CHAPTER – I

INTRODUCTION

1.1 Introduction

'Health is of universal interest and concern' (Forest Clement, 1932). All human societies notwithstanding the scale of development have a concept of what makes a healthy living as well as conception of illness. In fact, all communities have their own concepts of health. As part of their culture; among the various the concept still preferred, probably the oldest is that health is the 'absence of disease'. According to Mukherjee and Nandy (1986) health is not only the result of interaction between an individual's hereditary contribution with his natural and cultural environment but it is largely determined by the biological and cultural adaptation and evolution of the society and the population (cited in Kaushal's paper, 2004). Landy (1977) defined a state of health as 'the condition of an organism that permits it to adapt to its environmental situation with relative minimal pain and discomfort, achieve at least some physical and psychic gratification and possess a reasonable of survival'. During the recent past, there has been reawakening that health is a fundamental human right and worldwide social goal; that it is essential to the satisfaction of basic human needs and to an improved *quality of life and that it has to be attained by all people and gradually the concept of public* health care has emerged. Finally the World Health Organization (WHO) gave a utopian definition of health as 'a state of complete physical mental and social well-being and not merely the absence of disease or infirmity' (WHO, 1948). In recent years this statement has been amplified to include the ability to lead a "socially and economically productive life".

As the concept of health had been perceived by mankind, eventually the concept of disease, illness, medicine and treatment has evolved simultaneously. Disease according to modern science is only a departure from a state of health and more frequently a kind of disturbance in the health of body to which any particular case of sickness is attributed. Disease, a biological and cultural universal is one of the most predictable of human conditions. A state of disease according to Landy, 'is a condition of the organism that seriously obtrudes against these adaptive requirements and cause of behavioural dysfunction'.

Disease and health are universal experiences which are as old as human is. In fact, health and illness are two polar concepts. As our primitive ancestors evolved into human forms, so were *the disease they brought with them and those they acquired during the evolution* became social and cultural facts as well as pathological states. Eventually human society has created an 'adaptive strategy' to counteract disease. Man in trying to learn how to treat disease has

gained, a 'vast complex of knowledge, beliefs, techniques, roles, norms values, ideologies, attitudes, customs, rituals and symbols that interlock to form a mutually reinforcing and supporting system'(Das, 2004).

Every society has cultural objectives to prove whether or not there is a case of illness and whether or not individual is healthy. The concepts of health, disease and treatment vary according to the culture of a particular area. Moreover a particular culture of tribal area is guided by the traditionally laid-down customs and each member of the culture is ideally expected to conform to it. Health and treatment reflect the social solidarity of a community. In a tribal community, for example, illness and the consequent treatment is not always an individual or familiar affair, but the decision about the nature of treatment is taken at the community level. For human being in a given set up, disease threatens not only one's state of well being and that of other people on the group, but also it threatens the very integrity of the community as a whole. An event like death and occurrence of the disease not only lead to the heavy expenses and adverse psychological effects but also reduces the strength of the people for life activities. Chief priest, shaman, sorcerers, ojha and the traditional medical practitioners have to find out a mean to reduce human suffering and vail the victim out of their misery. Particularly traditional way of treatment is found to be inevitable among the tribal people although western treatment is applied in some circumstances.

In last few decades the importance and utility of the study of the traditional medical system has evolved in a new way. The advantage in learning about the indigenous beliefs and practices of the community gives the insight view of the community people and their interpersonal relationship. By studying the traditional medical system, it is possible to study the social solidarity of a community. In case of some specific diseases, not only the affected person or his family but the whole village is expected to observe certain taboos or norms and food habits in some rural and tribal areas while the non observance of such practices often calls for action by the village council. So, the interpersonal relationship and psychology of community people in the context of health care in relation to social solidarity could be studied very properly in this way.

SECTION- A

A.1.1 Concept of Medical Anthropology:

Anthropology combines in one discipline, the approaches of both biological and social sciences. In short, anthropology is a well defined study of physical, social and cultural aspects of man. The relationship between anthropology, medicine and medical practice goes back a long way and is well documented (Comelles and Martinez, 1993). Medical anthropology is a subfield of social and cultural anthropology. It is a term which has been used since 1963 (Scotch, Norman A. (1963) Medical Anthropology. Introduction Biennial Review of Anthropology) as a label for empirical research and theoretical production by anthropologists into the social processes and cultural representations of health, illness and the nursing/care practices associated with these. Furthermore, in Europe the terms "anthropology of medicine", "anthropology of health" and "anthropology of illness" have also been used, and "medical anthropology", was also a translation of the nineteenth century Dutch term "medische anthropologie". This term was chosen by some authors during the 1940s to refer to philosophical studies on health and illness (See Laín Entralgo, Pedro (1968) El estado de enfermedad. Esbozo de un capítulo de una posible antropología médica. Madrid, Moneda y Credito).

A.1.2 Definition of Medical Anthropology:

Etymologically, the word anthropology is derived from the Greek system Anthropo (men) noun ending- logy (science). Its literal meaning therefore, is 'science of man' (Beal; 1971). Medical anthropology is the study of human health and disease, health care systems, and bio-cultural adaptation. The discipline draws upon the four fields of anthropology to analyze and compare the health of regional populations and of ethnic and cultural enclaves, both prehistoric and contemporary. Collaboration among paleopathologists, human biologists, ethnologists, and linguists has created a field that is autonomous from any single sub discipline, with strong potential for integration of physical and Cultural anthropology. The field is also highly interdisciplinary, linking anthropology to sociology, economics, and geography, as well as to medicine, nursing, public health, and other health professions.

Many definition of Medical Anthropology have been offered. One of the broadest yet most concise is contained within the mission statement of the society of medical anthropologist's journal, the medical anthropology quarterly. It defines medical anthropology as a field that *includes:-....all enquiries into health, disease, illness and sickness in human individual and* populations that are undertaken from the holistic and cross cultural perspective distinctive of anthropology as a discipline that is, with an awareness of species, biological, cultural, linguistic and historical conformity and variation. It encompasses studies of ethnomedicine, epidemiology, maternal and child health, population, nutrition, human development in relation to health and disease, health care providers and services, public health, health policy and language and speech of health and health care (Medical Anthropology Quarterly; September 2001, cited in Tarafdar's paper, 2008).

A.1.3 Theoretical Aspects of Medical Anthropology:

Although the scope of anthropological enquiry into issues of human health, sickness and healing is very diverse and the subfields engaged in these enquires often overlap with one another, there are five identifiable basic approaches to medical anthropology: (a) biological and archaeological (b) culture ecological (c) ethnomedical (d) critical and (e) applied. The first two of these approaches focus on the interaction of human and their environment from a biosocial and bio-cultural perspective and also consider the interaction between biological and health questions and socio-economic and demographic factors. The other three approaches emphasize on the influence of culture on the thought pattern and behavioral characteristics of a group.

A.1.3.1 Biological and Archaeological Approaches:

The researches in biological and archaeological anthropology concerns important issues of human health, illness and often interest with the domain of medical anthropology. Researches under these domain help to explain the relationship between the evolutionary processes, human genetic variation and the different ways that human are sometime susceptible and other time resistant. The evolution of ancient human forms as well as their disease pattern helps us to better understand current health trends. The shift towards sedentary living patterns and subsistence based on plant and animal domestication, sometimes called the Neolithic Revolution, had a profound effect on human health. Skeletal evidence from populations

undergoing this transition indicates in overall deterioration in health consistence with the known relationship between infectious disease and malnutrition (Pelletier et al.1993). These issues have been attributed to increasing population density, social stratification, decreased nutritional variety, water and sanitation problems and close contact with domesticated animals (Cockburn 1971; Fenner 1970). A more recent threat to human health has come from chronic degenerative conditions and the so called outcome of these is heart disease, diabetes and cancer. Many of these disease share common etiological factors related to human adaptation over the last 100,000 years. Biological and archaeological anthropologists provide important information regarding the ethno-pharmacological aspects of traditional medical systems.

A.1.3.2 Cultural Ecological Approaches:

Ecology refers to the relationship between organisms and their total environment. Within medical anthropology, the ecological perspective has three major premises. First, the interdependent interactions of plants, animals and natural resources comprise an "ecosystem" with characteristics that transcend its component parts. Second, the common goal of species within an ecosystem is homeostasis: a balance between environmental degradation and the survival of living population. Third, modern human adaptations include cultural and technological innovations that can dramatically alter the homeostatic relationship between host and disease (Tarafdar, 2008).

A.1.3.3 Ethnomedical Approaches:

Horacio Fabrega defines ethnomedical science as the study of how members of different cultures think about disease and organize themselves towards medical treatment and social organization of treatment itself (Fabrega; 1975). As a domain of medical anthropology, ethnomedical research mainly focuses on five major areas viz. (a) ethnographic description of healing practices (b) comparison of ethnomedical system (c) explanatory models of health and sickness (d) health seeking behaviors and (e) the efficacy of ethnomedical systems (Tarafdar, 2008).

A.1.3.4 Critical Medical Anthropological Approaches:

The discipline of critical medical anthropology has emerged as a perspective in the 1980s and 1990s which combines some broad critiques and subsumes much theoretical diversity. Correctly attributing regional disparities in relation to larger political and global economic context, critical medical anthropology describes how large scale political, economic and cognitive structure constrains individual's decisions, shape their social behavior and affect their risk for disease. Critical medical anthropologists are trying to establish a new paradigm that views sickness not just an isolated event but as a product of complex interactions involving nature, society and culture (Tarafdar, 2008).

A.1.3.5 Applied Medical Anthropological Approaches:

Applied medical anthropology emphasizes the direct application of anthropological theories and method to particular social problems. Within this domain, applied approaches can be categorized into two general domains; applied anthropology in clinical settings and applied anthropology in public health programmes. Clinical applied anthropology focuses on health care within biomedical settings and analyzes the effects of cultural and socioeconomic factors on doctor-patient interaction, adherence to treatment and the experience of healing (Tarafdar, 2008).

A.1.4 Traditional Medicine:

For much of the twentieth century the concept of popular medicine, or folk medicine, has been familiar to both doctors and anthropologists. The concept of folk medicine was taken up by professional anthropologists in the first half of the twentieth century to demarcate between magical practices, medicine and religion and to explore the role and the significance of popular healers and their self-medicating practices. The term was also used to describe the health practices of aborigines in different parts of the world, with particular emphasis on their ethno-botanical knowledge. This knowledge is fundamental for isolating alkaloids and active pharmacological principles.

The study of indigenous medical features of a particular community is known as "ethnomedicine". It is also known as "folk medicine"; "popular medicine"; and popular

health culture (Polgar; 1962). Traditional medicine has a long history. The World Health Organization (1978) defines traditional medicine as ...the sum total of all the knowledge and practices, weather explicable or not, used in diagnosis, prevention and elimination of physical, mental or social imbalance and relying exclusively on practical experience and observation handed down from generation to generation whether verbally or in writing. Traditional medicine might also be considered as a solid amalgamation of dynamic medical knowledge and ancestral experience. In 2002 The World Health Organization again defines traditional medicine. Traditional medicines include diverse health practices, approaches, knowledge and beliefs incorporating plant, animal and or mineral based medicines, spiritual therapies, manual techniques and exercises applied singularly or in combination to maintain well-being as well as to treat, diagnose or prevent illness. The same when adopted outside of its traditional culture traditional medicine is often called the complementary and alternative medicine by the Western medical system.

Various anthropologists have been involved in the study of ethno-medical systems since the last quarter of 19th century. Tylor, Saligman, and Frazer have described healing, shamanism, witchcraft, magic etc and related them to the concept of illness in preliterate societies. In the early part of the 20th century Rivers, Ackernecht and Clements have provided elaborate descriptions and analyses of ethno-medical systems.

The causation and grammar of folk medicine is unique and is based on wrath of God's evil spirits, magic and witch craft. It has its own diagnostic tools and techniques which can heavily depend on variation. Treatment is through propitiation of Gods, exorcism, and counter magic, use of charms and amulets and administration of herbal preparation.

A.1.5 Traditional Indian Medicine:

The medical systems that are truly Indian in origin are the Ayurveda, the Siddha, Yoga and Naturopathy. But the Unani system of medicine is very much cultivated and developed and occupied a respectable position in Great Traditional Indian Medicine. Apart from the Great Traditional Medical Systems there are various other little traditional folk medicines which are used locally and restricted to particular locality or society. All these systems are indigenous and through over the years become a part of Indian Tradition. Prior to the advent of modern medicine these systems had for centuries taken care of the health needs of people. These

systems are widely used even today because of their accessibility, acceptability as well as of their cost effective in nature.

A.1.5.1 The Ayurveda:

Ayurveda means the science of life. It is one of the oldest formulated systems of medicine. The Ayurveda is a subsidiary branch of the *Atharvaveda*. Different Hindu mythological stories claimed that Brahma composed it in one hundred thousand stanzas and a thousand chapters before creation of man.

Charaka Samhita and *Susruta Samhita* are the two ancient texts on which Ayurveda is based. In ancient India, the celebrated authorities in Ayurvedic medicine were *Atreya, Charaka, Susruta* and *Vaghbhatt. Atreya* (about 800BC) acknowledged as the first great Indian physician and teacher. Ayurveda witnessed tremendous growth and development during the Buddhist time (226BC). *Charaka* (200AD) the most popular name in Ayurvedic medicine was a court physician to the Buddhist king Kaniska. Based on the teaching of *Atreya, Charaka* compiled his famous teatise on medicine the *Charaka Samhita* in which he mentioned about some 500 drugs. Father of Indian Surgery, Susruta stands out in prominence and compiled the surgical knowledge of his time in his classic *Susruta Samhita* probably between 800BC and 400AD.

Ayurveda is based upon certain fundamental doctrines known as the *darshanas* which encompasses all sciences- physical, chemical, biological and spiritual. So far as the function of the body is concerned the system considers the body mind and soul as complementary to one another. Everything is explained by the theory of *Tridosha*; *vayu* (wind), *pitta* (bile) and *kapha* (phlegm) and the seven *dhatus*, body fluid, blood, muscular tissue, adipose tissue, bone tissue, nervous tissues, and bone marrow. Disease was explained as a disturbance in the equilibrium of the three humors. It can be said that Ayurvedic medicine is concerned with preserving and promoting total health with sophistication of ethical and moral doctrines of life rather than just curing any type of disease.

A.1.5.2 The Siddha:

The system of medicine which is indigenous to the soil of Tamilnadu is Siddha system of medicine and is practised in the Tamil speaking areas of South India. The word Siddha is derived from the word *siddhi* which means an object to be attained or perfection or heavenly bliss. Siddhi generally refers to *Ashtama siddhi*, i.e. the eight great supernatural powers which have been enumerated as *Anima*. Those who have achieved these powers are called Siddhars.

According to the Siddha predictions or Siddha mythology it is known to the world that lord Shiva taught the Siddha principles and philosophies. All the Siddhars taught their principles along with their well experienced medicines to their disciples under Gurugulavasa. They brought the secrets in the palm leaves manuscripts with several code words for their understanding. It is handed down from Guru to disciples.

Most of the Siddha predictions are classified with several formulations which could be followed and adopted according to the land, climate, age, severity of disease, food and circumstances. In general, single and even compound medicines are advised for the patients by knowing the pulse diagnosis methods, the variations of *Naadi* in their hands by means of *Vali, Azhal, Aiyyan*, or in other words called *Vaatham, pitham* and *kapam*, respectively. Siddha system believes that all objects in the universe including human body are composed of five basic primordial elements, namely earth, water, fire, air and space.

The human body is a conglomeration of three humors and seven physical components. The Food is considered to be basic building material of human body, which gets processed into humors, tissues and wastes. The equilibrium of humors, body tissues and waste products is considered as health and its disturbance or imbalance leads to disease or pathologic state. Siddhars classified the diseases in different topics and accounted the total diseases for human body as 4448 diseases. They mentioned about the curable and incurable diseases along with the symptoms of the body and predicted the concerned, proper medicines also.

A.1.5.3 The Unani:

The Unani system of Medicine owes, as its name suggests, its origin to Greece. The term 'Unani' is derived from the work 'Unan' which means Greece in Arabic. Hippocrates (Buqrat in Arabic) (460-377 BC) who freed Medicine from the realm of superstition and magic, and gave it the status of Science. After Hippocrates, a number of other Greek scholars enriched the system considerably. After him many scholars enriched the system of whom Jalinoos (Galen) 131-210 A.D., Al-Razi (Rhazes) 850-925 A.D. and Abu Ali Ibn Sina (Avicenna) 980-1037 A.D. are noteworthy.

In India Unani system of Medicine was introduced by the Arabs, and soon it took firm roots in the soil. The Delhi Sultans, the *Khiljis*, the *Tughlaqs* and the *Mughal* Emperors provided state patronage to the scholars and even enrolled some as state employees and court physicians. The system found immediate favour with the masses and soon spread all over the country particularly during the 13th and 17th century.

Unani medicine was the first to establish that disease was a natural process and that symptoms were the reactions of the body to the disease. It believes in the humoral theory which presupposes the presence of the four humors - *Dam* (blood), *Balgham* (phlegm), *Safra* (yellow bile) and *Sauda* (black bile) in the body. Each humor has its own temperament - blood is hot and moist, phlegm cold and moist, yellow bile hot and dry and black bile cold and dry. Every person attains a temperament according to the preponderance in them of the humors which represent the person's healthy state, which are expressed as sanguine, phlegmatic, choleric and melancholic. The diagnosis of diseases in Unani system of medicine is through *Nabz* (pulse) and examination of *Baul* (Urine) and *Baraz* (stool).

A.1.5.4 Yoga:

Yoga is not a system of medicine but one attains a sound mind and a sound body through it. Yoga is a method by which one can develop one's inherent powers in a balanced manner. It offers the means to reach complete self realization. The literal meaning of Sanskrit word Yoga is to *yoke*. Accordingly yoga can be defined as a means for uniting the individual spirit with the universal spirit. Yoga is one among the six systems of Vedic philosophy, the earliest literature of Hindu civilization. *Maharishi patanjali*, rightly called the 'father of Yoga' compiled and refined various aspects of Yoga systematically in his 'Yoga sutras'

(aphorisms). He advocated the eight fold path of Yoga, popularly known as "Ashtanga Yoga" for all-round development of human personality.

These are - Yama, *Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhayana* and *Samadhi*. These components advocate restraint, observance of austerity, physical postures, breathing exercises, restraining the sense organs, contemplation, meditation and Samadhi. These steps are believed to have potential for the improvement of physical health by encouraging better circulation of oxygenated blood in the body, retraining the sense organs and thereby inducing tranquility and serenity of mind. The practice of Yoga prevents psychosomatic disorders/diseases and improves an individual's resistance and ability to endure stressful situations.

A.1.5.5 Naturopathy:

Nature Cure is a way of life which we find in a number of references in the Vedas and other ancient literatures. The morbid matter theory, concept of vital force and other concepts upon which Nature Cure is based are already available in old texts which indicate that these methods were widely practiced in ancient India. Although in the recent past the nature cure movement started in Germany and other western countries with hydrotherapy (water cure) popularized by Vincent Priessnitz (1799-1851) who is called 'Father of Naturopathy'. Nature cure movement gained its momentum in India as Mahatma Gandhi became interested on the nature cure treatment.

The science of natural therapeutics is based on the use of five elements that constitute the human body. They are water, earth, ether, sunlight and air. The rationale of naturopathy is that all healing comes from within the body itself. There are self therapeutic forces or powers inherent in the human body which helps to cure, preserve and promote health.

A.1.6 Health and Indigenous knowledge:

Anthropology has been going to live in other societies for nearly hundred years. Probably the idea was to add to our knowledge so that someday we might come to understand how human cultural behavior could vary so much and yet be so much the same at different times and in different places. Close to 2000 societies have now been described in the literature of

anthropology. This enormous knowledge of different societies enriches the wealth of modern science.

In most societies there does exist a rich body of scientific knowledge based on the demands of the concerned societies. This traditional knowledge or local knowledge is the wisdom held and shared by the people in our community and almost always passed down from one generation' to next one. It could be the knowledge about medicine, technologies, the environment, the spiritual world or anything else that is important to a particular community people. The knowledge in medicine is the sum total of all the knowledge and practices whether explicable or not, used in diagnosis, prevention, and elimination of physical, mental or social imbalance and relying exclusively on practical experience and observation handed down from generation to generation whether verbally or in writing. Such knowledge is in fact still used today in many areas all over the world in the day to day living of many indigenous people. In several parts of East Asia, South and South East Asia apart from the folk tradition there is also a parallel classical tradition of knowledge. These classical knowledge systems have very sophisticated theoretical foundations and are well documented in the thousand of manuscript. They represent non western knowledge systems. It is the holistic concept and is not only limited to the arena of treating disease but includes aspects of religion, socio cultural and economic domains. It can deal with the broad base of health problems from disease prevention to health promotion. This system includes usages of a wide range of biological resources using thousands of plant species, hundreds of animal species and animal parts and various minerals.

Unfortunately over the years this traditional knowledge and skills have been ignored and it was said to be primitive superstitious or unscientific; gradually the system was replaced by western knowledge. But now the deadly diseases like AIDS, cancer etc compel the modern science to rethink on its principle, as a result it is trying to rediscover the wisdom of indigenous knowledge.

SECTION- B

B.1.1 Concept of Tribe, Primitive Tribal Groups (PTGs) and Vulnerable Tribal Group:

The concept of tribe was a creation of the colonial period (Singh 1991cited in Roy Burman's book, 2003). According to Basu (1994) the term "Tribe" is no where defined in the

constitution and there is no satisfactory definition anywhere. The definition of tribe most frequently quoted by anthropologist refers to the one presented by the Winick's dictionary of anthropology, "A tribe is a social group usually with a definite area, dialect, cultural homogeneity and a unifying social organization". I.M. Lewis (1968) provides more comprehensive characteristics of tribes; ideally tribal societies are small in scale, are restricted in spatial and temporal range of their scale, legal and political relations and possess a morality, religion and world view of corresponding dimensions"(cited in Roy Burman's book, 2003). There are 664 tribes located in the five major belts in India. They are the socially segregated disadvantaged autochthonous people of the land. After independence gradually the concept of reservation emerged and through that emerged the idea of scheduled tribe in the independent India in the year 1950. The schedule tribe is a purely administrative category set up by the Government to distinguish one category of people and due to their backwardness is provided with some affirmative benefits so as to be brought at par with sections of the population. Almost all of these people also do conform to the idea of tribe as usually conceived in the parlance of anthropology.

The Constitution of India, Article 366 (25) defines Scheduled Tribes as "such tribes or tribal communities or part of or groups within such tribes or tribal communities as are deemed under Article 342 to the scheduled Tribes (STs) for the purposes of this Constitution". In Article 342, the procedure to be followed for specification of a Scheduled Tribe is prescribed. However, it does not contain the criterion for the specification of any community as scheduled tribe. An often used criterion is based on attributes such as geographical isolation, backwardness, distinctive culture, language, religion and shyness of contact. The census of India (1991) enumerates 573 notified scheduled tribes in India and they form about 8.08% of the total population of the country. About 84,326,240 persons have been enumerated in the country as being members of Scheduled Tribes (According to Census 2011 data) (source: Government of India, Ministry of Home Affairs, Office of the Registrar General and Census Commissioner, India).

Dhebar Commission (1960-1961) observed different layers among tribes of which lowest layer needed utmost consideration. The study team on Tribal Development Programme (Shilu-Ao-Team, 1969) marked a large number of tribal communities continuing to be extremely backward; some of them are still in primitive food gathering stage. Among those Scheduled Tribes who were identified more backward communities among the tribal

population groups have been categorized as Primitive Tribal Groups (PTGs) by the Government at centre in 1975. So far 75 tribal communities have been identified as Primitive Tribal Groups (PTGs) in different states and UTs in India. These hunting, food gathering and some agricultural communities who have been identified as more backward communities among the various tribal populations need special programmes for their sustainable development. Among all the states and union territories Orissa (13) is found to possess the maximum number of PTGs; followed by Andra Pradesh (12), Bihar (9), Madhya Pradesh (7), Tamilnadu (6), Gujrat (5), Kerala (5), Andaman and Nicober Island (5), Maharashtra (3), West Bengal (3), Karnataka (2), Uttar Pradesh (2), Rajasthan (1), Manipur (1), Tripura (1). The three Primitive Tribal Groups (PTGs) of West Bengal are Birhor, Lodha and Toto. No new group was declared as PTG on the basis of the 2001 census. But in 2006 the Government of India proposed to rename Primitive Tribal Group as 'Particularly Vulnerable Tribal Group' (PVTG). Primitive Tribal Group has since been renamed 'Particularly Vulnerable Tribal Group' by the Government of India.

B.1.2 Health Status of the Tribal People Inhabiting India:

Tribes in India, who constitute 15% of the geographical area and nearly 8.2% of the population, are truly disadvantaged and marginalized population of our country (source: Government of India, Ministry of Home Affairs, Office of the Registrar General and Census Commissioner, India). General health status of the tribal is poor as compared to the modern society. Due to a combination of societal attitudes, varying belief systems, and governmental neglect, tribal populations throughout India have long been denied basic healthcare. As a result, gaping disparities in health status of tribals, when compared to metropolitan areas, are evident. Genetic abnormalities and infectious diseases such as sickle-cell anemia, malaria, tuberculosis, leprosy, typhoid, and cholera are rampant in areas of Madhya Pradesh, Maharashtra, Tamilnadu, Orissa, and Assam states. Additionally, malnutrition, birth disorders, and gastrointestinal diseases are pervasive among tribal populations, and stark deficiencies have been detected in gross amounts of calcium, vitamin A, vitamin C, riboflavin, and animal protein. Certain tribal groups are even facing extinction due endemic diseases and an unusually low sex ratio (Paliwal, 2004).

Sometimes health status of the tribal population is marked by negative features that one may find in the morbidity and mortality. They may suffer from some distinct health problems, not because they have some specific type of health but because of specific placement in different

areas and circumstances in which they live. Poverty, illiteracy, malnutrition, lack of personal hygiene, unsanitary conditions and absence of health education, poor mother and child health services and poor coverage of national preventive programmes have been found responsible for the poor health of the tribal communities. Consanguineous marriage has also been found to affect the health status of the tribal adversely and also responsible for some specific illness including genetic disorders. Unfortunately, in one hand proper health services are not available in many of the tribal areas; on the other hand sometimes the common beliefs, customs and practices connected with health and disease will also influence their choice of treatment methods. Apart from the above said problems the gradual encroachment by the modern society on the natural resources of the tribal, depleting them of their habitat and exposing them to the alien aspect of globalization which is making a continuous mental stress on them.

B.1.3 Comparative Study on the Health Status between the Tribal People and the Main Stream Population:

India occupies 2.4% of the world's land and supports over 17.5% of the world's population. The total population of the country is 1,210,193,422 (according to the Census 2011). The indigenous tribal population form about 8.2% of the total population (according to 2011 Census). About 84,326,240 persons have been enumerated in the country as being members of STs (according to 2011 Census). There are about 162 major tribes and 270 minor tribal communities. They occupy around 15% of the geographical area of India. The Census of India 2001 enumerates 573 notified Scheduled Tribes in India among which 75 different tribes have identified as Primitive Tribal Groups (PTGs) by Government of India.

Due to a combination of societal attitudes, varying belief system and to some extent governmental neglect, the tribal populations throughout India have long been devoid of availing basic health care. As a result, gaping disparities in health status of tribes when compared to metropolitan areas are evident. Certain tribal groups are even facing extinction due to endemic diseases and an unusually low sex ratio. The sex ratio has been found to vary from tribe to tribe and from region to region. Although the sex ratio of Indian population in general 943 but among the Scheduled Tribe it is 990 (Census 2011) in general.

There are various other indicators which reflect the different socio- economic as well as health situation of the tribes. There are various other socio- economic indicators such as

literacy rate, unemployment rate, migration rate etc which indicates the socio-economic condition of the concerned population. It has been found low literacy rate among the Scheduled Tribe in comparison to the Indian national population of 61% (according to Demographics of India, 2011). The same has observed in case of unemployment rate. The unemployment rate is much higher in comparison to Indian national population 7.8%. The health status indicators such as birth rate death rate, life expectancy, infant mortality rate etc may also reflect the favorable and unfavorable social and cultural condition of the studied population.

B.1.4 Health and Government Policies:

Improvement of the health status of the population has been one of the major thrust areas for the social development programmes of the country. India is a signatory to the Alma-Ata declaration, 1978 and is committed to achieve the goal "Health for all by the year 2000 A.D." A separate Tribal Development Planning Cell has been functioning under the Ministry of Health Services since 1981 to co-ordinate the policy, planning, monitoring, evaluation etc. of the Health Care Schemes for welfare and development of Scheduled Tribes. The National Health Policy 1983 accordingly envisages high priority to provide health services to those residing in the tribal, hilly and backward areas as well as to endemic diseases affected population and vulnerable sections of the society. The Government of India in association with the states has developed a very comprehensive and useful policy on health that aims at achieving a phenomenal growth in this sector.

Keeping in view the far flung areas, forest land, hills and remote villages where most of the tribal habitations are concentrated the population coverage norms have been relaxed to one Primary Health Centre (PHC) for every 20,000 population and one Sub-centre for every 3,000 population in hilly/ tribal areas as against one PHC for 30,000 populations in general rural areas. Similarly Multipurpose Workers are appointed for 3,000 populations in tribal areas as against the norm of 5,000 populations for general. The states have been advised to set up at least 15% of the Sub- Centres in Scheduled Caste habitations or villages having 20% or more Scheduled Caste population (and 7.5 of their annual targets in tribal areas). The state Governments have been advised to give further relaxation for setting up Sub-Centres/ PHCs in the case of tribal hamlets which are 5 kms away from the available Health and Family Welfare delivery point. For the most disadvantaged population among the tribals i.e. for the PTGs a new scheme called 'Medical Care for Remote and Marginalized and Nomadic

Communities' was launched during the Ninth Five Year Plan with an approved layout of Rs 5 cror.

Under the Minimum Need Programme 20,972 Sub-Centres, 3,336 Primary Health Centres and 470 Community Health Centres have been established in tribal areas besides 1,122 Allopathic Dispensaries, 120 Allopathic Hospitals, 78 Allopathic Mobile Clinics, 1,106 Ayurvedic Hospitals, 24 Ayurvedic Hospitals, 251 Homeopathic Dispensaries, 28 Homeopathic Hospitals, 42 Unani Dispensaries, and 7 Siddha Dispensaries are functioning in the tribal areas in the country. Training of Dais (Traditional Birth Attendants) is being undertaken with emphasis on hands-on skill development for providing essential maternal and new born care ensuring clean delivery practices and promoting early referral of maternal complications and obstetric emergencies.

National Malaria Eradication Programme including Filaria Control, Japanese Encephalitis Control and Kala Azar Control are implemented by states/ UTs with 50% Central Assistance in tribal areas under TSP and SCP. 100% Central Assistance is being provided to North Eastern Tribal States from year 1994-95. National Leprosy Eradication Programme is 100% assisted for detection and treatment of leprosy cases. National Tuberculosis Control Programme is implemented with 100% Central Assistance for supply of anti-TB drugs, equipments etc in tribal areas under TSP. National AIDS Control Programme; a 100% centrally sponsored programme is implemented in tribal areas. A Central Planning Committee under the chairmanship of the Secretary, Ministry of Welfare has been constituted to review the health activities in the pockets of extremely backward tribal areas in the country. The committee has identified such pockets in 52 districts of 13 states (Andhra Pradesh- 6, Bihar- 6, Gujrat-3, Kerala- 5, Madhya Pradesh-4, Maharashtra-6, Manipur-1, Orissa-8, Uttar Pradesh 1, Rajasthan-2, Tamilnadu-2, Tripura-24, and West Bengal-1). (Ref:http://planningcommission.nic.in/plans/planrel/fiveyr/7th/vol2/7v2ch11.html)

Along with all the Government policies various other organizations make serious efforts to study on different health problems evident among the tribes. Such as, the Indian Council of Medical Research (ICMR), New Delhi have set up 5 Regional Medical Research Centers in the tribal areas in the country each at Jabalpur, Bhubaneswar, Jodhpur, Dibrugarh and Port Blair to carry out research on health problems of Scheduled Tribes.

B.1.5 Major Diseases Affecting Tribals:

The culture of any community determines the health behavior of the community in general and individual members in particular. The health behavior of the individual is closely linked to the way he or she perceives various health problems along with access to various health care institutions. The tribal scenario is far from being uniform. For instance, the Jarawa of the Andaman Islands are generally healthy a lot with strong build and glistering skin, but on the other hand there are number of tribal groups in the main land whose members are manifested as under nourished and disease stricken. It has been found from various studies that the Primitive Tribal Groups (PTGs) in India have special health problems and genetic abnormalities like sickle cell anemia, G-6-PD, red cell enzyme deficiency and thalassemia. Both male and female are equally affected in the case of sickle cell anemia whereas males are more affected than females in G-6-PD deficiency cases. The sickle cell disease is found in 72 districts of central, western and southern India. There are more than 35 tribal population groups showing a frequency of more than 19 percent (Kshatriya, 2004). Some of the other problems indicated by investigations in tribal areas include endemic diseases like malaria, tuberculosis, influenza, dysentery, malnutrition and infant mortality. These diseases also reflect that there is high possibility of HIV infection as TB and STD (sexually transmitted diseases) are found in great numbers among the tribals. In case of nutritional deficiency, particularly anemia accounts for 15-30 percent of maternal deaths in India where 60-70 percent of women are found to be anemic (Kshatriya, 2004). This incidence is particularly greater among tribal women. It has also been found that the tribal diets are generally grossly deficient in calcium, Vitamin A, B, C riboflavin. Iodine deficiency disorders are also prevalent in the tribal areas falling in the goiter belt. Soil depletion of micronutrients is important to be aware of the fact that our soil on account of long years of repeated cultivation is being steadily depleted of important minerals which results in lower levels of these micronutrients in vegetation, giving rise to deficiencies of micronutrients such as zinc.

Besides all the above said problems alcoholism has always been a recognized problem in tribal populations affecting not only the men's health and productivity but indirectly also the women and children. Social approval for the use of alcohol and few drugs to both male and female as part of tradition is found to be responsible for various crude pathological disorders.

B.1.6 Some Important Definitions:

B.1.6.1 Traditional medicine:

Traditional medicine could be defined in a number of ways taking into account the concepts and practices; information about which could be gathered, analyzed, evaluated and documented for posterity (Mahanti,1994). The World Health Organization defines traditional medicine as "the health practices, approaches, knowledge and beliefs incorporating plant, animal and mineral based medicines spiritual therapies, manual techniques and exercises applied singularly or in combination to treat, diagnose and prevent illness or maintain well-being (WHO, 2002). Traditional medicine (also known as indigenous or folk medicine) describes medical knowledge systems which developed over centuries within various societies before the era of modern medicine. The system is so comprehensive that it is very difficult to put the form in a particular slot of medical science. It mainly centres around two systems of traditional medicines broadly:

Small and indigenous traditional medicines which include mostly folk system based on socio-cultural aspects as well as magico-religious aspects of smaller groups of people.

The second system is called the great traditional medicine or system based on the concept of Ayurvedic, Unani, Sidh, Nature cure and Yoga medical system. This form of medicine takes into consideration Homeopathy as well as in the Indian context.

B.1.6.2 Ethnomedicine:

Ethnomedicine, a sub-division of medical anthropology refers 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). Etymologically speaking, the term refers to the medicines that are traditionally associated with specific ethnic groups. Thus, it can also be conceived of as Folk medicine, Traditional medicine or Indigenous medicine (Mibang and Choudhuri, 2003 cited in R.K.Kar's paper, 2004). Generally ethnomedical knowledge and practices have orally been transmitted over the centuries.

The term ethnomedicine is used to refer to those belief 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. It explores environmental, biological and socio-cultural factors as they impinge upon disease pattern and how people respond to it (Sinha and Banerjee 2004). The folk sector of the health care system comprises non-professional, non-bureaucratized "specialist". Folk healing can be divided into sacred and secular subsectors, indicating its roots in both religious (e.g. Shamanism) and empirical (e.g. herbalism) [cited in Das's paper 2004].

B.1.6.3 Herbal Medicine:

Herbal medicine or phytotherapy is the science of using herbal remedies to treat the sick. Herbalism is a traditional medicine or folk medicine practice based on the use of plant and plant extracts. Herbalism is also known as botanical medicine, medical herbalism, herbal medicine, herbology, and phytotherapy. The scope of herbal medicine is sometimes extended to include fungal and bee products, as well as minerals, shells and certain animal parts

B.1.6.4 Medicine Man:

In primitive societies, medicine man is same as the doctors of the modern societies. He acquired high status after priest and shaman. He used different kinds of herbs, plants, vegetables, fruits, grasses, stones soil and even blood, flesh, and skeleton of animals to cure the diseased man. The role of traditional medical practitioners of the rural and tribal communities is to provide health care to their community for years have stood the time test. In some societies medicine man coincide with priest and shaman.

B.1.6.5 Sorcery and Witchcraft:

Magic performed with anti-social or malicious intension is sorcery. The intension is always to herm others. Sorcery, like the other form of magic achieves its results indirectly by affecting the individual's emotional status. The effectiveness of sorcery depends upon the awareness of the victim that a magical ritual is being performed against him or her.

Like sorcery, witchcraft is another magical device to herm another person through supernatural means. But unlike sorcery which is a cultivated art, in witches the supposed persons who are believed to have certain inherited or inborn supernatural powers inherent in their body itself. They tend to enhance their efficacy by consuming rubbish and performing culturally disapproved acts.

Witchcraft can be viewed as a belief in a supernatural, mystical power that develops in some (usually adult) people and enables them to work evil directly, without magic or spiritual assistance. The witchcraft power is regarded as a distinct category of supernatural agency. It may fly about by itself but is ineffective unless it has a human host (Stevens Jr., 1996 cited in A.K.Sinha and B.G.Banerjee's paper 2004)

B.1.6.6 Shaman:

Shamanism comprises a range of traditional beliefs and practices concerned with communication with the spirit world. A practitioner of shamanism is known as shaman. Usually a part-time make specialist, shaman have fairly high status in his community and is often involved in healing. The shaman like the physician tried to cure his patients by correcting the causes of his illness. In line with his cultures concept of disease, this cure may involve not only the administration of the therapeutic agents but have the provision of the means for confession, atonement, and restoration into the good grace of the family. A shaman is socially recognized as having special supernatural powers that are used for and on behalf of the clients for varieties of activities such as curing divination, sorcery and recording fortunes among others.

B.1.6.7 Ojha:

The term *Ojha* is used amongst speakers of Hindi, Oriya, Bengali, and Nepali as well as amongst the Santals. The term has been derived from Sanskrit overtime. Although literal translations vary, but one such example is "who controls the spirit on Earth". In the Indian villages and especially among the tribals, *ojha* is a kind of healer for coping with the misfortunes at different circumstances. *Ojha* belongs to the first caste, the spirit leaders and teachers placed even above the king. Remedy from the capturing of ghost and snake biting are the two major fields of working. There are many *Ojhas* who still practice astrology as their traditional occupation. They are specially trained by their ancestor and the whole knowledge is transmitted verbally from one generation to other generation.

B.1.6.8 Tribe:

The definition of tribe most frequently quoted by anthropologist refers to the one presented by Winick's dictionary of anthropology 'A tribe is a social group usually with a definite area,

dialect, cultural homogeneity and a unifying social organization'. Lewis (1968) provides a more comprehensive characteristics of tribes, 'Ideally tribal societies are small scale are restricted in special and temporal range of their scale, legal and political relations and possess a morality, religion and world view of corresponding dimension' (cited in Roy Burman's book, 2003). The members of the tribe acknowledge the authority of a chief and usually regard themselves as having common ancestors.

SECTION – C

C.1.1 Studies on Tribal Health:

C.1.1.1 International Studies:

Lewis (1959) had noted that advantage in learning about the indigenous belief and practices of the community is the insight they give into the total world view which is also reflected in other sphere such as agriculture, politics and interpersonal relations.

Leslie (1967) contrasts professional and popular health culture on a different basis. He uses professional health culture to refer to the realms of practitioners in both systems, but does not include the medical sphere of folk specialist. A distinction is made between professional health culture and popular health cultures.

Bruce (1997) in his book titled 'Soul Healing' describes the chapter shamanic healing and it reveals shamanism is a religious phenomenon, restricted to Siberia and Central Asia. Shaman is a psycho-pomp (who guides souls).

Rodrigues De Areia M.L. (1998) studied medicine and traditional doctor in Central Africa. In this work the researcher clearly distinguish between the three agents of traditional knowledge, namely the diviner, the curandero (herbalist doctor) and the sorcerer.

Kaja Finkler (1998) studied two system of healing-Spiritual and Biomedicine- as practiced in Mexico. As a participant and observer of both healing regimes and their patients, he noted similarities and dissimilarities between secular and sacred healing that broaden the grasp of the two medicinal systems and result in different impacts on patients.

Chaudhuri in 2003 explained how the ecological imbalance due to unplanned and uncontrolled use of insecticides and pesticides for agricultural sector may also affect the health condition of the population. This may also affect the nutritional status of people, particularly the tribals. In Thailand he found the indiscriminate use of insecticides and pesticides killed the small fishes in the paddy field and thus the poorer families, who generally consumed this protein, were deprived of it.

Sjaak van der Geest and Kaja Finkler (2004) studied about hospital ethnography where they tried to evaluate how modern medical institutions can both reflect and reinforce dominant social and cultural processes of their societies. The authors discussed also about how modern medical views and facilities get reshaped at the presence of a particular dominant culture.

Kate Senior and Richard Chenhall (2013) studied a remote Arnhem Land Community in the Northern Territory of Australia where the authors discussed about how people perceive their health and their role in health care in their community. They also discussed about the involvement of the community members with the health clinic, traditional medicines and dependence on sorcery or witchcraft at the time of sickness.

C.1.1.2 Indian Studies:

E.T. Dalton (1872) compiled materials about the geographical settings, physical traits, economic, social and religious life of the Lepchas and Limbus of Sikkim and Darjeeling in the book 'Descriptive Ethnology of Bengal'.

Bodding made some remarkable studies on tribes. He (1940) had critically examined different traditional medicine and medical practices among the Santhals. He also observed different types of cultural norms and values behind those practices.

G.S. Ghurye found adequate place in tribal studies in his book 'The Aborigines, so called, and their feature' which was written in 1943. In the book he evaluated the status of the tribals in the Indian social structure.

B.S.Guha (1951) discussed about the overall tribal situation in India, their life, culture, economy and religion in the book 'The Tribes in India'.

Elwin (1955) tried to describe and analyze the relationship that exists between culture and tribal medicine. His study claims that there is an extremely close relationship between medicine and other sub-system like morality, religion and magic.

Marriot (1955) critically examined the cultural problems involved in introducing more effective technicians to the conservative Indian village of Krisangari. He took representative from different social strata and found out conflicts that were obstacles to the spread of western medicine.

A.K. Das and S.K. Banerjee (1962) wrote 'Impact of Industrialization on the life of the Tribals of West Bengal' which includes impact of industries on tribal culture as well as religious life among the tribes of West Bengal.

Sanyal (1973) wrote the book The Meches and the Totos, Two Sub-Himalayan Tribes of North Bengal. In his book author tried to emphasize the importance of the study of social, cultural, political, economic as well as religious life of numerically insignificant Sub-Himalayan Mongoloid tribe Toto.

L.P. Vidyarthi and B.K.Rai (1977) wrote an important book entitled 'Tribal Culture of India' which started with the importance of the study of Indian tribal life. That study gave a comprehensive idea of the economic, social, political and religious organization of the Indian tribes.

Buddhadeb Chaudhuri (1986) edited the book 'Tribal Health: Socio-Cultural Dimensions on Health' where the overall tribal scenario of India was discussed in detail; their problems, changing scenario, various type of developmental programme were also discussed.

Buddhadeb Chaudhuri (1990) edited the book 'Cultural and Environmental Dimensions on Health' where he compiled various socio-cultural aspects of health, food habit, socio-cultural dimensions of nutrition and growth, traditional and modern health care services, relation between health, nutrition and environment as well as health, culture and environment. Process of modernization of development in relation to health was also discussed.

Kar (1993) in a paper entitled 'Reproductive Health Behaviuor of the Nocte Women in Arunachal Pradesh' attempted to enlight a qualitative appraisal of some relevant aspects of

reproductive health behaviour of Nocte women through a look at their social structure, culture, food habit, morbidity and traditional health seeking behavior.

Sarthak Sengupta (1999) edited the book 'Health, Healers and Healing: Studies in Medical Anthropology' where broad spectrums of medical anthropological perspectives were discussed. Studies on perception and conception of health and illness, traditional art of healing and the cure, medical pluralism were discussed in detail by various experts.

Buddhadeb Chaudhuri (2003) wrote an important book entitled 'Health, Forest and Development: The Tribal Situation' where socio-cultural dimensions of health, relation between environment and health, interaction of traditional and modern health care systems and concept of tribal medicine were discussed elaborately.

'Changing Tribal Life' edited book by Padmaja Sen (2003) made detailed discussion about the changing life style of the tribe. Philosophy of tribal life, concept of value and notion among the tribes were evaluated in various articles.

According to Tarafdar (2006) Rituals of different phases of life cycle (birth, marriage and death) are linked with health issues and health status of concerned population. He recorded that the use of different types of herbal ingredients, auspicious articles and special things in different rituals reflect the necessity of those in daily life for better health and protection. The Santals and the Koras are accustomed to use them not only in occasions but also for day-to-day survival.

In his study Tarafdar (2010) pointed out that the Santals and Koras of West Bengal inhibit in a close touch with adjacent dominant Bengalee culture. In terms of concept of health, disease and treatment a prominent influence of dominant culture take place and it is more intensified upon the Kora than the Santals. In various circumstances, the Kora are not even to remember or pursue their ways of traditional thinking regarding the causation of disease and nature of treatment as more exaggerate and regular interaction has been occur between the dominant culture and the Koras. Even some government initiated health care programmes also influence and alter the vision and ideas of both the tribal groups of West Bengal.

S.N. Chaudhary (2012) edited the book 'Tribal Health and Nutrition' where discussions were made on various issues related to tribal health and nutrition in India in specific context to their culture, local ecology, voluntary efforts and institutional intervention.

'Indian Tribal Life' was written by Dr. Ravi Shankar Prasad and Prof. Pramod Kumar Sinha (2012). This book included various dimensions of tribal life from health issues to developmental aspects provided by the state as part of National Policy.

C.1.1.3 Studies on Totos:

Toto, a small mongoloid tribe is found to settle in a single pocket within the district of Jalpaiguri. The Totos were taken into account firstly by the British administrators. It was the British who for the first time made a serious attempt to know the socio-cultural as well as socio-economic life of different ethnic populations inhabited in the North –Eastern states of India. It was partly because of their colonial administrative policy. From their research work initially it was possible to know about the demographic profile, land holding pattern, language, economic, cultural, religious as well as social life of those secluded population. The Totos were also taken into account firstly by the British administrators during the second half of the 19th century. The existence of this small mongoloid population was revealed by a British land revenue employee Mr Krishna Kanta Bose in the year 1865 (Majumdar,1993). There after various anthropologists, sociologists, biologists made some serious work to know their livelihood along with their genetic constituents.

In course of research work regarding the early existence of the tribe, it could be asserted that the Totos were first mentioned by Babu Krishna Kanta Bose, a British Government. employee of Rangpur collectorate. According to the history, this region (i.e. Totopara) was under the control of Bhutanese. The collectorate of Rangpur David Scott sent Babu Krishna Kanta Bose to Bhutan Government as an envoy in 1815. Bose however found people called Totos in a village called Lukepur under the Falakata tehasil of western Duars and not at Totopara, the present habitation of the Toto people. After the Bhutan war in 1865 the then British Government ultimately ceded the whole region to India and the Bhutan Duars Act was signed in 1868 to assume full control of the area. After revising various sources of previous work regarding the studied tribe it could be easily asserted that the only settlement of the Totos i.e. the present Totopara village was traced by D. Sunder, the settlement officer of

Jalpaiguri District. He was appointed for the settlement operations in Western Duars during 1889-1894, to take a stock of people, their lands and the crop (Sunder, 1895 cited in Bimalendu Majumder thesis, 1993). He for the first time made seven pages note about the habit and language of this small tribe.

After Sunder, J. Milligan settlement officer of Jalpaiguri District conducted the second survey during 1906-1916 among the Totos. His account on the Totos is very brief covering only two pages (Milligan, 1916). He differed with Sunder in some socio-economic aspect regarding the concerned tribe. G.A. Grierson (1909) for the first time studied Toto language; Vol: III Part I included a brief survey covering about six pages of the Toto dialect Jalpaiguri District Gazetteer, published in 1911, devoted only one page on the Totos. The third survey was conducted by B. Mukherjee during 1931-1935. He published a very brief note of only a half page on the Totos. These limited works were conducted and published in the pre-independent period.

In the post independent India there were several anthropological, sociological and bio-chemical enquiries which were conducted among the Totos. Among the various researchers Dr Charu Chandra Sanyal was probably the first who wrote two newspaper articles on the Totos in the year 1947. He conducted his field work during the year 1945 to 1953. In the year 1955 he again published an article on the Totos covering social and domestic life of the Totos in the journal of Asiatic Society. In 1968 Mr. Charu Chandra Sanyal wrote another report on the Totos which is known as Totos revisited (Banyajati, vol.xvi, No.4 October 1968). Language pattern of the tribe Toto was his prime area of attension. But the article was revised and republished in the year 1973 on the same journal of the Asiatic society. Later on finally in the year 1973 he published his famous book among the Totos viz. 'The Meches and The Totos: Two Sub-Himalayan Tribes of North Bengal' from the North Bengal University. Another serious publication was found in the District handbook of Jalpaiguri (1951) which was written by A. Mitra in- charge of Census operation in West Bengal (cited in Bimalendu Majumdar's thesis, 1993).

During mid 50's B.K. Roy Barman was the first who made the doctoral dissertation on the Totos. After appointing as a Tribal Welfare Officer of the District Jalpaiguri in the year 1955 he took his interest on this small forest dwelling tribe. He visited Totopara first time in the same year for some administrative purpose. Since then he continued his study on the Totos. Out of his studies he published different articles on the Totos viz. "Drama of Two Drums:

Mayu Festival of the Totos" in the year 1957; Brief Statement on the Socio- economic situation in Totopara and Perspective and Programme of Activities in Totopara Welfare Centre in the year 1957. He submitted his doctoral dissertation to the University of Calcutta in 1959 entitled 'Dynamics of Persistence and Change of a Small Community–The Toto'. After his doctoral submission he published two valuable articles; 'A Note on the Socio-Medical Survey among the Totos' in 1964, 'Hundred Years in a Tribal Village- Totopara' in 1969. Another important article viz. 'Some Aspects of Toto Ethnography' was published in the Bulletin of the Cultural Research Institute in the year 1964 which was appended by K. Chattopadhyay and P. Chakrabarty under the supervision of Dr. B.K. RoyBarman.

In the year 1969 another important monograph 'The Totos' was published by Amal kumar Das, Deputy Director of Cultural Research Institute. The article was published by the Scheduled Castes and the Scheduled Tribes Welfare Department of the Government of West Bengal. The history of the village, physical feature, demographic features religious and cultural life, village organization and also the disease pattern were briefly covered in that article.

Other than the above articles various Bengali articles were published about the Totos. In the year 1972 Santosh Kumar Bhattacharjee, the Welfare Organiser of Totopara published 'Totoder Katha'; 'Toto Upajatir Pujaparban O Samajik Riti Niti' was published by B. Majumdar in 1978; 'Toto Upajatir Samaskritik Pariprekshit- Vyadhi O Chikitsa' by Dr Bimalendu Majumdar in 1983; Debendranath Dhali published a small booklet 'Toto' in 1987; 'Uttar Banglar Toto Upajati O Annanno Prabandha' by Pabitra Gupta in 1988.

In 1990 Divisional Commissioner of Jalpaiguri district Smt Kalyani Chowdhuri seriously thought about the problems of the Toto community. Nitai Mukherjee gave a newspaper report on Totopara in 1994 ('Dainik Basumati' 14th August 1994). In response to Smt Chowdhuri's request Anthropological Survey of India send a research team in Totopara leaded by two famous anthropologists, B.N. Sarkar and Dr. R. Bhattyacharjee. After a large investigation they concluded that the Totos were in a way of extinction, but there were no such crude genetical reason behind that. Their traditional cultural practices and the processes of livelihood were found to be responsible.

Bimalendu Majumdar is renowned for his research work on the Totos. After publishing various research articles on the Totos in different journals he published his book on the Totos

viz. 'A Sociological Study of the Toto Folk Tales' in the year 1991. He submitted his doctoral dissertation 'Cultural and Economic Transformation of a Small tribe in the Sub-Himalayas- a study of the Totos' to the University of North Bengal in the year 1993.

Manibrata Bhattyacharya is another famous anthropologist who worked on the social transformation of the Toto society (Toto at the Cross Roads, 1998). In his book Dr. Bhattyacharya went through a detailed demographic analysis. He also discussed about the land crisis and the changing scenario of the cultural practices of the Toto society.

Pinak Tarafdar worked on the traditional health care practices among the Totos (Traditional Healthcare Practices among the Totos of Totopara, District–Jalpaiguri, West Bengal, unpublished UGC Minor Research Project, 2008-2010). He made detail discussion about health, disease and traditional treatment procedure among the Totos. He also discussed about the relation between health, forest and nutrition particularly in the context of Totos.

C.1.2 Scope of the Study:

The traditional tribal societies in India as well as in the world differ from region to region due to various ecological settings, socio- economic and socio-cultural reasons. The tribal communities of India differ considerably from one another in race, language, culture and beliefs in their myths and customs, and present a spectacle of striking diversity.

The social as well as biological functioning of the human being is much shaped by culture. Particularly in case of tribal societies the world of tribal medicine is largely non-classical and traditional. The main body of medical knowledge existing in the belief and practices is cultural, that is handed down from one generation to another. In nature, it is magico-religious, but always including some empirical elements. It not only gives an idea about the social solidarity of a community but it also gives an idea about the process of traditional way of treatment and how it differs from one community to other community.

So, the overall improved health situation of India can only be achieved through the improvement of the tribal health scenario of our country which contributes to the multiculturaristic attributes of our nation. This present medical anthropological enquiry is made to explain the concept of health, disease, medical system and medical belief related religious practices, diagnosis and traditional way of treatment among the Totos of District

Jalpaiguri, West Bengal. It will also highlight the issues of the modern health care facilities, infrastructure and implementation of different treatment procedure and introduced health care programmes among the said population and area.

C.1.3 Aim of the Study:

(a) To examine the condition of Primary Health Centre (PHC), Sub-centres, Block Hospitals, District Hospitals.

(b) To find the actual health scenario along with the disease pattern of the concerned Primitive Tribal Group which will help the Government while formulating health policy for the primitive tribal people.

(c) Documentation of traditional knowledge in health and medicine is urgently necessary. This knowledge could be proved helpful for further development of Ayurveda, Homeopathy and Allopathy in an integrated manner.

(d) To find and access solution to reduce human suffering and minimize the cost of treatment (including diagnosis and prescribed medicine).

(e) To put more emphasis on eradicating some diseases; especially malaria.

(f) More seriousness should be taken for giving immunization programmes, vaccination programmes, and maternal care before and after delivery.

(g) Studies will also enlighten the legal and policy formulation involving protection of traditional knowledge.

(h) The study will also try to find out possible way which will help to eradicate the social as well as health problem without affecting the ideology of the studied community.

C.1.4 Objectives:

Objectives of any anthropological enquiry orient mainly through improving the quality of life of the community people, at the same time helping for initiating further developmental programmes. The present study deals with the health condition and treatment of different diseases among the Toto people of the Totopara village of District Jalpaiguri. All the data on different health aspects are collected by visiting Totopara. Along with the traditional medical practices the present study observed the impact of modern health care programmes. The objectives of present study are to organize and present the relevant data which establishes the correlation between different variables. The specific objectives of the present studies are as follows:

(a) To collect and analyze the data on different types of conception about disease, healing practices and traditional medicine among the Primitive Tribe Toto.

(b) To examine the different magico-religious healing practices prevalent among them and to understand the role of magico-religious healers in the village.

(c) To reveal the ethno-medical implications of their herbal medicine.

(d) To evaluate the role and working of the traditional medical practitioner.

(e) To know the relation between herbal medicine and forest.

(f) To know their acceptance and dependency towards modern medical system.

(g) To examine the accessibility of modern medical system.

(h) To assess the role of medical personal, quack, officers, and staff in the Sub-centres, PHC, Rural hospital, State General hospital in the health care programmes.

(i) To study the different types of preventive and promotive health care services followed by the various Government agencies such as ICDS.

(j) To study the actual condition of drinking water and sanitation of the area.

(k) Special attention is given to the condition of family planning and its traditional and modern ways.

(l) To evaluate the modern health care programmes provided by PHCs, Sub-centres, Block hospitals and Sub divisional hospitals.

(m)To observe the health consciousness among the present generation.

(n) To study the present health hazard faced by the population.

(o) To evaluate the interaction between the knowledge of traditional health care practices and the modern medical facilities and programmes.

(p) To evaluate the health facilities and communication factors of the sub divisional hospital.

C.1.5. Hypothesis:

Considering the objectives of the present study the following hypothesis can be framed;

(a) Concept of health, disease and treatment among the concerned population may vary due to different age, sex, education, economy, environment and communication. Further, in various causes of "ailment" may leads to different categories of treatment procedures. The variation between male and female is also another important criterion.

(b) Tribal patients may psychologically assured by the techniques of treatment applied by the traditional healers as both of them are sharing the same cultural milieu.

(c) Dependence and assurance of traditional medical system and lack of proper infrastructure and less communication of modern medical system may influence the population to show deep concern about the former than the latter.

(d) Imposition of different forest laws may restrict the accessibility of herbal medicines which adversely affect the traditional health care practices. Deforestation and commercial afforestation may be added criteria in this regard.

(e) In the tribal areas the fruitful treatment of various disease by the modern medical practitioners are possible when they know the economic, educational and cultural background of the community.

(f) Success of different health care programmes may depend upon the ideologies of the concerned population; some health care programmes may be accepted by the population while other may not succeed up to the desired level of the Government.

C.1.6 Selection of the Field:

As the present study was done exclusively on the health behavior among the tribal population; it was necessary to select a tribe which is not only the indigenous population of this country but who also fulfill all the other important characteristics to be a tribe. So, the Totos, one of the three Primitive Tribal Groups (now known as Particularly Vulnerable Tribal Group) in the state of West Bengal was chosen for its tribal dominating character as well as it's prolong inhabitation in the same region. A rich forest resource and ethnic composition of that region was helpful in studying the ethno-botanical knowledge of the said area and at the same time social transformation of the concerned population.

The village was selected considering the scope and objectives of the proposed study. Totos, the only PVTG of North Bengal are concentrated in the northern borders of the state under Madarihat block which is 96.56 km from the Jalpaiguri town. The village is known as Totopara. Presently they have a population of 1170 of which 635 are male and 535 are female i.e. having an unequal sex ratio (Tribal Welfare Society, Totopara). As they are living in the area since long before, so, it seems to be that an effective traditional health care practices support them to sustain in an inaccessible environment. The present work will orient through the health condition of the Toto population emphasizing specially on their traditional medical system, traditional belief towards good health, traditional medical practices, magico-religious belief and practices.

The Totopara Mouja is devided into six segments. These segments are 'Dhumci gaon', 'Mitran gaon' Puja gaon 'Mondal gaon', 'Panchayat gaon'and, 'Subba gaon'. All these six segments of Totopara were situated on the slop of the Teding hill. Dhumci gaon is situated at

the top of the hill and Mondal gaon and Panchayat gaon were situated in comparatively plain area.

Dhumci gaon was situated at the longest distance from the said market centre and health facilities were negligible in comparison to the other segments of the village. There were 33 number of Toto families resided in the Dhumci gaon. Very ill- equipped communication was observed. The absence of modern medical practitioner was another criterion.

Mitran gaon was situated at the West direction. The distance from the market place and PHC was shorter than Dhumci gaon but longer than the other segments of the village. Total 29 number of Toto families resided over there. There was no modern medical practitioner but quack and traditional medical practitioners were quite available. Ill equipped communication was observed.

Puja gaon was located at the North- East direction of the village. The distance from the market place and PHC was shorter than the Dhumci gaon and Mitran gaon but longer than Panchayat gaon, Subba gaon and Mondal gaon. The total numbers of Toto families were 22. There was no modern medical practitioner but quack and herbal medicine men were available. Communication was not good enough but better than above two sectors of the village.

Mondal gaon was situated at the South direction of the village. The market place and PHC was situated at the shortest distance. A small rivulet demarcated the Mondal gaon from Subba gaon. The total numbers of Toto family resided in Mondal gaon was 24. The inhabitants of the Mondal gaon could readily access the only medical practitioner of the village who was appointed in the local PHC.

Panchayat gaon was the southward directed section of the village. The highest numbers of Toto families were found to reside in the Panchayat gaon. Primary Health centre was located in the Panchayet gaon. The market place was situated at the shortest distance than that of Dhumci gaon, Puja gaon and Mitran gaon.

Subba gaon was the middle section of the village. The market place was situated at the shortest distance but the distance of PHC was longer than the Panchayat gaon and Mondal

gaon. The total numbers of Toto families were 68. Although modern medical practitioner was not available but quack, herbal medicine men were available.

C.1.7 Research Methodology used in the Present Study:

Any scientific enquiry requires proper methodology for achieving exact goal. The scientific methodology should be specified, so that the other researcher could easily understand the desired result and propagate the research work.

The study was conducted in all the segments of the tribal village Totopara, Block Madarihat, District Jalpaiguri. The village was selected according to the previously selected criteria. The Primitive Tribal Group Toto was the target population in this study.

A pilot survey of the village was done during October-November, 2009. The Toto people have their own dialect but they do not have their own written language. It has been found that due to prolong interaction with the Nepalese a large segment of Toto population can speak in Nepali. They were unable to speak Hindi, Bengali or English. A small section of Toto population was found to speak Bengali. So, for conducting the field work in-depth it was necessary to take the help of an interpreter. The field work was conducted into various phases; it was started from the above mentioned time and date and extended up to December 2012. There were six divisions of the total field work. Two to four times of field work were done under each division as per the requirement.

Six village sectors were categorized into two categories depending on certain parameters like communication, distance from Primary Health Centre etc. Category-1 village sectors were located farthest from the said market place and from the only modern medical institution (Totopara Primary Health Centre). So, limited health facilities were available in close proximity. Very ill equipped communication was noticed to the local Primary Health Centre (PHC) or any other place. The absence of quack was also additional parameter. Three village sectors were chosen under this category viz. Dhumci gaon, Mitran gaon and Puja gaon.

Category-2 village sectors were nearest to the modern medical institution and market place. Communication was good in comparison to the category-1 village sectors. Three village sectors were chosen under this category viz. Mondal gaon, Panchayat gaon and Subba gaon.

Categorization of the sectors:

Types	Sectors	Criteria
Category- 1	Dhumci gaon	1. Distant from market, PHC, Bank, school. 2. Less communicative.
	Mitran gaon	
	Puja gaon	
Category- 2	Mondal gaon	1. Close to market, PHC, Bank, school. 2. More communicative.
	Panchayat gaon	
	Subba gaon	

Division 1:

At the first time the general observation of the village was done along with the completion of Preliminary Scheduled Form (PSF). The details of that form are given in the forth coming sections of this writing.

Division 2:

Case studies of the disease affected persons were taken on the basis of sample and according to the pre-settled requirements. For the time constrains and limitations of the study only last five years diseases or related misfortunes affected persons were considered for evaluation.

Sample Table

Sex	Income Category	Traditional	Modern	Both
Male	Lower	1	1	1
	Higher	1	1	1
Female	Lower	1	1	1
	Higher	1	1	1

Division 3:

Detailed open structured interview was taken from the medical personal including the traditional medicine men, magico-religious practitioners, quack, and modern medical

practitioners (doctor appointed in the local Primary Health Centre, nurses of PHC, compounder, health workers of the PHC) of the village.

Division 4:

Evaluation of the Government projects and schemes viz. ICDS, Pulse Polio Programmes etc. detailed structured interview of the ICDS workers.

Division 5:

The actual infrastructure of the only Primary Health Centre of the village was studied in detail.

Division 6:

The actual situation of the Block Hospital, District Hospital and the other Government or non-Government institutions from where the studied population takes medical help was evaluated. Condition and situation of diagnostic centers and medical shops were also observed by the researcher during that phase of field work.

Preliminary Schedule Form:

There are seven sub sections in the Preliminary Schedule Form. At the first phase of field work the data were collected through the Preliminary Schedule Form. Each house hold of the village was covered while taking data through PSF.

The quarries of the form are as follows-

1. General Information: (family level)

(a) Serial No (b) House Hold Number (c) Village Segment Name (d) Informant Name (e) Age (f) Clan Name (g) Name of the Clan Deity (h) Date.

2. Demographic Information: (individual level)

(a) Name (b) Sex (c) Age (d) Relation with head (e) Civil Condition (f) Age at marriage (g) Occupation (h) Education.

3. Information Regarding Present Work: (individual level)

- Birth place (home/ PHC/ hospital)
- Who attended (midwives/ doctor/ nurse/ health worker/quack)
- Disease in last five years.
- Way of treatment (traditional/ modern/ both)
- *Institution/ person consulted.*
- Distance of it.
- Procedure of treatment (traditional/ modern/ both)
- How long the treatment exists.
- Result (cured/ not cured/ still treatment going on)
- Expense for the treatment.
- Vaccination.
- Pulse polio.
- Attended ICDS (for pregnant mother and children)
- View regarding family planning (for married adult).

4. House Hold Information:

1. Number of rooms (bed room/ kitchen/ worship place/ verandah)
2. Use of it.
3. Condition of the house (*kuccha/ pucca/* bamboo made/ wooden/ mixed).
4. Place of keeping family deity.
5. Style of Iconography.
6. Electricity connection.
7. Sanitation.

5. Information Regarding Domestic Animal:

(a) Type of domestic animal.

(b) Their shelter.

(c) Disease of domestic animal which directly affects the family members.

(d) Diseases caused by the domestic animals.

6. Health Particulars:

(a) Source of drinking water (summer/ rainy season/ winter)
(b) Sanitation (bathroom/ open field).
(c) Source of water. (bathing purpose; washing and house hold work)
(d) Daily food habit (morning/ afternoon/ evening) and food consumption practices.
(e) Food pollution.
(f) Food preservation.
(g) Consumption of liquor; smoking habit; prevalence of tobacco and beetle nut (individual level)

7. Economic Information: (family level)

4. Land holding (home/ agriculture purpose)
5. Income.
6. *Expenditure.*
7. Economic help. (Given by Government/ Non Government agencies).

8. Socio-Cultural and Religious Life Related Information: (family level)

(a) Religious festivals
(b) Marriage practices.

Case Study: (Division 2)

According to the analysis of PSF the sample of the detailed case study of the patient in all the six segments of the village were chosen. Some important categories were taken for sampling the disease affected people (in last three years).

(a) Sex (b) Age (c) Treatment procedure. (traditional/ modern/ both) (d) Family income.

Division 3:

For the collection of the traditional healing practices the author had to face various difficulties. The traditional healers did not trust the author and to some extent misunderstood

the author. At the initial stage they thought the author might have some connection with the medical practitioner of other community. In the fear that their knowledge would not be anymore a secret one they denied to explain their indigenous medical practices. But on clarification of the nature and objectives of the study they agreed to co- operate. Gradually rapport was established and the author was able to win their confidence. Although there was an open structured interview schedule but the author had to meet them several times for collecting detail information on disease; cause, nature and types of treatment and also to observe the result of the treatment. The author had also visited the adjacent area and forest for observing the medicinal plants; the process of collection and preservation.

Open structured interview was also conducted for taking data from the modern medical practitioner. The author did not face any difficulties at this section of work. As they were very much aware about the work, the author got friendly co-operation. In various contexts they also gave valuable suggestion which were found very useful/ fruitful.

Considering the cause of disease various religious belief, function, ceremonies in life time; commonly observed religious practices, rites, rituals to cure the disease; the magical beliefs within the community regarding well-being as well as for the death of the community people were also observed. The combination of herbal medicine and modern medicine with magico-religious healing processes had also been covered.

The role of traditional as well as modern three- tire Panchayat were important in the present study. The head of the traditional Panchayat *Gapu* and the other members gave valuable information regarding present work. The role of the Panchayat offices including pradhan, members, and staff were also conspicuous in the present study. The active participation and co-operation of the above said people helped the author to gather information regarding various aspects including various Governmental schemes and implementation, as well as constrains and drawbacks about Ballalguri Gram Panchayat. Interview with the concerned Block Development Officer were also added criterion in this phase of field study.

Focused Group interview was also taken at various phases of field study. The villagers gathered at least twice a week at the local market place. It was very good conductive time for researcher to collect data directly from them.

The researcher visited almost all the recreational place, meeting place, religious place *(Demsha)* several times for collecting detailed data. The researcher's participant observation in various magico- religious healing practices, rites and rituals enable her to gather various information regarding health issues of the community people. The researcher has also taken some herbal medicine given by the traditional healer for coping with some severe diseases like malaria, acute dysentery, jaundice etc.

C.1.8 Data Analysis:

Primary source of data regarding the present study were confined to Primary Schedule Form (PSF), open and close structured interview of the disease affected persons (last five years), open structured interview of the traditional medical practitioners as well as modern doctors, health officials of the block and district hospitals, nurse, health workers, ICDS workers, pharmacists and so on. Participant observation in the field diaries were also served as a primary data source.

Secondary sources were taken from Census of India (1991; 2001), District Gazetteers (Jalpaiguri), Totopara Welfare Society, Totopara, various valuable books, papers and journals on Medical Anthropology from the Library, Department of Anthropology, North Bengal University. The researcher visited various libraries in Siliguri, Jalpaiguri, Cooch Behar, Alipurduar for collecting relevant information from books, journals, enclyclopedias, dictionaries, scientific journals. The researcher also took the help of various internet sites. Maps illustrating the location of the largest as well as only the studied area have also been included where ever needed.

The data were two types viz. qualitative and quantitative. All the data were analyzed and tables were analyzed and prepared manually.

C.1.9 Organization of the Thesis:

The thesis is divided into five chapters.

Chapter 1: Introduction

This chapter mainly deals with the basic components of health, disease and treatment along with the conventional idea about Medical Anthropology. This chapter also highlights the role of cultural anthropology in studying health care practices. From this section one can get an idea about the outline of the health and different Government policies for the tribes along with the problems of its implementation. Analytical discussion is given on scope, objectives and hypothesis of the present study. Methodological section gives a detailed idea for understanding the framework of the study.

Chapter 2: The Village and the People

Understanding about the village and the people is the prime objective of this chapter. A detailed idea about the studied village and people is given including the demographic profile of the people. From this chapter one can know about the socio- cultural life of the studied tribe. A short note about the State, District and Block is also given for better interpretation.

Chapter 3: Health and Disease: Traditional Way of Treatment

Traditional concept of health and disease as well as the indigenous way of treatment among the studied tribe is given in this chapter. In this chapter reader can go through the super natural beliefs regarding health and well-being of the community member along with the procedure of appeasement of different deities for protection from various diseases. Role and activities of the traditional healers are also demonstrated in detail. Knowledge about the indigenous medicine occupies a crucial part in this chapter. Case studies of those patients who avail the traditional medicine in different circumstances are also a vital portion of this chapter.

Chapter 4: Modern Health Care Facilities and Programmes

This chapter is started with the discussion about the health scenario of the country and the different Government policies formulated for the upliftment of socio- economic status of the Indian tribal population. At a glance the health infrastructure of the country can be helpful for understanding the forth coming section. A discussion is also made on the overall tribal health problem.

The actual condition of the Primary Health Centre (PHC), Sub-centres, Block hospital and State General Hospital is discussed in detail. Within this chapter a small section is made to evaluate the role and activities of the modern medical practitioners, nurses, staff, and health workers. Case studies of those patients who availed the modern medical facilities in different circumstances are a vital portion of this chapter.

Chapter 5: General Observation and Conclusion

In this chapter a general discussion is made on the above said aspects along with the possible suggestive measures.