-components, each of them comprising several variables. The framework in Diagram-1 provides the basic skeleton. Chart-1 gives detailed variables packaged in each bundle/sub-components.

The first bundle is concerned with various aspects of society and culture of the Chenchus. This bundle includes broad aspects like ecology, social organization, economy, political organization, religion and norms, values and beliefs. The chief objective is to elicit the cultural perceptions, ideas, theories of and implications for health and disease as reflected in the society and culture of the Chenchus.

The second bundle addresses the traditional system of health and disease regime. Concept of health, concept of disease, health care practices
and health care delivery and personnel are the chief components of the second bundle. Each of the components have their respective elements. It also include mortality and morbidity which actually reflect the health status of the population. This bundle is mainly intended to elicit the substantive details of health and diseases among the Chenchus.

The third bundle deals with modern interventions and its impact. Principally this bundle is divided into two components namely development intervention and modern medical intervention. Again each of the components has specific elements as shown in the chart. By means of this conceptual model, the perception towards medical system and the problems in the utilization are elicited. Further, the impact of developmental programmes is also analysed and their implications for health are highlighted.

This conceptual framework explicitly assumes that the causality between culture and health care is not uni-directional. Each influences the other. However the framework is not exhaustive. This elementary conceptual framework is used in view that the research design of the present study is basically explorative. The chief aim of using this framework is to achieve systematic approach to study the chosen theme and to fulfill the objectives of the study.
Schematic diagram of Conceptual Framework (boxes indicate major bundles; ovals indicate sub-bundles)
Chart 1
Variables in The Conceptual Framework: Health and Disease Regime

Socio-cultural Regime
- Ecological
  - Isolation
  - Ecosystem complexity
  - Population density
  - Settlement Pattern
  - Semi-nomadism
  - Dietary habits and food security
- Social organization
  - Economy
    - Livelihood
    - Income
  - Political organization
    - Territoriality
- Religion
  - Beliefs
  - Norms
  - Values
- Education

Concept of Health
- Body fitness
- Health terminology
- Anatomical knowledge
- Life Forces/Draves
- Family planning

Concept of Disease
- Disturbances in the body
- Weather
- Disease causation
- Diagnosis

Health Care Practices
- Personal hygiene
- Sanitation
- Dietary Habits
- Obstetric practices

Health care Delivery
- Professionals
- Magico religious
- Herbal Treatment

Continue in next page
Area of the Study

The present study is conducted in ten sample settlements inhabited by the Chenchus in the Nallamalai forest, Andhra Pradesh. The Nallamalai forest region is located in the middle portion of the Eastern Ghats, South India. Comprising a vast and most prominent range of rolling hills and valleys running parallel to the coromandal coast. The study area is adjacent to Srisailam- the famous shivite shrine of lord Mallikharjuna. A majority of the Chenchus are seen concentrated in and around the Nallamalai which is their original ancestral land. Though the Chenchus are also seen dwelling in other areas, the ethnic identity of these Chenchus, is rather uncertain (Furer Haimendorf, 1943).

The Nallamalai region is divided into two portions by the river Krishna. The present study is confined only to the southern portion which falls within the district administration of Kurnool and Prakasam. This selection is made by taking into consideration the following issues: the Northern portion is beset with militant activities; some of the extremist groups belonging to Peoples War Group have made this area as the centre of their activity; compared to the northern portion, the Chenchus inhabiting the southern portion are relatively isolated, less exposed to the outside influence, and continue to depend on their traditional calling of food gathering and hunting.
LOCATION MAP OF THE STUDY VILLAGES
IN AND AROUND NALLAMALAI HILL RANGES

1. Bairlooty gudem
2. Billagondi penta
3. Chilakacherta
4. Chinthala
5. Hanumanthu Chenchugudem
6. Korrapolu
7. Marripalem
8. Murikimala
9. Peddamathanala
10. Thummalaballu
However, the Chenchus even in the Southern region cannot be designated as a pure hunter-gatherers owing to the fact that several changes are clearly seen.

**Selection of Sample Settlements**

There are altogether 82 Chenchu gudem settlements in the Nallamalai region falling in the districts of Kurnool and Prakasam. By means of random sampling, 10 settlements are selected. All these settlements are located deep inside the forest and quite far away from the caste villages or townships. However some of the villages are located by the road side and hence can be reached by bus (Table-1.1).

The rest of the settlements have no transport facility. There were 302 households in all the ten settlements put together with a population of 1565. All the households were covered for the present study.
<table>
<thead>
<tr>
<th>S.No.</th>
<th>Name of the Facility</th>
<th>Bairstaat gudem</th>
<th>Billagardipeta</th>
<th>Chikaracherta</th>
<th>Chinthala</th>
<th>Hanumanthu Chenchu gudem</th>
<th>Karrapally</th>
<th>Manripalem</th>
<th>Murikimilla</th>
<th>Peddasanthanala</th>
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<td>Foot path</td>
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<td>Fooppath</td>
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<td></td>
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<td>Traditional</td>
<td>Road</td>
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<td>Traditional</td>
<td>R.C. houses</td>
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<td>3</td>
<td>Drinking source of water supply</td>
<td>Bore well, Stream water, Pond &amp; Dog well</td>
<td>Bore well, Dog well &amp; Stream water</td>
<td>Bore well, Stream water</td>
<td>Bore well</td>
<td>Bore well, pond &amp; Stream water</td>
<td>Bore well</td>
<td>Bore well</td>
<td>Bore well &amp; pond</td>
<td>Bore well &amp; stream</td>
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<td>Irregular</td>
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<td>4 KM</td>
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<td>12. Police Station</td>
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<td>No</td>
<td>No</td>
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</table>
Tools and Techniques of Data Collection

The data required for the present study are identified under the following heads:

1. Socio-economic census data of the selected settlements
2. Ethnography of the Chenchu
3. Concept of health and disease
4. Morbidity and mortality conditions and their causes
5. Sanitation and hygiene
6. Inventory of medicinal plants and medicinally valued food plants and animal food.
7. Traditional treatment procedures of various diseases (supernatural; magico-religious; mechanical)
8. Patient experiences and illness episodes
9. Medical and magico-religious functionaries
10. The experiences of the Chenchus with the modern health care services

Household socio-economic census schedule, mortality and morbidity schedule, interview-guide, unstructured interviews, case studies, focused group discussion (FGD)*, survey of plants and other materia medica, survey schedule of physical lay-outs of settlements as well as the houses of the

* FGD were conducted for the following topics:
Chenchus were the tools employed for data collection. Diseases and their symptoms were collected through the help of a 'tracer list' and the local health personnel. Participant observation was the chief technique employed for collection of various data.

Extensive interview guide containing questions on various aspects was prepared. The schedules contained columns for socio-economic data, mortality, morbidity and physical amenities related to sanitation and hygiene. Medicinal and food plants were identified by means of group discussion. Case studies are generated in order to understand the illness episodes and their treatment.

Problems in Data Collection

Data collection among the Chenchus was somewhat an arduous exercise. The Chenchus were branded as extremely shy and timid by the early ethnographers (Furer Haimendorf, 1943; Newbold, 1846). The present day Chenchu are reticent and exhibit retentive amidst strangers. Inquiry and intrusion into their life are retaliated with disdain.

An inebriate Chenchu may drag the ethnographer into an obstreperous interrogation dotted with violent expressions. Their expression of displeasure in any form over the presence of the ethnographer amidst them is

1. Perception on family planning, 2. Application of herbal medicine, 3. Inventory of diseases
unmistakable. Explaining the goals of research hardly impressed the people. The *Chenchus* are given to the habit of deep longing for certain benefits (in the form of government benefits/programmes) from those who visit them. In the mental scheme of the *Chenchus*, a stranger has no valid reason to visit their habitats. They are habituated with the routine visits by the government officials, interrogation by the Forest Department and the Excise Department officials and routine interviews by the researchers. The present researcher had to wait patiently for days in order to seek acquaintance. The *Chenchu* daily life do not have slots for community entertainment or gathering for music or dance. Adults spend most of their time either in sleeping or inebriation and when sober, go to work. Women are sternly uncommunicative. Children and adolescent boys and girls spend their time in playing and carrying out small household chores and roaming in the neighbouring places. The young children and adolescents were the companions to the researcher or during the initial periods of field-work. School was also a place where the researcher used to interact with the children. Gradually, participation in their economic activities was initiated. The people used to avail small help from the researcher in calculating the wages, small additions and subtractions in their economic dealings etc. Sharing of food was quite helpful in expediting rapport. Gradually, the researcher was able to develop good acquaintance with key-informants. Whenever the local auxiliary nurse mid wife (ANM) is present, the researcher made use of her help.
In every settlement, effort is made to identify "key-informants". They were either highly vocal individuals, knowledgeable persons, specialists in using herbal treatment, or magico-religious rites, or mid-wifery or political leaders. Key-informants comprised both males and females, generally drawn from old generations. Ideas and opinions regarding health and disease, treatment procedures are gathered from these key-informants as well as patients.

Data Collection

The data were collected during the years 2000 and 2001. The first visit was made in the month of May 1999 during which the researcher visited the Integrated Tribal Development Agency (ITDA) at Srisailam. With the help of the Project Officer the researcher toured all the selected villages and got himself introduced to several Chenchus. Arrangements were made to stay within the village. Mostly a vacant hut was chosen. In the absence of a vacant hut, the researcher stayed with single householders. Staying amidst the people was preferred so as to have a direct touch with the people. Several trips were made to the selected settlements. The field work was completed in the month of December 2000. However, field work was again conducted in 2004 during October and November during which period the Naxal insurgency was temporarily suspended.
After establishing rapport, the household census schedules and mortality-morbidity schedules were canvassed in each village. Later on, the researcher stayed in each village for two to three weeks observing, interviewing and collecting disease episodes and treatment procedures. Individual experience of disease, treatment etc., are collected. Patients were particularly interviewed to record and understand their own narration of disease episodes.

The data on morbidity were collected through the method of "self-perceived morbidity". 'Self-perceived morbidity' refers to symptoms and impairments that are perceived and reported by an individual, usually in response to inquiries regarding illness. Typically the informants were asked about the occurrence of illness or specific symptoms during the period of one month immediately preceding the date of interview. A 'tracer list' (Linder, 1965) which is a list of symptoms and their associated disease names, was used for prompting, as a lead in order to identify the illness by their symptoms. This list was also useful to understand the symptoms in their own language and the nature of illness according to their own cultural perception.

The researcher had to accompany the Chenchus in their occupational trips to the forest. Assisting them in these pursuits, helping them in calculation of value to the forest produce, wage, etc, representing their
problems to the officials, guidance to the boys and girls in their educational plans, etc. have paved the way for free communication. The researcher had led a simple life cooking simple meal and buying the same kind of groceries the Cherchas procure from the Girijan Consumer Co-operative (GCC) stores. The researcher had also learnt to speak in their dialect. The objectives, purpose of the research work were explained to them time and again without any allusions or pretext. The experiences in one settlement were exchanged in another settlement. The informants in one village were invited as guests of the researcher when staying in other village.

In this way, the researchers participated in their daily life. This gave an opportunity to see, hear and observe various details related to the present work.

Analysis and interpretation

Firstly the collected data were edited. The results were tabulated according to various socio-economic indicators as well as different mortality and morbidity measurements. The qualitative data is segregated into suitable aspects and used in appropriate places. Case studies are utilised in order to illustrate certain issues, propositions, postulates. The present researcher also tried to compare the results with other populations. Comparative approach is an essential ingredient in anthropology. For comparative purpose, available literature was freely used but confining mostly to the tribal people from India.
and one or two cases from outside India. Free comparison is not always
worthy. This study is not designed basing on experimental design and hence
did not call for controlled comparison. Comparison is however attempted to
know the degree or level of the fertility or mortality indicators dietary
diversity. The comparison populations include food-gatherers, as well as
pastoralists, shifting cultivators and agriculturists. The rationality for
choosing various populations freely lies in the scope and possibility for
gauging fertility mortality indicators as observed among the Chenchus. Some
of the populations compared, for example the Kung Bushmen, are the fine
examples of food-gatherers. By comparison with such populations, the
Chenchus can be evaluated most appropriately. One important constraint in
comparison is availability of data. Very few studies are available on tribal
demography. Hence only tribes for which relevant figures are available, are
above considered. The Chenchus being a tribe in transition, the comparation
population include, Hunters – Gatherers, Pastoralists, agriculturists. On the
whole comparison is attempted to understand the magnitude of the mortality
rates among the Chenchu.

Organisation of the data

The thesis is presented in eight chapters. Chapter- I is Introduction. It
deals with the statement of the problem, review of literature, the lacunae in the
research pertaining to the health, disease among the tribes of India, the
objectives of the study besides methodology. Ethnography of the Chenchus is given in chapter II. Chapter-III, focuses on physical factors and personal hygiene prevailing among the Chenchus. Chapter-IV is concerned with the concept of health and disease. Chapter-V delineate the rate of mortality. It also records the morbidity as perceived by the Chenchus. Chapter - VI it deals with the family planning among the Chenchus. Chapter - VII describes healing practices and the examines the interface between the modern medical system and the Chenchus. The last Chapter - VIII brings out a summary of the findings and conclusions.