

**SOCIAL ENVIRONMENT AND HEALTH CARE PRACTICES - A
COMPARATIVE STUDY AMONG THE TRIBALS IN TAPAN
BLOCK OF DAKSHIN DINAJPUR, WEST BENGAL**



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By
Tapan Kumar Gope

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CHAPTETR 1

INTRODUCTION

PROBLEM OF THE STUDY

Environment is the study of physical objects, biological organism and atmosphere of a particular region. It influences the way of life of the people. The people, in turn, work with the given environment and shape up a style of life compatible with it. In the process they evolve their own customs, values, norms, beliefs, religion and social institution so as to blend with the environment harmoniously. In a way environment, society and culture are interdependent and mutually interacting with each other. We may categories the environment as physical environment and social environment. Physical objects, biological organisms and atmosphere describe as physical environment. Social environment encompasses all aspects of human life such as occupation, income, land holding pattern, economic classes, educational status, customs, values, beliefs, practices, religious, taboos etc.

Social environment influences the health problem and health practices of any community. Ever since the emergence of man on the earth, illness and diseases have become perennial problems for him. Each society, in this respect, is found to develop some kind of value system within its own ethno science for treatment of diseases. There are some universal perceptions of health and disease where all the human societies possess some common considerations and at the same time there are some social perceptions unique to a particular society. So far as the unique perceptions of the society are concerned, the concept and treatment of diseases are differently defined in different societies. The biological disorders in the body may be depicted as the disease in case of human being, but the biological explanation cannot delineate all about illness in human societies. Biological factors tell the basic causes responsible for disorders in the body, there are social explanations for various applications in the body and mind especially in the primitive societies. Social environment helps in the spread and control of certain disease. If the society is socially sound enough, there is a general trend for simultaneous improvement in the health status.

Social environment plays an important role in the tribal worldview of health, disease, and treatment. Primitive concept of health, disease, and treatment is the integral component of the overall environment of tribal community. The usual theory of disease in tribal society is that it is caused by breach of some taboo or by hostile spirits, the ghosts or the dead. Sickness is the routine punishment for every crime meted out to them by the spirits. Accordingly, they have taboos and prayers. The *Pahan* (Village Priest) in addition to his religious functions act as the mediator between the people and the myth powers. When a person goes to traditional medicine man, he gets something more beyond physical health. It is the socio-physiological re-enforcement (Choudhury 1986 p1-11). Tribals of India have developed strong magico-religious health care system. They believe that evil spirits cause most of the diseases.

The tribal, broadly speaking, believe in four types of spirits (Vidyarthi, 1977). They are: (a) protective deities or spirits believe to safeguard the welfare of the village and worshipped at a communal level, (b) benevolent spirits who are worshipped at communal level and mostly familial level regularly, otherwise they may bring disease, death and calamities, (c) evil or malevolent spirits and deities control small pox, fever etc, (d) ancestral spirits who are very benevolent spirits and protect the family members. The tribal communities have number of deities connected with different diseases like Sitala, Manasa etc. When there is an epidemic like pox or cholera, Sitala is always propitiated. Manasa is the controlling deity of the snakes, and naturally her blessings are sought against snakebites.

Biswas (1934, p1-28) has illustrated primary concept of disease classification of Clement and Rivers. Disease is caused by breach of some taboo or by hostile spirits, the ghosts or the dead. Clement's classification of causes of disease may be represented as, (i) Supernatural Agency; soul loss intrusion, spirit of sickness, spirit of intrusion and breach of taboo describe as supernatural agency, (ii) Human Agency; evil eye, evil touch, evil mouth, and sorcery categories as human agency, where as (iii) Natural Causes refer to the disease object

intrusion. Rivers classification states that, (i) those in which some mobile object or substance is projected into the body of the victim. This is limited to Indonesia, Papuomenalaisia and America, (ii) those in which something is abstracted from the body. It is practice only in India and Africa, (iii) those in which the sorcerer acts on some part of the body of a person or on some object, which has been connected with the body of a person in the belief that thereby he can act on the person as a whole.

The present study will deal with the social environment and health care practices among some tribal communities in a comparative perspective of a few villages of the Tapan block of Dakshin Dinajpur District of West Bengal. In the study area, we have found Santal, Oraon and Munda as major tribes. The Santals and Oraons are the dominating tribes of the study area. The study will concentrate on these two communities. The primitive concept of disease and treatment among the Santals and Oraons are not equal. They are also not practicing modern health cares equally. The changing trend in health care practices of the tribals in the study area is interesting. Health culture of the tribals in the study area is mixed in nature. They do not entirely depend on their primitive medicine as well as on modern medicine. We shall state briefly the primitive concept of disease and treatment between these two tribes to have a clear perspective of the changing trend of health care practices of the tribals and factors responsible for these changes.

The Santals, the primitive people of India, have concept of disease of their own. According to them diseases are caused by a 'Tijo' (Bodding 1925), which may be large or very microscopic. 'Tijos' enter the body through foods. The Santals also have a belief that evil men by dint of their magical power intrude dirt's such as stone or wood or pebbles or lumps of hair in the body that cause unbearable pain. Children are mostly susceptible to such spells. The *ojhas* suck out these things from their body and they believe that by doing so they can be cured. The Santals believe that *bongas* or spirits have control over various natural phenomena and the natural calamities that often occur because of their

influences. The relation between the Santals and the *bongas* are often one of the reverential fear, submission, and propitiation. On the one hand, the performance of religious rites expresses the recognition of the existence of the supernatural powers that can be exercised by the *bongas* and on the other hand the power of the *bongas* are generally invoked to secure the good will of the beneficent ones and to avert the ill will of the maleficent ones. In other words, the instrumental aspects behind these religious rites express an alliance with the benevolent *bongas* and through them control of the harmful spirits. The expressive aspects is symbolized and manifested in a special manner in the various seasonal rites and festivals correlated to the annual agriculture and the recurring rites of passage (Troisi, 1978,p163).

The Oraon sorcerer carries something with him a rag bundle what are known as *nasans* (destructive and harmful agencies), which include human hairs, nail pairings, claws, fragments of bone and legs of chickens and other birds and also small quantities of rice grains, mustard seeds and certain other grains. Sorcerer mixes this in the food pouncing appropriate spells, which kill the victim. The Oraons have a belief that there are among them some powerful sorcerers or witches who by some appropriate *mantras* extract the liver of an intended victim without the latter perceiving it. Only women are believed to practice witchcraft. Witches also influence the evil spirits as sorcery by using materials objects. A person may be harmed through black magic by a twig used as toothbrush by him. The dust from below the footsteps, paired nails, and hairs are also used for this purpose. Rheumatism of the lower limb may be caused by an energy getting hold of a little dust of one's feet and uttering some magical formula over it and sacrificing a fowl or making offerings of aura rice over the dust. While a wall of a house is under construction, a witch may secretly take away some earth of the wall and tie in a cloth, so that the wall may crack before completion. Another way of afflicting a person is to bury some medicinal herbs or roots using magic, on the path usually travelled by the victim. There are many kind of illness caused by witches. They depend on the witch doctor to cure them from this illness. This kind

of specialist occupies a high position in their society. Oraons also believes in the potentially beneficent ancestors appear and talk with them in dreams and they always keep their affectionate eyes on their descendants so that evil spirits may not cause harm to them.

The tribal communities of the study area are living side by side with the Hindus for number of decades. The constant and close interaction between them has led to the convergence of many aspects in their way of life. The tribals have also internalised some common Hindu values and customs. As a result, the tribals in the study area claim to be Hindus themselves though they still continue the practices of animistic religion. In general, the Santals are more advanced than the Oraons. The Hindu influences are also more among the Santals than the Oraons. The Santals do not claim any caste status, because they prefer to assimilate the Hindu system as a reference which they can reinterpret. The Santals duplicate the Hindu society, in order not to be absorbed by it, they take Hinduism as a possible set of symbolic conditions for remodelling their own society.

There are number of agencies like Primary Health Centres, Non-Government Organisations such as the Tagore Society for Rural Development etc which have been working in the study area for a long period of time. However, the impact of modern system could not bring satisfactory impact on the life of the tribals. They still overwhelmingly cling to their traditional 'sub culture of medicine'. Their traditional animistic religion has a close inter-relationship with the belief in traditional practices of medicine and causation of disease. They still believe that causes of illness and treatment of disease are directly linked with the supernatural power. This might be due to the belief of the tribal communities in their traditional medical system because traditional medical system just fits in with their culture and their way of thinking. Tribal communities possess a unique health problem in regard to the acceptance and rejection of modern medicine. It is very difficult to understand the tribal health problem only by providing health

institutions, modern doctors, equipments and medicine to the tribal communities for the betterment of their health status. Inadequate service quality and western model of modern health services fail to meet the expectation of the tribal communities. The Tagore Society for Rural Development may play vital role to bridge the gap between tribal community and modern health facilities. We describe here briefly about the Tagore Society for Rural Development and its intervention in the field of community health among the tribals of the study area.

The Tagore Society for Rural Development is a non-government voluntary organisation founded in 1969. The organisation was initially involved with irrigation and agricultural programmes. The Tagore Society for Rural Development has undertaken number of development programmes and schemes including health programmes in three states namely, West Bengal, Bihar and Orissa. The Society has started functioning in the villages under the Tapan block of Dakshin Dinajpur district since 1977. The overall programmes of the society may be divided into two broad categories such as, (a) Income-generation programmes that includes credit facilities for the poor, development of the minor irrigation through check dam, renovation and excavation of ponds, social forestry etc, (b) Non-Income generation programmes, which includes adult and functional literacy, non-formal education for non-school going children and dropouts and health care services. The Society has started health care activities only after 1990 in the study area.

The Society has been trying to cultivate self-respect and self-reliance among the villagers by creating their own employment and bringing sustainable development in the field of economy, health and education to improve the standard of living of the poor people of the study area from the inception. The ultimate objective of the Society is the total development of the villages. As per the long term perspective plan of the Tagore Society for Rural Development, the major health problem being faced by the communities are (i) inefficient and inadequate government health services that do not provide comprehensive health care, (ii) high prevalence of diseases and conditions such as gastro-

enteritis, tuberculosis, acute respiratory infection, malnutrition, scabies and other skin diseases, (iii) lack of health awareness among the community leading to poor personal hygiene, acceptance of diseases as god's will and poor utilisation of existing health resources, (iv) high cost and irrational treatment being provided by private practitioners and quacks in the study area, (v) presence of superstitions, customs and beliefs leading to early marriage, harmful health practices and delay in obtaining services, (vi) poor communication (poor geographical accessibility) between the villages and government health centres, (vii) poor environmental sanitation, the practices of open air defecation, absence of drainage for waste water. The use of large number of open ponds in the area for multiple purpose are some of the factors that contribute to the poor environmental sanitation-the ponds also serve as a breeding ground for mosquitoes etc.

The Tagore Society for Rural Development is equipped with one trained doctor, four trained health supervisors and one health worker in each of the target villages. The Tagore Society for Rural Development also hires doctors from Kolkata or district town Balurghat during epidemic and for the health check up for pregnant women in the target villages. A Director, who is also the Joint Secretary of the Tagore Society for Rural Development manages the day-to-day functions of the Society at Balapur, Tapan block of Dakshin Dinajpur district of West Bengal.

The activities of the Tagore Society for Rural Development are: (i) diarrhoea control programme, which includes training of the members of the tribal communities, setting up of Oral Re-hydrations Solution distribution points, chlorination of wells and purifications of drinking water, (ii) mother and child health care, which includes compiling of eligible list for immunisation and registering ante-natal. There are few basic services like iron folic acid tablet supplementation, provision of tetanus toxoid injection for the pregnant mother, nutrition education and health check-up camp for ante-natal mothers. High-risk cases were referred to the Block Primary Health Centre or District Hospital.

Training of the traditional birth attendants, post-natal visits by trained health workers are some of the other activities under mother care. Immunisation, treatment for malnourished children, nutrition education are some of the activities for child care, (iii) health education on selected topics, group meeting for women are being organised twice in a month in the villages. Diarrhoea management, immunisation, the use of safe drinking water, mother and child health care, nutrition, personal hygiene, communicable diseases and environmental sanitation are some of the topics frequently discussed in the meetings, (iv) school health check up by qualified doctors for the students of primary schools, (v) food supplementation, supplementary nutritious foods are being provided to under five years of age malnourished children, (vi) de-worming of the worm infected children in the age group of 0-14 years and vitamin-A administration to 0-6 years of age children, (vi) treatment of minor ailments by trained health workers, (vii) providing safe drinking water to the members of the tribal communities by sinking tube wells in the villages.

We shall also explain in some details the modern health facilities available in the study area other than the facilities of the Tagore Society for Rural Development. During the last 50 years a vast network of health care services has been built up in modern India, improved and high-grade facilities are available now. Still our health system is based on western model, services are based on urban hospitals with a curative approach. Before-independence it was urban oriented and after independence, though a large number of Primary Health Centres and Rural Hospitals have been established. The community health scheme was introduced in the year 1978. More and more attention is now given on the problem of rural health particularly for the tribals and other backward groups, who are generally backward, but represent a sizeable population of the society. Instead of all these, the rural health services are not fully equipped because large expenditure is still incurred in urban hospitals. The benefit of modern health services does not reach to the poor or the bulk of the rural people. The basic health care services including mother and child health care services, family planning, health and

nutrition are inadequate in terms of outreach, range of services, quality and availability.

The Block Primary Health Centre situated at the block headquarter Tapan and the Primary Health Centre at Balapur extend both the preventive and curative services to the tribals of the study area. In addition to the Primary Health Centres, there are thirty Sub-centres. These Sub-centres are situated in different villages of the Tapan block under the Block Primary Health Centre. Only three of these Sub-centres are accessible to the tribal communities of the study area. Health workers run these Sub-centres. As per our observations, these centres provide only immunisation services to pregnant mother and children. These centres open once in every fortnight only. Staffs of the health centres have reported that members of the tribal communities often do not utilise the medical facilities of these institutions. The under-utilisation of the health institutions is very much prevalent in the study area. The reasons may be reflected such factors like attitude of the health personnel towards tribal communities, disregard of traditional system and physical and social inaccessibility. The tribals are often not informed about the available health facilities in the hospitals, if the tribal lack confidence in the Primary Health Centres, they may ignore them. Health workers including doctors do not understand the cultural and intellectual levels of the tribals with whom they have to work. As a result the primitive concept of health, disease and treatment is still exist in the study area.

The tribals of the study area have been interacting with the modern medical culture directly or indirectly for more than thirty years. They are living side by side with their Hindu counterparts for more than hundred years. They have now slowly opened themselves towards modern world. They have started sending their children to educational institutions. Some of these may be the out come of the work of the Tagore Society for Rural Development, though they are not able to explore all the benefits of the modern worlds due to their backward socio-cultural milieu. All these may be the reasons for gradual inclination of the tribals towards modern medicine. It may be stated here that modern and traditional concept of

health, disease and treatment exists side by side in the tribal communities though the tribals are gradually inclining towards modern concept of health, disease and treatment.

We have a number of studies on the health problems of the tribal communities. Unfortunately, specific study on the tribals dealing with health, disease and treatment in relation to social environment is practically absent. The interacting influences of social environment and the role of non-government voluntary organisation in relation to health care practices of the tribals should be deeply analysed. How the health care practices among the different tribal communities vary, if at all. It is not possible only by the government mechanism to accomplish the health need of all. There is a need to involve private and non-government organisations in the health sector. The studies related to the involvement of non-government organisations in the health sector and its impact on the health care practices are rare.

REVIEW OF LITERATURES

Sociology of health is comparatively a new development in India. The interest of Sociologist and Anthropologist in the field of health and medicine is rather new. A number of articles are there covering the history and development of medical anthropology or sociology of health outside India as the subject is quite popular there. One can have a very brief idea about the development of this subject from the available articles in India. There are some studies on ethno-medicine, family planning, interaction between traditional and modern medical systems, medical professionals and cultural dimensions of health in general. This review is mainly based on the published research works on ethno-medicine, interaction between traditional and modern medicine and socio-cultural aspects of medicine in general.

Hughes (1968) has discussed that the term ethno-medicine is used to refer to those beliefs and practices relating to disease that are products of indigenous cultural development. Man devises causes for the significant events in life. The afflictions that beset body and mind are explained in both naturalistic and super naturalistic terms. The explanation is based on some conceptual framework founded in common sense empiricism. Widespread through out the world are five basic categories of events or situation on which folk etiology are believed to be responsible for illness: (i) sorcery, (ii) breach of taboo, (iii) intrusion of disease object, (iv) intrusion of disease causing spirit and (v) loss of soul. Hughes has described that a theory of disease implies a theory of normality. Though the normal is in no way easy to define for all times and places. Afflictions common enough to a group to be endemic, though there are clinical deformities, may often be accepted as a part of life. Therapeutic practices in ethno-medicine address themselves to both supernatural and empirical theories of disease causation. All human groups have a pharmacopoeia and at least rudimentary medical techniques. A great part of the task of the folk medicine especially preventive medicine is borne by cultural practices, which have important functional implications for health. Theories of disease generally have major relevance to moral order, that is, to the control of human behaviour in the society. A therapeutic attendance upon occurrence of disease may also have socially cohesive result. Folk medicine does not change easily under the impact of sustained contact with industrialised world, or even as a result deliberate attempts of introducing new concept of disease and hygiene. It is also observed that it is easy to bring behavioural changes than to bring changes in belief's systems.

Singh, Jayaswal, Arora, Choudhary and Jabbi (1987) in their study in two tribal blocks of Ranchi district have observed widespread ignorance and miss-conception about family planning, childcare and breast-feeding. Majority of the tribals want to prevent childbirth after having desired number of children. A vast majority of them believes that vasectomy makes a man impotent. There are

strong son-preferences because most of the tribals have felt that a son is a necessity for continuation of the lineage of the family. A majority of them also do not know that the sex determination of the child entirely depends on the father, and mother do not have any role in it. Tribals males as well as females have inadequate knowledge of immunisation, weight of the child at different ages, sign of dehydration and facts of child development. Majority of the tribals have misconceptions and ignorance about breast-feeding. Tribals consider first breast milk harmful to the baby. They also believe that during illness of mother, she should not breast feed her child as it may cause harm to the child. Tribals also have no idea about supplementary food to the child after 4-5 months. They believe that the child can be kept healthy with breast-feeding till one or one and a half year age of the child.

Mathur (1982) in a study has discussed the disease curing techniques among the tribals of North Wynad of Kerala. He has observed that the tribals of Wynad are generally healthy. They use garlic, turmeric, pepper, ginger and various roots and tubers in their daily diet. They have knowledge of medicinal value of herbs. They also believe in sacrifices in honour of their deities. They are not totally immune from all diseases. Majority of them believe in supernatural powers. Their beliefs in supernaturalism are reinforced by their illiteracy and poverty. The tribals of Wynad believe in the powers of forest deities, family gods and supernatural agencies. The tribals of Wynad believe that reciting of *mantras* is the most popular and effective technique to cure disease. The tribal medicine man is the mediator between the people and the deities. The diagnosis of disease is based on the intuition and mediation. The supernatural agencies like spirits and gods are propitiated at regular intervals as a measure of prevention.

The article by Gupta (1986) has discussed the tribal concept of health, disease and remedy. Tribal concept of health, of disease, of treatment, of life and death is as varied as their culture. The tribal society is guided by traditionally laid down customs and every member of the society is expected to conform to it. Unseen forces intervene human affairs in the tribal communities. In the tribal society the

real enemies of human health and prosperity are the gods and dead. The usual theory of disease in the tribal society is that diseases are caused by the breach of some taboo or by hostile spirits, the ghosts or the dead. Sickness is the routine punishment for every crime meted out to them by the spirits. In tribal society magico-religious treatment of disease is resorted to. Tribals also hit upon some herbs in some way or another and found it efficacious. They have then tried the same for complaints other than those it was originally used for and have in this way, been guided by experience.

Hockings (1980) has presented the various practices relating to diseases among the Badagas of South India in his book - 'Sex and Disease in a Mountain Community'. He has highlighted that each folk medical systems develop over the course of several centuries within a particular social framework. The context of development includes four shifting factors such as environmental changes, cultural shift, relation between various social units and successful innovations. Personal hygiene and sanitation is quite good among the Badagas. The range of therapeutic practices is varied. All medicines are more or less liquid. No indigenous pills or powders are administered. Changes in diet may include the diets that give the patient cooling or a heating effect. Surgery is practiced. Offering of prayers to god/goddesses are common among the Badagas.

Pal, Bhattacharjee and Guha (1986) have discussed the tribal concept of diseases in traditional system. They have a belief that most of the diseases are caused by evil spirits, anger, of clan gods, *bongas* and breach of taboos. As per the tribal concepts evil spirits causes most of the diseases of women and children. Epidemic diseases are caused by the anger of clan gods and *bongas*. Personal diseases are caused by breach of taboos and venereal diseases are caused by breach of sex taboos. They have also highlighted the connection of traditional and tribal system of medicine. Like other medicine, tribal medicine has curative and preventive sides with the application of herbs, minerals and animal products.

Henry (1981) has studied a North Indian healer and has identified the factors that help Indian healer in winning the confidence of the people. He is of the view that to understand a folk healer's effectiveness, it is necessary to understand his pertinent mental culture, his role and the image of himself he projects. The confidence in a healer is further strengthened by his role as a *sadhu*, his literacy and his stern demeanour.

Srivastava (1974) has studied folk medicine in some of the villages in Rajasthan and Uttar Pradesh. It has been noted by the author that the villagers generally use traditional knowledge and practices, habits and customs, charms and incantations, magical and religious practices as folk medicine in the treatment of diseases. However in case of serious illness they take the help of modern qualified doctors.

Mann and Mann (1986) have brought to the light the religious attributes and cure among the tribal. They have discussed the cases of Onge, Nicobares, Hikkiipkki, Garasia and Bhil. There is a wide recognition of spirits and ghosts in the tribal communities. Supernatural, if disturbed through any gesture or forgetfulness, can cause any severe condition that would prove damaging to the community health. Maintenance of religious structures, images, symbols and places is an essential job for a tribal. The cure role of supernatural is largely recognised by all categories.

Guha (1986) has focused on the folk medicine of the Boro Kacharis, a plain tribe of Assam. She observes that, in all human groups, no matter how small or big, there exists a body of beliefs about the nature, causation and cure of diseases and their relation to other aspects of group life. Religion, morality, disease and its cure are often inter-linked. The Boro society is no exception to this pattern. They believe that good health is the outcome of an honest and pure life, where as disease and sufferings are results of dishonesty, immorality and incest. At least one *ojha* resides in every village. Apart from conducting religious rites he treats ordinary ailments. The Boro-Kacharis classify supernatural causes into six

categories, (i) Wrath of God, (ii) *Mowdai Hamnai*, (iii) *Manshi Kalamnai*, (iv) Evil eye, (v) Sin committed, (vi) Breach of taboo. Besides supernatural cause, improper food, inclement weather, dampness of the locality and excessive indulgence in sex can lead to disease like dysentery, diarrhoea, cold, cough, scabies, loss of vitality etc. These diseases are diagnosed by symptoms and have physical remedies. Supernatural caused diseases are diagnosed in various ways like (a) Divination and (b) Interrogation. Treatment involves propitiation with or without sacrifices of animals and this way evil spirit leave the host. Precaution is taken against epidemics throughout the year.

Das and Ghosh (1986) in their paper have dealt about the child care practices, belief and tradition connected with the method of feeding, role of person in the childcare, medical services sought among the Santals of Dhadkidh village of Singhbhum district of Bihar. The Santals do not usually possess an elaborate knowledge regarding the health care of a child. Whatever, they have been traditionally is apparently inexplicable to them from the health and hygiene point of view. The customs, beliefs and practices directly or indirectly influences the child health care practices. The health care practices of the tribals are not to be confused with the modern concept but rather it is to be understood in relation to their environment, economy, religion and socio-cultural beliefs and practices.

Bhowmick (1980) has discussed the concept of diseases of primitive man, the disease associated with gods and goddesses. He observes that primitive man attributed disease to the spiritual and supernatural agencies rather than biological causes. This lead to the origin of disease gods and goddesses and formulation of certain set ritualistic procedures to appease them for cure. Through systematic patterns of behaviour and belief systems, primitive man attempt to deal with man's relation with the non-empirical world and all other basic contingencies of life. Man also suffers from diseases and naturally for the satisfaction of the human urges, needs and for safety he has to depend upon and surrender to some supernatural power. Author also observes that the belief in sorcerer, magician or *ojha* is on the decline.

Shalina (1989) in her study amongst the tribals of Mandla and the slum dwellers of Chandigarh explores some of the co-relation and variations in regard to the mother child health status and value of child. Slum dwellers and tribals both are poor but the women and children of the urban slum dwellers are deprived of adequate physical care and they are socially victimised also. The slum dwellers have all the medical facilities but the utilisation is very poor. Pregnant women are taken to the hospital only when they become critical and beyond any medical help. They depend on magic cure of disease for child health care. Children are loaded with *taveej* or magical charms. Women are merely treated as economic assets and reproductive units to the society. A male child is normally better cared and his health diet is primary concern of the parents than a female child. Slum dwellers are aware of modern medicine and its effectiveness but they ignore to use modern medicine. However the mother child health status amongst the tribals presents an equally dismal picture but the factors responsible for the restrictive use of modern medicine by the tribals are dramatically different from that of the slum dwellers. Tribals neither oppose nor are immune to modern medicine. Their problem is of availability and reaches of modern medicine. Tribal worldview unlike the perception of the urban slum dwellers neither discriminates between male and female children nor women are treated as mere appended reproductive units to the society.

Sachidananda (1986) has discussed the socio-cultural factors related to the tribal health. He has pointed out that social organisation impinges heavily upon the beliefs and practices in regard to the health among the tribals. Tribal thinking, ways, magic and real knowledge are interrelated. In tribal society, medicine, religion, magic and morality are closely related. The tribal nature of treatment varies with the causes of disease.

The study by Choudhury (1986) in two rural areas, one is a tribal village away from urban area and the other is a multi-caste village that is not very far away from urban or semi-urban areas where good medical facilities are available has brought to the light the relationship of medicine and culture. Tribals believe that a

man becomes ill due to natural causes, spirit-possession or influence of evil eye and sorcery. They believe that only a *deona* can save by his magical power. They also attribute a few diseases to a particular deity. They regularly worship the deities. Tribals still have clung to their traditional modes of beliefs and practices. When facilities are available few tribals consult the doctors when the *deona* fails to help up the disease. Interestingly, the authority of traditional medicine men is less in the multi-caste village where tribal exposed to modern medicine. In the multi-caste villages traditional view of disease exist side by side with modern concepts.

Mital (1979) through his study on the Santals has thrown light to the interaction between modern and primitive medicine. The Santals generally do not avail modern medicine, if they do so they do it while having a strong faith in primitive medicine. The Santals have strong belief in *ojhas* and witches. The *ojhas* have two separate roles to play, (a) spiritual leader and (b) medicine man or doctor. The remedies used by *ojhas* are rudimentary. He gives medicine made out of herbs, roots, barks, shrubs, plants or fruits. The Santals believe in three sources of diseases such as natural source, supernatural source and human source. They also divide the illness into two categories like physical illness and mental illness. All diseases, they believe are mental but in course of time they affect a person physically. To diagnose a disease the *ojha* takes two *sal* leaves rubs oil on it, sprinkles vermilion and chants *mantras*. After a while he looks into the leaves and reads. It is believed that the *ojha* can see the cause and cure of disease in the leaves. Treatment of diseases is done in two ways through divination, magic and through medicines. Theories of diseases and clinical diagnosis are not known to the Santals. The Santals believe that if a modern doctor treats someone he is sure to die. The Santals refuse to accept modern family planning methods but they have a well-planned family. They take resource of herbals medicines to terminate pregnancy.

The study by Chowdhuri, De and Debnath (1986) in four blocks of Purulia district has highlighted that the tribals are less aware of many of the diseases. The

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knowledge in health, hygiene and preventive measures of the tribals are very poor. The tribals have still believed on traditional health care practices. In the initial stage of the disease tribal patient goes to their village medicine man. In some case's medicine man prescribes prayers, as it is known to them that few diseases have specific time period and in some case's medicine man also prescribe modern drugs. The benefit of the modern medicine is yet to be accepted by the tribal communities. Poor economies, non-accessibility of modern services are some of the reasons for this.

Hasan (1979) through his study of a village in Uttar Pradesh provides us with an idea of the concept of sanitation, personal hygiene and etiology of disease held by the people of rural India. He observes that the villagers have no idea of sanitation and disease causation. The villagers do not recognise the germ theory of disease. Cleanliness is identified with purification. Illness means feeling unwell so maladies causing to discomfort are not taken to be diseases. More than one cause is often attributed to one diseases and hence treatments are also many.

Hasan (1967) has also pointed out that the villagers seem to have developed their preferences for certain modern treatments. Thus combining both traditional and modern medicine they have developed a new system of medicine in rural India.

Gould (1965) has observed the similar practices in Sherpur village. It has been observed that the modern medical treatment is not totally opposed by the traditional rural people. Moreover it is noticed that the traditional healers, *vaids*, *ojhas* etc, who have partly adopted modern technique of diagnosis and treatment of disease have been more popularly accepted by the villagers than those who do not use modern medical instrument and treatment.

Sahu (1980, 1986) has made a comparative study between the Oraons who have access to modern health facilities built around the Rourkela Steel Plant and those who live in a remote rural area of Kokerma with no government health

centre facilities. Again this has been compared with some villages having government health facilities. The author has observed that instead of own cultural identity of the Oraons, access to effective health services determines the cultural response of the Oraons. The Oraons make great effort to seek services of practitioners of western system in spite of unfavourable conditions when they encounter serious problems. There is no significant cultural resistance for the acceptance of modern medicine as long they are available and accessible to the Oraons.

In a study in two villages of Rajasthan Carstairs (1977) has observed that the strong faith on herbals and magic cure exists among the people. Though acupuncture has a strong acceptance among those people who have come in touch with them, modern medicine has failed to impress the people. Like herbalists or the magician modern doctors never assure the patient that he will be cured. Some of the people accepted the modern medicine but not with total rejection of traditional system of cure. The author has also suggested that a new system should not be straight away introduced to a community. Awareness is to be generated first among the people so that they can accept the new system after introduction of the same.

In another work, Carstairs (1983) has discussed the beliefs existing among the rural folk regarding illness, their level of hygiene and their attitude towards western medicine. He has also pointed out the reasons why western medicine has failed to impress the rural people. He has observed that the villagers attribute diseases to supernatural invasion work of witches or sorcerers and imbalance of bodily humours. The villagers have strong faith in their assurance of cure. The modern western medicine is one of the many alternative methods when traditional medicine or magical methods fail. Due to advocates and practitioners, modern western medicine fails to impress upon the rural people. The doctors are never serious in their duties. The villagers are badly treated by them. They are not willing to promote western medicine.

Jayaswal and Singh (1987) in their study has brought to the light the extents of health modernity are very low varied from zero to two percent in the rural tribal population of Chotanagpur and Santhalparganas in relation to physical and mental health, diet and nutrition, family planning, child care and breast feeding and health habits. As per their observation the low level of health modernity is a consequence of illiteracy, poverty and also due to the absence of health education. All these are reflected among the tribals of both the area in the unhygienic living conditions, faulty food habits, lack of personal hygiene and environmental sanitation and intake of *haria* (rice-beer) and tobacco.

Bhadra (1997) in his study amongst tribals in four tea plantations in Darjeeling district having differential medical facilities has observed that tribal workers of tea plantations have still retained much of their health culture. It has also been observed from the study that there is a keen inclination among the workers towards modern medical facilities where medical facilities are better and easily accessible to them. Where as in those plantations where sufficient medical facilities are not available, inclination of the workers towards modern medical system is not noticed. An important observance of the study is of the contention, which the traditional culture of the tribal acts as barrier in acceptance of modern medicine does not seem to hold good in the present context. Availability, accessibility and the cost involved in modern treatment have a great role for the acceptance and non-acceptance of modern medicine.

Lieben (1973) has discussed that health and disease are related to cultural as well as biological factors. Modern medicine has primarily biological orientation but medical history shows that social and cultural aspect of health is also the concern of medical science. Much of the development of medical anthropology has taken place since the World War II. Anthropological study of social and cultural influences on health and disease include not only subjects of immediate therapeutic relevance but phenomena that have special interest because of their effect on human ecology and the course of human evaluation. Medical anthropology encompasses the study of medical phenomena as social and

cultural features and socio-cultural phenomena influence them as their medical aspects illuminate them. The domain of ethno-medicine is an indigenous medical feature. There are studies that reveal the significance of preventive measures in traditional medicine though preventive measure has been seen as less important in most traditional medical systems. Ethno-medicinal therapists are of various types; herbalists, diviners, midwives, masseur etc. The relationship between medicine and rest of the culture is very close. Etiology and diagnosis of disease is central to any discussion of the connection between medical phenomena and their culture settings.

Srinivasan (1984) has made an attempt to study the perceptions of rural population in utilisation of health and medical care services in selected Primary Health Centres in Tamilnadu. The study has revealed that rural populations are aware of modern medicine. People still preferred the traditional practice of conducting delivery at home. The attitude of the people towards modern medicine has changed, as they have now understood the efficacy of modern medicine.

In another work Srinivasan (1987) has discussed the role of Primary Health Centres in rural health care and the reasons for its failure. Primary Health Centres are the principal institutions providing integrated health services to the rural population but the people, especially women and children, living in interior and remote areas can not avail the services due to the problems of transport and time constraints. Beside this, clinical rather than community orientation of physicians, inadequate training of the health workers, inadequate and erratic supply of medicine, lack of social accessibility, non-participation of the community in the health care delivery system, indifferent attitude of the doctors and paramedical staff and the location of the Primary Health Centres are some of the reasons for under utilisation of the existing health care services.

Basu (1994) has presented that the tribal groups have developed a strong magico-religious health care systems and they wish to survive and live in their

own style. They live and interact within their own homogenous and culturally firm systems wherein common beliefs, customs and practices connected with health and disease have been found intimately connected with the treatment of disease. He has also presented the tribal ill health in regard to women's nutritional health, maternal and child health connected with unsanitary conditions, lack of personnel hygiene, health education and the ignorance of the tribal. The author has also pointed out the gap between the tribal health care systems and the culture of the Primary Health Centre. The inadequate nature of facilities in many tribal areas, lack of respect of the health providers for indigenous culture, lack of attention given to the patients are the main factors for non-acceptance and distrust of tribal people towards modern medicine. He has suggested to bridging the gap, short-term orientation courses on tribal culture, need to be organised for health workers at different level, simultaneously, traditional health practitioners need to be identified for training in public health. Tribal girls could be trained as nurses and midwives to generate better response.

Van and Klass (1981) have highlighted the reasons for the failure of the Primary Health Centres in the villages. As per the observation of the authors, the concepts of modern medicine are based on western model and it is often in clash with the structure of the traditional society. The structural factors are not only responsible for the ill functioning of the Primary Health Centres. They have emphasised the need to understand the social milieu for the introduction of modern medicine effectively.

Khan (1987) through his study has presented the reasons and factors associated with high infant mortality in Uttar Pradesh. He has observed that education of the mother is negatively associated with mortality condition. The level of mortality among illiterate mothers is much higher than that who has some years of schooling. Mortality level in that family is extremely high where untrained midwives attend deliveries and the infant mortality is much lower where trained professionals attend deliveries. The author has also observed the correlation between infant mortality and environmental sanitation, housing etc. The infant

mortality rate is the highest among those families who live in mud houses and source of drinking water is open well. While infant mortality rate is the lowest among those families when the source of drinking water changes from well to pipe water and the houses with concrete roof.

Roy (1989) has studied various aspects of health facilities, incidence of diseases and the use of health care facilities by the people in some villages of West Bengal during the time period of 1972- 1977 and 1977- 1982. During the period 1972-1977 the health facilities were entirely curative in nature, purely hospital oriented and depended on the western mode of treatment. The introduction of the community health scheme was intended to radically change the health care strategy in post-1977 as it gave special emphasis on the health team approach to bridge the gap between target population and the programme. He has observed very little change in regard to the health care facilities and pattern of treatment. The general condition of the access for the poor people has not change much. Villagers are using folk treatment in the post-1978. Roy has also observed that due to economic backwardness of the people and non-availability of the facilities not much improvement has been recorded in the period of post-1978 in public health and hygiene.

Kopparty (1989) has shown interest on social environment and maternal and child health practices. In a study in a village of Andhrapradesh, he has observed that social environment plays a significant role in morbidity prevalence, health action resorted to and maternal and child health practices. In Indian society one's caste status, high or low position in the social stratification, bring out a sharp contrast in their style of living, occupation, income, land holding pattern, education, values, norms, beliefs etc. All these are reflected in the sphere of health care practices. Women, being generally accorded low status next to males, are vulnerable to neglect either deliberately or by compulsion, this reflected in health practices also. Female in the low caste group has more minor morbidity's than the high caste group. In case of children more sick persons are found among males than females. In case of age (55 years+) more sick persons

are found among males than females. In case of middle age (15 years to 54 years of age) slightly more sick persons are found among females than males. In regard to health action for acute and chronic morbidity, females in the low caste group take less action than the female in the high caste group. He has also pointed out that high caste female takes special action regarding diet before and after delivery, than low caste females. Females on the high caste group not only depend on the Primary Health Centre, they also consult other agencies during pregnancies while female in the low caste group depends only on the Primary Health Centres. Similarly, female in the high caste groups starts weaning food and normal food supplementation for their babies much earlier than the females in the low caste groups.

Pool (1986) has discussed the avoidance of food during early pregnancy extending from conception to the beginning of the second trimester and late pregnancy extending from the second trimester to the immediate after delivery in a tribal area of Gujarat. Two main categories of food are connected with this period. Some food should be strictly avoided during the first period but these are recommended in the second period. Women avoid all kinds of hot food during the first half of the pregnancy fearing abortion. Cold foods are avoided during second phase to prevent difficulty in delivery. Hot foods are recommended during last month of the pregnancy to facilitate delivery. After delivery hot food is recommended in order to stimulate the expulsion of dirt. If the post delivery bleeding is excessive, hot food is to be reduced. Body constitution of the tribal women also plays an important role during pregnancy. Women with hot body constitution and those who perform hard physical labour are seen as more prone to have abortion than those with cold body constitution. Women in general take less food during pregnancy. The quantity of foods is specially reduced during last trimester. As foetus grows, it fills the stomach leaving little room for food. Some women also eat less deliberately in order to help the foetus to grow big, as big foetus needs more rooms.

Karna (1976) in his study in some villages of Bihar has pointed out that villagers are inclined to varieties of treatment. Some villagers explain some diseases in terms of supernatural factors, but they do not take to this recourse in every case of illness. There are varieties of concept of diseases existing among villagers, they rarely held common notion of any disease. He has also observed that two broad categories of diseases as scientific and conventional are present among the villagers. Two further categories of conventional diseases are natural and supernatural.

Bang (1973) has discussed some current concepts regarding small pox goddess Sitala in West Bengal. The people have a belief that goddess is present inside the patient during illness and the appearance of the pustules is a testimony to it. When a small pox patient speaks, it is believed that the goddess is speaking. Dietary prescription, herbal treatment and worshipping are the form the treatment for small pox. The professional vacillator claims that the eruption following variation show that goddess is present and failure of eruption indicates her anger. Earlier official attempt to introduce vaccination against small pox are opposed by the vacillators as these might threaten their profession.

Bhatnagar, Sharma and Nath (1985) have evaluated the utilities of *dai* training in infant care. Knowledge and practices of *dai*'s knowledge in regard to putting the baby to breast earlier than six hours, use of colostrums, giving boiled cool water and oral dehydration in case of diarrhoea have improved after training. They have also noted the improvement in supplementary milk feeding regarding cleaning of feeding container, use of *katori*, spoon etc. The small change has noticed in case of practice of dilution of milk with water for supplementary milk feeding, while the knowledge of *dai*'s on immunisation and oral dehydration therapy have showed extensive improvement. Knowledge of spacing method has showed small improvement but of terminal method, the knowledge of trained and untrained *dai*'s is same. The authors have observed that the trained *dai*'s have imparted correct knowledge to the mothers in infant feeding and childcare during their post-natal visit.

Bhatnagar (1989) in a study in three villages of Punjab has highlighted the community response towards available medical facilities. The utilisation of medical facilities is negligible in those villages which are away from the Primary Health Centre, while utilisation of medical facilities is significantly more in those that are located near the Primary Health Centre. In addition to access to services other reasons for non-utilisation of medical services are indifferent attitude of the medical practitioners, improper care, non-availability of medicines etc.

Khan (1986) has assessed the impact of rural development programme on the Santals of the Bolpur Police Station of the district Birbhum in West Bengal. Two sets of villages have been studied, the villages within the jurisdiction of Sriniketan of Visva Bharati and the villages away from Sriniketan. The Sriniketan Rural Extension office is situated at a distance of half kilometre from the first set of villages and the Subsidiary Health Centre is one kilometre away from other set of villages. The author has observed that the Santals lives in the villages close to Sriniketan have accepted modern health care practices related to antenatal care, delivery, child care and awareness of free health services, whereas Santals away from the Sriniketan are practicing traditional health care and they are reluctant to accept modern health care practices. The study has indicated the failure of the government health programme in motivating the Santals, whereas the health care activities initiated through Sriniketan influenced the Santals in a positive way.

Gurumurthy (1986) has studied the Yanadis, a tribal community of South India. He has observed that religion plays a vital role in the determination of fertility. Yanadis, much devoted to tribal gods, have higher fertility, but those who worship Hindu gods have lower fertility. The religious importance of having a son is also significant in fertility behaviour. They fear adopting modern family planning measures as these may bring God's Wrath.

The study by Khare (1981) has highlighted the village therapeutic system (folk medicine). He has observed in a North Indian village that the village therapeutic

as it is claimed to continue is based on such cultural makes as body and being *dava* and *dua*, *dharma*, *karma* and *daiva*. Ethical overlaps and differences between indigenous and modern western medicine have taken into consideration. The villagers in the treatment of diseases bring about a culturally holistic approach. The sick are qualified under a set of social factors and cultural values and treatment is done under a culturally meaningful priority.

In addition to the above-mentioned studies there are some other studies, which have dealt with the anthropological aspects of tribal health. Some of the studies have conducted by Dalton (1872), Boddington (1925) etc, presented the progress of the anthropological studies on relatively isolated populations in hills and forests of India, the so-called tribes. There are few more studies indicating the importance of understanding the social aspects of health and diseases. The studies conducted by Sarkar (1958), Ray, Chowdhury, Bhowmik and Das (1976) and Majumdar (1933) have emphasised the importance of understanding the social environment and cultural dimension of health and diseases. There are some more ethno medical studies among tribals in different parts of the country have taken up by a few Indian and foreign scholars. Among these, the studies conducted by Bhat (1976, 1985) and Joshi (1978) are important to note here.

OBJECTIVE OF THE STUDY

Health behaviour of a community mainly depends on their social class, ethnic background, religion, occupation and education. Health behaviour changes with the change in socio cultural status of a particular community. In this study an attempt has been made to understand how the social environment influences the health care practices of the tribals in the Tapan block of Dakshin Dinajpur district of West Bengal. We will consider here ethnic background, literacy, classes, impact of the non- government organisations and the Primary Health Centres to

examine the health care practices in the light of modern medicine among the Santals and Oraons in the target and non target villages of the Tagore Society for Rural Development, a non government organisation working in the locality for more than twenty years. The existing traditional system of medical beliefs and practices of the Santals and Oraons will be studied in a comparative perspective to examine the existing tribal concept of health, disease, treatment and causes of diseases. The present study also proposes to assess the impact of the Primary Health Centres and the Tagore Society for Rural Development on the traditional health care practices of the tribals. To what extent the traditional health care system of the tribals have changed, to what extent tribals are aware of modern medicine, how far they have accepted or rejected modern medicine, what are the causes of acceptance or rejection of modern medicine, all these are to be considered in this study. The study will also examine the attitude of the tribals towards modern medicine and the similarities and variation of attitude among the Santals and Oraons in health care practices.

The objectives of the study are:

1. The Santals and Oraons in Dakshin Dinajpur district have originally migrated from the Chotonagpur region of Bihar (now Jharkhand) and Madhyapradesh (now Chhatrishgarh) who have been living here for a number of decades. Irrespective of their income level, there is a change in their social life due to influences of the Hindu communities and the intervention of the Tagore Society for Rural Development. In this context this study will examine the nature of changes in the concept of health, disease and treatment and causes of disease among the Santals and Oraons under the new socio cultural environment. It will also investigate to what extent the traditional health care practices of both these communities have been continuing.
2. The study will look at the impact of the Tagore Society for Rural Development and modern medical services on the traditional health care practices among the Santals and Oraons. The present study will also considers: to what extent their traditional health care practices have changed, to what extent the

Santals and Oraons are aware of modern medicine, to what extent the Santals and Oraons have accepted or rejected modern medicine with comparative perspective, what are the causes of acceptance or rejection of modern medicine among the Santals and Oraons. What is the attitude of the Santals and Oraons towards modern medicine and to what extent economic and social factors have motivated the Santals and Oraons in adopting modern health care practices are to be examined.

3. Medical practitioners and public health workers in India have been reporting that very often tribals do not utilise the medical and preventive facilities available to them. In this context the present study will examine the role and attitude of the modern medical practitioners in socio-cultural environment of the tribals.
4. The study will propose to emphasise the mother child health care practices and the changing trend in these practices among the Santals and Oraons in a comparative perspective due to intervention of the Primary Health Centres and the Tagore Society for Rural Development.
5. The study will see the concept of fertility and family planning among the Santals and Oraons and the use of traditional and modern practices of birth control. To what extent tribals are aware of modern family planning method, to what extent the Santals and Oraons have accepted or rejected modern family planning method and what are the causes of acceptance or rejection of modern family planning method, all these will be examined in this study.
6. This study will cover the environmental sanitation and personal hygiene of the Santal and Oraon communities. To what extent the Santals and Oraons have adopted modern hygienic health culture is a matter of investigation.
7. The study will look into the nutritional status and health culture of the Santals and Oraons with a comparative perspective.
8. It is also observed by a number of sociologists that tribals use to practice traditional and modern medical system simultaneously. This study will see the nature of interaction of traditional and modern medical practices among the Santals and Oraons.

9. Lastly, the study will look into the factors that are conducive, according to the tribals' own view, to the development and spread of modern medical practices among the Santals and Oraons of this region.

METHODOLOGY

The study is based on the fieldwork in four target villages under the Tagore Society for Rural Development and four non-target villages in the Tapan block of Dakshin Dinajpur district in West Bengal. Target villages refer to those villages where the Tagore Society for Rural Development has been working at least for more than 10 years for the overall development of the tribals. The non-target villages refer to those villages where there are no such interventions by the Society. Chamtakuri, Dudiakuri, Dakshin Keshrail and Chhiraikuri are the selected target villages, and Sondapukur, Balapur, Haribanshipur and Sotipukur are the selected non-target villages under this study. The Tagore Society for Rural Development has been working in 38 villages of the Tapan block at least for more than 10 years.

The target and non-target villages for this study have been chosen after considering certain criteria. The target villages of the Tagore Society for Rural Development and the non-target villages where the study has been conducted are under the two Primary Health Centres. The Primary Health Centre situated at Balapur covers three target villages and three non-target villages. The villages are Chamtakuri, Dudiakuri, Dakshin Keshrail, Chhiraikuri, Balapur, Haribanshipur and Sondapukur. Whereas Chhiraikuri and Satipukur villages come under the Primary Health Centre situated at the block headquarter at Tapan. Both the target and non-target villages are selected from the Primary Health Centres, which are away not more than five kilometres. The impact of Primary Health Centres in all the villages is almost same but there are variations of health care practices due to the additional intervention of the Tagore Society for Rural

Development for health development. All these villages are equally away from the district town Balurghat, where better health facilities are available. In all the villages sufficient number of tribal respondents belonging to either the Santals or Oraons are available. According to the representatives of the Tagore Society for Rural Development, the tribals in the selected target villages are slightly better responding to the health related programmes than the tribals of the non-target villages. Likewise in the selected non-target villages there is no such intervention of the Tagore Society for Rural Development for health development. In both the target and non- target villages, we have found the easy access of the tribals to the folk healers and other local health practitioners. All the target and non-target villages are situated on both sides of the connecting bus road between Balurghat, the headquarter of the district and Gangarampur, an important town of the district. Santals, Oraons and Mundas are the tribals living in these villages, along with some Hindus. Rajbansis, Karmakars, Bramins and Kaiyastas are the major Hindu castes living in the target and non-target villages. All the tribals living in the target and non-target villages practice animistic religion, though they claim to be Hindu themselves.

The fieldwork was conducted for a period of two years spreading over 1995-1996. We have applied different types of field techniques for collection of data. All the primary data were collected through census enumeration schedule, interview schedule, case studies, observations and group discussions. The secondary data were collected from library, offices, published documents, books and journals. For collection of the basic data at first census enumeration schedules were used. In the first phase after selection of the villages, census data of all the families of the tribals belonging to the Santals and Oraons were collected. Through the census, besides taking the number of family members of the tribals, information like place of birth, sex, educational qualifications of the family members, earnings, marital status, relation with the head of the family, occupation, affiliation with Church, land owned and type of family were taken.

The Santals and Oraons were identified as major tribal communities in the study area.

In the second phase, interviewing the family heads of the Santals and Oraons was done with an interview schedule. No sampling was felt necessary since all the heads of the Santals and Oraons were interviewed. We have studied all the families of the Santals and Oraons of four target and four non-target villages. When all the families were interviewed methodologically, we could ignore the sampling for selection of informants. Interviews were taken with the help of an interview schedule containing questions, pertaining to different aspects of health behaviour, traditional and modern medicine, housing, water, and sanitation, personal hygiene, food habits, intoxication, mother and child health care and family planning. The questions of the interview schedule are given below.

Interview Schedule

Name:

Ethnicity:

Age:

Village:

Health, Disease and Treatment

1. What is your concept about good health?
2. How do you know that a person is sick?
3. Who are the family members who suffered from diseases during last one year? (Name of the family members and diseases)
4. What are the causes of the above disease?
5. If Supernatural powers are responsible, name them according to diseases?

6. Who cured the above diseases? (Traditional medicine man/ Magician/ Modern doctor)
7. Do you think that diseases are caused because of the 'evil spirit'? If yes, which diseases?
8. How are these recognised?
9. What is 'evil eye'? What do you do in case of 'evil eye'?
10. Whom do you call first for treatment, traditional medicine man or modern doctor?
11. Before calling a medicine man do you try some treatments of your own? If yes, what are these?
12. Give the name of the common ailments of your area.
13. Are you in favour of magic cure of disease?
14. Which diseases have you seen being cured like this?
15. Have you heard from the elders of such cures?
16. Are you in favour of medical help for diseases? Reasons.
17. Do you generally try traditional medicine side by side with modern medicine?
18. What are the methods of treatment by which traditional medicine man diagnose diseases?
19. What are the methods of treatment of diseases? Give details of treatment of magical, supernatural worship, herbal medicine or any other.
20. When traditional medicines fail, do you go for modern treatment? Why?
21. In case of illness do you visit the Primary Health Centre?
22. If yes, why?
23. If no, why?
24. Why do you stick to traditional medicine?
25. Are you suspicious about modern medicine? If so, why?
26. What is your impression about the Primary Health Centre?
27. Do you get all facilities of modern medicine from the Primary Health Centre?
28. Do you feel that staff of the Primary Health Centre, do not behave with you properly and do not treat the patients with care?

29. Do you have constraints to adopt modern medical treatment? If so, specify social, economic or any other constraints.
30. Does the traditional medicine man prevent you from going to the Primary Health Centre?
31. Does your neighbour prevent you from going to the Primary Health Centre? Or any other reason, please specify.
32. Do you think that due to lack of communication you could not adopt modern health practices properly?
33. Do you think that due to inadequate medical facilities you could not adopt modern health practices properly?
34. Do you think that proper or adequate medicines are not given to the patients in the Primary Health Centre?
35. What is the walking distance of the Primary Health Centre from your villages?
36. What is the means of communication?
37. Did you ever receive any health facilities from the Primary Health Centre?
38. What type of health facilities does the Primary Health Centre Provide?
39. What types of health facilities are provided to you from the Tagore Society for ~~Community~~ Rural Development?
40. Do you think, educational camp organised by the Tagore Society for Rural Development, helps to motivate you to adopt modern medicine? If yes, how?
41. Do you think that behaviour of the health staff of the Tagore Society for Rural Development is acceptable to you?
42. How and when you meet with the health staff of the Tagore Society for Rural Development?

Environmental Sanitation and Personal Hygiene

43. Do you have a lavatory in your family?
 - a. If yes, do you use it?
 - b. If no, where do you and your family defecate?
 - c. What are the consequences of open-air defecation?
44. In your family do children get worms?

45. Do you think worms are dangerous to health? If yes, why?
46. Do you give your children de-worming medicine?
- 46.1. If yes, what kind of medicine?
- 46.2. If modern medicine, where do you get from?
- 46.3. If no why?
47. What is your view about the general cleanliness of the house?
48. From where do you draw drinking water?
49. Do you purify water before drinking?
50. Where do you take bath? Do you take bath daily?
- 50.1. If no, why and after how many days do you usually take bath?
51. Do you use soap while taking bath?
- 51.1. If no, why you do not use?
- 51.2. If yes, do you use it on every bath?
- 51.3. If you do not use it on every bath, why is it so and after how many baths you use soap?
52. Do you wash your face and teeth daily? If yes, when do you wash?
53. What do you use to clean your teeth?
54. After how many days do you cut your nail?
55. When do you wash your hand?
- 55.1. Do you use soap while washing hand? Specify reasons.
56. Do you change your clothes daily? If no, after how many days do you change?

57. Do you wash your clothes daily? If no, why?
58. Where do you wash your clothes?
 - 58.1. Do you use cleaning agent to wash your clothes?
59. Do you wear shoes?
 - 59.1. If no, why?
 - 59.2 If yes, do you wear shoes daily or occasionally?
60. Where do mosquitoes breed?
 - 60.1. Do you think that the collected water near the house provides for mosquitoes?
 - 60.2. Do you think that the mosquito bites is harmful?
 - 60.3. Do you know if they cause any serious illness?
 - 60.4. If yes, which ones?
61. Do you think that flies are also responsible for some diseases? If yes, which ones?
62. If 60.2 and 61 are positive, what do you do to prevent mosquitoes and flies from entering your house?

Nutrition

63. How many times do you take food in a day and what are the food items?
64. How many times have you taken milk, meat, and fish during the last seven days?
65. Does your meal contain ~~any~~ food items prepared on previous day?
66. Do you care to select your food items according to their nutritive values?
67. Are there any special foods that have to be eaten or not eaten at certain seasons?

Intoxication

68. Do you smoke?
- 68.2. If yes, what do you smoke?
- 68.3. How many times do you smoke?
69. Do you consume liquor?
- 69.2. If yes, what do you consume, *haria* or country liquor or both?
- 69.3. How many times a day do you consume liquor and how much? Please give one week's consumption?
- 69.4. Are you aware of the harmful effects of liquor?

Maternal and Child health

70. What do you do when you learn about a women becoming pregnant in your house?
71. Is there any taboo during pregnancy in regard to food, work etc.? Explain in details.
72. What are the practices that are followed during the ante-natal period?
73. Whose help is sought for delivery?
74. What are the practices that are followed during the post-natal period?
75. Who takes care of the mother and child?
76. During pregnancy what kind of special food should a pregnant woman have?
77. What forms the diet of the neonate and infant?
78. At what age cereals are started?
79. At what age child usually switches to the adult type of food?
80. How long is the child breast-feeds?
81. Do you undergo ante-natal check-ups during pregnancy?
82. If yes, give frequency of check-ups and where you undergo this check-up?
83. Do you receive tetanus toxide vaccine during pregnancy?
- 83.2. If yes, what is the use of TT-Immunisation?
- 83.3. What is the worst possible outcome if a mother is not immunised?

- 83.4. What will happen if only one injection of tetanus toxoid is given?
- 83.5. How many times the mother is given the injection and what is the correct period for taking these injections?
85. Have you heard of iron tablets?
- 85.1. What is the use of iron tablets during pregnancy?
- 85.2. Whether you received iron tablets during pregnancy? If yes, give numbers and correct period for taking these medicines.
86. Do you vaccinate your children?
- 86.1. If no, what preventive measures do you take up?
87. Have you heard of tetanus, diphtheria, whooping cough, measles and polio?
88. What is tetanus?
- 88.1. What are the symptoms?
- 88.2. How can it be prevented?
89. If you do not vaccinate can it be attributed to your ignorance or some other reasons? Specify reasons.
90. If you followed modern system for mother and child health, how were you motivated to do these?
- 90.1. Did anybody talk to you about mother and child health?
- 90.2. Are there any contributions from the Tagore Society for Rural Development?
91. What are the ceremonies that are performed after the birth of the child?

Fertility

92. How many children do you have?

Sons-	Daughters-	Totals-
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93. How many children did you have?

94. How many children did you want to have?

95. Do you want to have any more children?

95.1. If yes,

Sons-

Daughters-

Totals-

96. Do you think that a son is a must for each family?

97. Why do you want more sons/daughters?

98. If you have no children specify reasons.

99. Do you know how repeat childbirth can check?

100. Do you think there should be sufficient spacing of birth?

100.1. If yes, have you heard any method for that?

Group discussions were also conducted with the members of the Santals and Oraons to understand the social and cultural beliefs and behaviour relating to health care practices more intimately in the target and non-target villages. Discussion topics varied but mainly included services available and demanded for health care practices, reasons for under utilisation of the Primary Health Centre, role of folk and traditional medicines, beliefs, causes of diseases and treatment of diseases. One focus group discussion of each community was conducted. In total four focus group discussions of 6-7 members each were organised, two each among the Santals and Oraons separately in the target and non-target villages were organised. All these groups were mixed. Men and women participated equally in these group discussions. Case studies on the traditional beliefs in supernatural power concerning diseases, nature of interaction of traditional and modern medical practices and the cases of non-acceptance of modern medical practices were taken from the Santals and Oraons of both the target and non-target villages. The economic status of the Santals and Oraons in the study area is almost same with little variation. We conducted in-depth case studies of such families whose annual income was more than thirty thousand per annum to enable us to understand the impact of economy on the health behaviour of the tribal people. In addition to these, a separate interview guide was prepared on specific issues for interviewing the

key informants: Representative of the Tagore Society for Rural Development, Medical Officers of Primary Health Centres, traditional folk healers, quacks and other local health practitioners including *dais* and homeopathic doctors were interviewed. The anthropological observation method was also a part of the methodology for the study. We observed the actual health behaviour of the tribal people and compared them with the data provided by them through the interview schedule. This helped in checking and crosschecking of the collected data.

CHAPTER 2

THE REGION AND THE TRIBAL PEOPLE

THE REGION

West Bengal

West Bengal is a land of natural beauty, exquisite lyrical poetry and enthusiastic people. Situated in the east of India, West Bengal stretches from the Himalayas in the north to the Bay of Bengal in the South. This state shares international boundaries with Bangladesh, Bhutan and Nepal. Hence it is a strategically important place. The State is interlocked by the other states like Sikkim, Assam, Orissa and Bihar. The river Hooghly and its tributaries, Mayurakshi, Damodar, Kangsabati and the Rupnarayan, enrich the soils of Bengal. The northern districts of West Bengal like Darjeeling, Jalpaiguri and Cooch Bihar (in the Himalayas ranges) are watered by the rivers Tista, Torsa, Jaldhaka and Ranjit. From the northern places (feet of Himalayas) to the tropical forests of Sunderbans, West Bengal is a land of incessant beauty. The total area of West Bengal is 88,752 square kilometers. There are 37,910 inhabited villages and 38,024 towns in West Bengal as per 1991 census. Census population of West Bengal is 8,02,21,171 (2001). The density of population as per 2001 census is 904. Sex ratio of West Bengal (females per thousand males) as per 2001 census is 934 and the literacy rate as per 2001 census is 69.22 per cent. The Scheduled Tribe population in West Bengal as per 1991 census is 38,08,760. The percentage of Scheduled Tribe population to total population as per 1991 census is 5.59.

The District of Dakshin Dinajpur

The district of Dakshin Dinajpur is situated in the northern part of the State of West Bengal. The district is the Southern-Western district of Jalpaiguri Division. It is bounded on the South and East by Bangladesh, on the West by the districts of Malda and Uttar Dinajpur and on the North by the district of Uttar Dinajpur. The

district Dakshin Dinajpur is one of the smallest in terms of population and area. Agriculture is the primary activity with not much of industrial efforts in existence. The district is proud for its continuing cultural activities and peasant's movements of the past. The district headquarter is situated at Balurghat. The early history of the district rests on a number of obscure traditions and legends. The Palos, Sen and Mohammedan ruled the district in 1203A.D. The district came under the control of East India Company in 1765 and after 1857, the district came under the control of British Government. After Independence in 1947, the district of West Dinajpur came into being by curving out of a portion of undivided Dinajpur district of undivided Bengal. In the year 1992 the West Dinajpur district was divided into two parts, namely, Uttar Dinajpur and Dakshin Dinajpur. The Dakshin Dinajpur district is one of the most remote and backward in the state of West Bengal and only means of communication to other places is by road. There are no railways in the district.

Just after the partition of Bengal the district began to receive immigrants from East Pakistan (Bangladesh) whose flow has not ceased yet. The district has a population of 12.01 lacs (Family Welfare Statistics: 1995, p.10). The present population of the district consists of tribals and non-tribals including Rajbansis and Palyas with different sects of Muslims and Hindu caste groups. As per the 1991 census, the district of Dakshin Dinajpur has 42 per cent Scheduled Tribe (S.T.) and Scheduled Caste (S.C.) population and 11 per cent urban population as compared to the State average of 35 per cent and 26 per cent respectively. The district has a sex ratio of 944 female per 1000 males, infant mortality rate of 130 per thousand and literacy rate of 38 per cent. The economy of the district entirely depends on agriculture and allied activities. Rice is the main crop of the district followed by wheat, pulses and oil seeds. The climate of the district is characterised by hot summer (beginning mid of March), abundant rainfall (June to September) and humidity. Average rainfall in the area is 1688 mm that varies between 1121 mm till 2177 mm. The district comprises of two Sub-Divisions, namely Balurghat Sub-Division and Gangarampur Sub-Division. There are 8

blocks in the district. The blocks Balurghat, Hilli, Kumarganj and Tapan come under the Balurgat Sub-Division, and Harirampur, Kushmundi, Banshihari and Gangarampur come under the Gangarampur Sub-Division.

The Tapan block is entirely village-based, and the concentration of the tribals is quite high in the block. As per the 1991 census, total population of the block was 186953. The block has a Scheduled Tribe (S.T.) population of 23 per cent. Agriculture is the main economic activity of the block with cultivators (50%) and agricultural-labourers (31%) forming bulk of the total working population. 90 per cent of the cultivators and 77 per cent of the agricultural labourers gain employment in this sector for less than 6 months in a year. The remaining population is engaged in dairy, animal husbandry, small and cottage industries, small business and trade. The Scheduled Tribes of the block are mostly engaged in agriculture either as cultivators or as agricultural labourers. This area is mainly mono-crop zone. The net area under irrigation is 20 per cent. The main crops are rice, mustard and wheat. Open dug wells are the source of drinking water for 68 per cent population in the Tapan block while others depend on tube wells. Around 80 per cent families have their own *katcha* houses.

The Villages

The villages we have studied are situated nearby Bangladesh-India border in the Tapan block of Dakshin Dinajpur district. The names of the villages are Chamtakuri, Dudiakuri, Dakshin Keshrail, Chhiraikuri, Balapur, Haribanshipur, Sondapukur and Satipukur. Chamtakuri, Dudiakuri, Chiraikuri and Dakshin Keshrail are the target villages of the Tagore Society for Rural Development where the Society has been working for more than a decade. The villages, namely Satipukur, Sondapukur, Balapur and Haribanshipur are the non-target villages of the Tagore Society for Rural Development. There are no interventions of the Society in these villages. The villages, namely Chamtakuri, Dudiakuri, Dakshin Keshrail, Sondapukur are within 5 Kilometre away from the Primary

Health Center situated at Balapur and the rest of the villages are within 5 Kilometer away from the Primary Health Center situated at Tapan. All the villages are 0 to 10 Kilometer away from the head quarter of the Tagore Society for Rural Development, based at Balapur. District town Balurghat is on an average 20 Kilometer away from these villages. The villages are linked by mud roads leading in turn to main metal road which links these areas. Accessibility to these villages during the monsoon is constrained. In addition to the Santals, Oraons and Mundas, castes like the Rajbansis, Kayasthas, Goalas, Bhumalis, Ghatoals, Tilis, Bramins and Muslims are some of the other communities found in these villages. Concentration of the tribals in these villages is quite high. A common type of life pattern and cultural habits are noticed among the communities having similar type of economic activities.

Exploitation by the moneylenders has also been observed in both the target and non-target villages. Due to the credit programmes of the Tagore Society for Rural Development, the tribals of the target villages are now getting credits of various natures from the Tagore Society for Rural development. Some of these are; (i) agricultural credits, they get this kind of credit both in the form of kinds and cash. Fertilisers and seeds are also provided to the tribals from the Tagore Society for Rural Development, whereas they need petty cash to meet the other purposes, (ii) consumption credit, merely used to meet the consumption need of the tribals in the lean season and (iii) business credit, if some one is interested to start small business they may avail this kind of credit. The credit need of the tribals of the target villages is not fulfilled totally by the Tagore Society for Rural Development. As a result they have to depend on moneylenders for credits.

THE TRIBAL PEOPLE

The Santals, Oraons, and Mundas represent the tribals in the study area. They have their origin in Chotonagpur, Madhya Pradesh and Orissa. The 1901 census report stated that, 'About fifty years ago it occurred to the manager of a government estate that the waste land might be reclaimed if the Santals were imported and settled there. The experiment proved such a success that the influx has continued ever since---.' According to both Hunter and Thomas the Santals came to this region from the then 'Beerbhoom' which included the present district of Dumka in Bihar (Basak 1992:p.4). A few Mundas and Oraons followed the lead from Ranchi. They have now become fully settled in this area. Most of these people are landless cultivators with no security of jobs and food for every day throughout the year. The routine of life here is quite different from that of their traditional culture.

The major influences that have noticed since their immigration to the present locality are; (i) interaction with other groups belonging to various tribes, (ii) contact with Hindu communities living in the neighborhood, (iii) welfare activities sponsored by the government and non-government organisations. All these factors, in the process of their adoption to the new setting, seem to have changed the tribals' socio-economic and socio-religious life to a remarkable degree. In some areas, they have adopted very effectively resulting into some re-organisation of their traditional way of life, and in some other areas, however, the tradition yet seems to work as an inhibiting factor in their successful adoption. In this perspective the Hindu influences on the tribals are more in performing their social functions. Hindu culture and religious practices have also been found in these tribal communities who identified themselves as Hindu.

Different tribal groups have different cultural backgrounds with their distinct traditional health culture. They have only two things in common, one is their poverty and another one is that they are people of Dravidian origin. Ethno-history of the Santals and Oraons will help us in understanding their traditional health

culture. These tribes have different legends regarding their origins. In regard to their social and cultural life, tribals are different from one group to another. We shall discuss here the ethnic background of the Santals and Oraons and the changes taken place in their society as impact of various socio-cultural forces of the Hindu neighbourhood and different welfare programmes.

The Santals

The Santals are found in India as well as in Bangladesh. In India they are distributed in the States of Bihar, Orissa, West Bengal and Tripura. Their main concentration is in Bihar, mainly in the districts of Santal Parganas, Bhagalpur, Hazaribagh, Purnea, Manbhum, Singhbhum and Munghyr. The Santals constitute one of the largest tribes of India numbering more than three million souls (3,152,545 according to the 1961 census). They are very hardy, simple hearted, efficient agriculturist and excellent hunter. Their history is the history of a hard struggle with the surroundings just to maintain their existence. Their faithfulness and simplicity have made way to the landlords and other employers to exploit them miserably. When the exploitation surpassed all limits, they revolted against the British rulers and the Zamindars. This was in 1871. The upsurge was oppressed brutally by the British; when Bhagirath, the leader of the movement, died in the same year at the Bhagalpur jail.

The Santals have different legends regarding their origins. The Santals traced back their origin to a wild goose (Hasdak) that laid two eggs. From these sprang Pilchu Haram and Pilchu Burth the parents of the race. Bodding has doubted the existence of a Negroid element among them. Hrdlicka has also corroborated this view and has suggested a Mongolian admixture. Peter Schmidt has classed them with the Austro-Asiatic people. Ruggeri has described them as Australoid- Veddics while Haddon has grouped them with the Pre-Dravidians. Guha has described them as Proto-Australoids and Sarkar has regarded them as

Veddics. The Santals speak Santali language. Santali belongs to the Munda family of languages. The Mundari language belongs to the Austro-Asiatic subfamily of the great Austric family. According to Campbell, Santali language has reached a much higher stage of development than any other sister language. It has drawn upon other languages; the influence of Bengali in this language seems to be the most important. The cradle land of the Santals was somewhere in the great mountain. From there they migrated to their present habitat via Hihri Pipri, Chae Champa, Silda, Sikar, Nagpur and Sir. The Santals are primarily agriculturists. Collecting, hunting and fishing were once very important sources of their living but now these have reduced to a subsidiary status. Animal husbandry is known to the Santals, but it plays a minor role in maintaining their food supply. An increase in the population, the loss of land, the need for cash and the exploitation by contractors, money-lenders and land-lords have led a large number of the Santals to migrate to tea gardens, coal mines, factories etc., where they work as unskilled labourers. There are some Santals now who are engaged in various modern occupations.

The Santals cultivate three classes of land: *barge*, *gora*, and *khet*. *Barge* is the land for dwelling, especially in the rear. There they raise sorghum, maize, certain winter legumes, beans and vegetables of different kinds. *Gora* is the highland, which is usually located at a little distance away from the dwelling. There they produce different varieties of millet, several varieties of cotton, some highland varieties of pulses and others. *Khet* or rice fields are terraced on the hill slopes. Three kinds of rice field are distinguished by three different names. The classifications of plots are made according to their relative positions on inclined surface. The plots lying on the lowest level are regarded as the best. Rice is their staple crop. All varieties of rice, except one are transplanted in the *khet*. The only variety that is sown broadcast is cultivated not on *khet* but on *gora* type of land. Hence this variety is known as highland rice. Bullocks and buffaloes are employed for ploughing, leveling and wedding. Cow-dung and ashes are used as manure. They mainly depend on rainfall, though they have an indigenous system

of artificial irrigation with the helps of *bandhs* or embankments constructed across ravines, hollows, or other natural depressions. Both men and women take part in agricultural operations. However, there is a division of labour on the basis of sex. Men do the heavier work, such as, cleaning forests or ploughing, or constructing a *bandh* etc. In agricultural operations women are tabooed from ploughing the field. Otherwise, both sexes take equal part in transplanting, de-weeding, reaping, and threshing. Husking is exclusively a women's business. The Santals are well equipped with all necessary agricultural implements like plough, sickle, scythe, leveler, hoe, axe and adze.

Sal, mahua and bamboo trees play very important role in their economy. These trees not only supply food in the form of flowers, fruits and young shoots but also serve many other purposes. In their quest of food the collection of wild plants, roots, fruits, tubers, flowers, young shoots, resins and mushrooms subsidise their food supply and ensure against the recurrent scarcities in the summer season and also help in warding off the famines that result from crop-failures. The women who act in groups usually do the collection. The Santals hunt any game available, but do not deliberately molest tiger or bear. Only the men who act in groups do hunting. Usually in summer the men of entire village or sometimes even of a group of villages organise hunting expeditions. For hunting purposes, the hills or forests are generally divided into sections, each under the jurisdiction of a *dihri* who may be said to be the spiritual and secular leader of hunt. The *dihri* is usually a Santal who holds no official position but he is elected to the office because of his knowledge of the appropriate sacrifices and formula necessary to assure success and avoid harm on the hunt. Informal one-day hunt do not require the presence of the *dihri* since the hunters return home in the same evening. The annual hunt last for two to four days and in this occasion the presence of *dihri* is a must.

Fishing is another subsidiary economic activity of the Santals. They generally catch fish in streams, artificial ponds, and water reservoir. There are four methods of fishing; netting, use of traps, shooting with bows and arrows and with

the use of vegetable poison. The groups of men generally do fishing though the women can also participate in the fishing. Quite often there are public fishing expeditions in which the men of an entire village or a number of villages participate in groups. The Santals domesticate animals like fowl, pig, goat, cow, buffalo, sheep, and pigeon. They take freely the flesh of all these animals. Traditionally they disliked taking of any milk. But now it is seen that the milk of goat is often given to ailing children and the milk of cow in some places has got an acceptance as a food item. The job of domesticating animals is regarded as a joint responsibility of all the members of the family irrespective of age and sex distinction. The Santals have no special technique of making fire. Some buy matchboxes and others borrow them from neighbors. Sometimes in the forest during their hunting excursions they light a fire by the friction of wood. The Santal ovens are made of mud and are so arranged that the pots may rest on three triangular supports which are raised almost a cubit from the ground. As to the existence of weaving among the Santals there is a controversy. It may be claimed that the crude system of spinning and weaving which went out of use due to the impact of neighboring artisan castes. They also know the art of extracting oil from various seeds, wild as well as cultivated. They are also experts in manufacturing from burnt mussel or snail shells. The household goods include bed sheet, mat, sitting plank, mortar, pestle, husking machine winnowing fan, broomstick, cooking pots etc. The musical instruments of the Santals are flutes, pipes, drums and violins of different shapes and sizes. Bow and arrow or bolt, battle-axe, sword and shield constitute their weapons of war and chase.

The Santals generally eat twice a day and an addition of a third meal is of rare occurrence. The daily menu consists of boiled rice and curry. They seldom take fish or meat and largely depend on vegetable curry. In addition to their domestic animals, they take the flesh of such wild animals like jackals, rats, snakes, lizards, tortoises, crocodiles and different kinds of birds. However, the meat of dogs, cats and horses is regarded with abhorrence. Millets, fruits, roots, tubers, flowers and some plants are regarded as supplementary foods, especially during

the times of scarcity. The principal beverage of the Santals is a kind of rice beer, known as *haria*. They also drink intoxicating liquor distilled from dried flowers of *mahua*. They take tobacco in the form of smoking. Tobacco being rolled into a *sal* leaf is used for smoking and being mixed with a kind of lime is used for chewing.

Santal village is usually small in size. Ten to thirty five families inhabit it. The houses are situated on both the sides of the street. A lengthwise central road, shaded by tall trees, communicates the village with the world around. A dwelling consists of one or more huts and a mud wall generally defines its boundary. Cattle shed, pig-sty, fowl-pen, dove-cot, manure-pit, kitchen garden, and rectangular or square courtyard are the general additions to a Santal dwelling. A small space in one corner of the principal hut is kept apart by a low wall. This place is regarded as the abode of the family deities and ancestral spirits. The huts are generally without windows, though sometimes lattices are provided with. The walls are built of thin stick plastered with mud or only mud and the rafters are of *sal* wood. The roof being provided with a bamboo structure is gable shaped and is thatched with grass or straw. In a typical Santal village, opposite to the house of *manjhi* (headman), there is a place called *manjhithan*. It is believed to be the abode of the spirit of the village. Here the meeting of the village panchayat usually takes place and the headman collects taxes from the villagers. There is another village shrine, known as *jatherthan*, which is a cluster of *sal* trees. It is regarded as the abode of principal deities worshipped by the people.

The working dress of a Santal man consists of *kopni*, a narrow strip of cloth passed between the legs and tied to a string wound round the join. At other times, he wears round his waist a short piece of cloth (*dhuti*). A Santal woman generally dresses with a larger piece of cloth (*sari*). All these cloths are made of cotton. They usually procure their garments from the local or weekly market, or from itinerant traders. Women, sometimes men also, wear their hair long and tied into a knot at the back of the head. Women generally use cow tail hairs to tie their coiffures. Both the sexes are fond of decorating themselves with flowers,

feathers and cow tail hair necklace. In addition to these, Santal women wear ornaments made of brass. At present nickel and silver are becoming popular. The ornaments commonly found are wrestles, armlets, anklets, rinks, tiaras, girdles, earrings and necklaces. The Santals are a people with very good artistic taste, which is well reflected on the decorated walls of their huts. They are also very fond of dance and music. Men and women often dance together arranging themselves in a circular fashion. During dance they sing, while some others, standing in the center of the circle provides the music. Among the musical instruments the chief one is *madol*, which is a double membrane drum. The other instruments are, single, membrane drum, flute and buffalo horn trumpet. Dance and music have essential role in almost all ceremonial or festive occasions.

The internal structure of the Santal tribe is singularly complete and elaborate. There are twelve exogamous clans, (i) Hasdak, (ii) Murmu, (iii) Kisku, (iv) Hembram, (v) Marundi, (vi) Saren, (vii) Tudu, (viii) Baske, (ix) Besra, (x) Pauria, (xi) Chore, (xii) Bedia. The first seven are said to be descended from the seven sons of Pilchu Haram and Pilchu Buri. The five other were added afterwards. All these clans enjoy the same social status except the Besra and Chore who are regarded as somewhat inferior. The members of other clans avoid marriage with the members of these two clans. Each Santal village has a *Jagmanjhi* whose most important duty is to look after the morals of the boys and girls. There is also a *Paramanik* whose function is to attend to the farming arrangements. There is a village priests called *Neua* or *Nayaki*.

The clans are further divided into a number of sub clans (*khunt*), the number of which varies from clan to clan. The number of sub clans varies from thirteen to twenty eight with a total of two hundred and two. This figure is not beyond controversy. The main function of the clan and sub clan organisation is to regulate marriage. A man cannot marry a member of his own clan. The prohibition is more rigid in case of intra sub clan marriage. Normally, a man is prohibited from marrying a girl belonging to his mother's clan but, if he at all does it, he must take care that the girl does not belong to the same sub clan as his

mother's. Both the clans and sub clans are patriarchal. Women adopt their husbands' clan names through marriage. The small social unit is the family, which is generally of two types; the first one, consisting of husband, wife and their children and the second one consisting of grandparents, grand children, married sons with their wife and unmarried daughters. The first one may be called as simple family, while the latter joint or extended one.

Girls are married as adults mostly to men of their own choice. While monogamy is the rule of Santal society though polygamy is common by the custom of the tribe. Pre-marital sex relation between a youth and a girl is tolerated, but if such a relation results into pregnancy then the youth is bound to marry the girl, otherwise he would be severely punished and his father would be levied a heavy fine. Remarriage of widow is permitted. Widow must marry younger brother of her late husband. Divorce is allowed at wish of either husband or wife, which is effected in the presence of the assembled villagers. The Santals have recognised the following six forms of marriage; (i) Regular marriage (bride marriage), (ii) *Ghardi jawae*, (iii) *Itut*, (iv) *Nirbalak*, (v) *Sanga*, and (vi) *Kringjawae* or husband purchase. In regular marriage father of a young man usually negotiate the marriage by engaging a professional matchmaker to look for a suitable girl. The second form of marriage the *Gardi jawae* is resorted to the girl who are ugly and there is no prospect of her being getting married in the ordinary way. Young men who not sure whether the girl will accept them or not, they adopt the third form *Itut*, which compel the girl to marry him. The man smears his fingers with vermilion or common earth and puts it on her forehead whenever he gets such an opportunity in a market place or a similar place and claims her as his wife. The fourth form, '*Nirbalak*' may be described as the female variety of *Itut*. A girl, who cannot get a man, take a pot of haria enters the boy's house and insists on staying there. The man's mother who desires to have a say in the selection of her daughter-in-law may use any sort of personal violence. If she is found enough strong to stand all these trials, she is finally accepted in the family of her choice. This is followed by a formal marriage. The fifth form *Sanga* is used

for the marriage of widow and divorced women. The sixth form, *Kiringjawae* is resorted to when a girl has had a liaison with and becomes pregnant, by a man of her clan whom she cannot marry. In order to avoid scandal someone is procured to accept the post of husband.

Girl after marriage goes to reside with her husband either in her husband's father's family or in the individual family set up by her husband. In some cases the son-in-law is taken as a son who resides in the father-in-law's house and this son-in-law is called as *Ghardijawae*. Such cases occur when a family has got no son but only one daughter or if all the elder daughters are married off to different families or if a family has only one marriageable daughter and minor sons. In the last case the *Ghardijawae* may set up an independent family when the minor brother's-in-law are grown up. After marriage, both husband and wife have the right to divorce. A divorce may be sought on the grounds of adultery, unwillingness, of one of the parties to cohabit with the other, witchcraft and sterility. A woman may seek divorce if the husband cannot give her sufficient food, clothes and ornaments. If a man seeks divorce he will not get back the bride price he originally paid, over and above he is to pay a fine of rupees five and a piece of cloth to the wife. If, on the other hand, the wife seeks divorce and cannot prove sufficient cause, then her father has to refund the money received as bride price. Divorce is affected in the presence of the villagers assembled for the purpose. In case the husband suspects that his wife practices witchcraft then simply handing her over to her parents or nearest relatives divorces her.

In a family the authority rests on the father and normally it is the duty of the other members to obey him strictly. In the absence of the father, the eldest son takes the position. In fact the eldest son in a Santal family is looked upon by the younger ones as the representative of the father and for that reason the status of the eldest brother's wife is often paralleled with that of the mother. Within the family organisation there is a division of labour on the basis of sex and age. It is the duty of a husband to provide his family members with food materials, clothing's and shelter through such activities as cultivation, hunting and fishing. On the

other hand, a wife has to do all the works concerning the household, over and above; she assists her husband in agricultural and fishing operation too. The grown up boys assist their father while the girls are engaged in household work with their mother. The parents with deep love and affection protect the children. The women, though devoid of certain religious and administrative functions, have an important economic status in the family. But she is not considered a mere chattel and she enjoys certain amount of authority and independence within her own sphere.

The kinship terminology of the Santal is a form of classificatory system. The father and father's brother are designated by the same term, *appa*; but this term is modified by a descriptive term indicating younger by *hopen* or older by *gongo*. Thus, mother's and father's brother's wives are also designated by the single term *ayo*. In this case same descriptive terms are prefixed to mean the elder or younger. The customary rule of disposing a dead body is the cremation of the corpse. The dead body is first anointed with oil and then new clothes are put on it. A few of the pots and pans of the deceased are placed along with dead body on the bier. The friends and the relatives of the deceased carry the bier to the cremation ground. The dead body is again anointed with oil and vermilion and then it is put on the pyre. A coin is put into the mouth of the corpse and the whole body is covered by the piece of firewood. Each person attending the funeral puts at least one piece of firewood on the pyre. Next an egg is broken over the pyre. The eldest son or the nearest relative prepares a torch of dried grass bound with thread from his own cloth. After walking three times round the pile in silence he touches the mouth of the deceased with the brand. When the body is nearly burnt the clansman extinguish the fire. The nearest relative breaks of three fragments of bones and washes them in fresh milk colored with vermilion. These are then placed in a small earthen vessel. This pot with the bones is buried somewhere outside the village. The funeral party then returns home after bathing themselves and crunching incense of *sal* resin. They perform purification ceremony, after five days following a death when all the villagers and kinsmen

assemble at the house of the deceased after getting them shaved and bathed. They sacrifice to the ancestral spirits. Afterwards they carry the pot with the bones to the river for final immersion.

There exist taboo in regard to the relation between a man and his younger brother's wife. It is so great they avoid even touching one another's shadow; wife's elder sisters are also avoided. Avoidance also prevails between bride's father and bridegroom's mother and also between bridegroom's father and bride's mother. On the other hand, joking relation exists between a man and his elder brother's wife. They enjoy considerable freedom, so much so that even sexual intercourse between them is not deemed as a criminal offence. A similar relationship exists between a woman and her elder sister's husband. Joking relationship also exists between grand parents and grand children.

The village community is the most important socio- economic and political unit of the Santals. It is governed by a panchayat consisting of seven officials, viz., (i) *manjhi*-the headman, (ii) *paramanik*- the assistant headman, (iii) *naeke*- the village priest entrusted with the duties of worshipping the national deities, (iv) *kudum naeke*- priest of the spirits residing in the hills and jungles of the neighborhood, (v) *jog-manjhi*- entrusted to arrange the communal feasts and guarding the morals of the village youth, (vi) *jog-paramanik*- an assistant to *paramanik*, (vii) *godet*- the messenger to the panchayat. The function of the panchayat is to solve any problem that affects the interest of village community. Inter-village disputes are solved by joint endeavor of the panchayats of both the villages. If the panchayat finds it difficult to take any resolution by itself, then all the villagers may be called and after prolonged discussion resolution may be taken on general consensus. According to the Santal tradition all land belong to the village community and individual property right is not recognised. Lands were annually redistributed so that a few individuals could not monopolize good land. Besides land, individual ownership is recognised in every case, such as, houses, domestic utensils, weapons, implements, cattle and clothing. All the sons of a man inherit private property equally, except that the eldest gets a bullock and a

rupee more than the others. In the Santal Parganas, daughters have no share in property and in the absence of any male issue the property of a deceased person goes to his nearest male agnates, generally brothers. If the father of the deceased is alive, the property reverts to him. In the absence of both sons and brothers, the property goes to the person's brother's sons. But in Mayurbhanj the case is somewhat different. There, daughters inherit the property in preference to all the agnates of the deceased, if there are no sons. His widow inherits the property of a childless man, if his portion was separated from his brothers. The males exclusively inherited the occupancy of land but now in some cases the daughters are also recorded as raiyats and Santal reformists are trying for the recognition of the married Santal girls.

The Santal religion is animistic. The Santals have a great god *Thakur* whom the Santals have long ceased to worship for sufficient reason, as it does neither good nor ill to the mankind. He is identified by some with the Sun whom the Santals regard as god and worship every fifth or tenth year with sacrifices of goats. Besides, *Takhur* they believe in a number of *bongas* or malevolent supernatural beings. Each family has two special gods of his own- the *Orak-bonga* or household god and the *Abge-bonga* or secret god. The popular *bongas* of the tribe are, (i) Marang-buru, (ii) Moreka, (iii) Jaher-era, (iv) Gosai-era, (v) Pargana and (vi) Manjhi. Besides *bongas* they also believe in *rakes* and *ekagudia*- the monstrous beings, *curins* and *bhut*. The chief festival of the Santals is the honest festival celebrated in the month of *Posh* (November-December), after the chief rice crop of the year has been got in. Private families sacrifice pigs, goats, and fowls and a general saturnalia of drunkenness and sexual intercourse prevails. Next important festival is the Baha puja, celebrated in *Phalgun* (February- March), when the *sal* trees come to flower. Other festivals are *Ero-sim*, the sowing festival in *Asar* (May-June), *Horiar-Sim*, the feast of the sprouting of the rice in *Bhadra* (September-October), *Irigundli-nanai*, the offering of the first fruits of the millets '*iri*' and '*gundli*' in *Bhadra*, *Janthar-puja* in *Aghran* (October-November), the first fruit of the winter rice crop; *sankrant puja* on the

last day of the *Posh* when bread, *chira* and molasses are offered to the dead ancestors, *Magh-sim* is celebrated in the month of *Magh* when the jungle grass is cut.

Santal women are believed to practice witchcraft and like *bongas* they can do much harm. It is also believed that such women can influence the *bongas* by their feminine charms and make them do according to their will. To counteract the evil influence of *bongas* and doers of witchcraft, there are specialists known as *Jan guru* and *ojha guru*. They take recourse to divination to discover the cause of misfortune or illness. Once the cause is known, incantations and scarifies are performed to appease the evil doing *bonga* and if it is caused by witchcraft, the alleged practitioners is driven out of the village. The Santal believe in certain natural causes of disease as well as those caused by *bongas* and witches. Most common of the natural causes is the dislocation or twisting of any *sir* (i.e., muscles, nerves, arteries and veins). Rabies, epilepsy, scabies, cancer, ring-worm etc are believed to be caused by different kind of worms that may be fairly large or invisibly small. Among other natural causes there are, bad diet, taking unclean food, exposure in mist and fog and bathing in dirty water. If an *ojha* is called upon to treat a disease, he may give medicine prepared from plants and herbs, as also recite incantations performing scarifies. They recognise a regular science of *ojha* and it is customary for young men of a village to go through the early course of training in *ojha*-science. There is also a special training that follows the preliminary one and lasts for a few years. In special training only a few can succeed and are initiated as full-fledged *ojha*.

The Oraons

The Oraons are presently distributed over the large tract of eastern India. They are also settled agriculturists. They belong to the Dravidian stock of southern India and according to their tradition, it is claimed that their ancestors migrated from Konkan in the west coast to northern India, and then ultimately came to their present habitat at Chotanagpur Plateau, the eastern parts of Sirguja and

Jasshpur and are scattered in Singhbhum, Gangpur, Bonai, Hazaribag and Shambalpur of the central Provinces. The Oraons are mostly distributed in Ranchi district of Bihar presently Jharkhand. The Oraons speak a language of their own, which belongs to the Dravidian family of languages. The influences of Hindi, Oriya, Bengali and Mundari languages are well marked. The Oraons are physically characterized by dark, brown complexion; black, coarse, generally wavy hair, thick beard and much hair on the body, dolichocephalic head; eyes of medium size and of black colour; nose prominent, straight, often depressed at the root; thick lips; slightly projecting jaws; and below medium stature. The Oraons designated themselves as Kurukhs. The name Kurukh is derived from a Dravidian root, meaning man.

The Oraons are predominantly agriculturists. Hunting, fishing, cattle rearing and crafts are practiced in little measure. In former times, in their home land (Chotanagpur) hunting had some economic and more socio religious importance. They used to hunt collectively during three big annual hunting festivals; (i) Phagu sendra (spring hunt), (ii) Bishu sendra (summer hunt) and (iii) Jaith sendra (hunting in the month of May-June). It was a socio religious duty for an able Oraon male to participate in these hunting festivals. At present its economic importance is lost and it has been reduced to almost a ritualistic activity. Besides these, a good many of them have migrated to neighboring districts of Bihar, in Bengal and Assam as labourers in the mines, jungles and tea gardens and also some of them work as labourers in making and mending road.

They cultivate varieties of paddy, millet, pulses and oil seeds. For cultivation of different crops they distinguish different type of soil on the basis of position and fertility. The cultivable land is primarily divided into two classes; *tanr* or up-lands and *don* or low-lands. The *don* land is further sub-divided into three categories; (i) *taria* or upper portion of the slope, (ii) *chaunra* or intermediate portion and (iii) *kudar* or bottom of the slope. In *tanr* land they cultivate coarse rice, millet, pulses and oil-seed usually in rotation. In *don* lands they produce two classes of paddy, *bhadai* rice, which is reaped in October and *aghani* rice, which is reaped in

November-December. The fertility of the soil in general is poor and requires manures for a good harvest. Oraon farmers use indigenous manures as, cow dung, mud of the old tanks and karanj flower mixed with ashes. Good harvest merely depends on the good system of irrigation, which is very little in the Oraon country. There are few embankments for storage of rainwater and irrigation channels leading to the fields, some tanks and wells, but these significantly merge relative to requirement. In almost every village there is a pond or some waterlogged area, which dries up in summer, from which water is drawn by lever system. The Oraon farmer has to depend on rain fall for cultivation. Women are prohibited from hunting and plough, hoeing, leveling and irrigation; these are exclusively male business. But they do sowing, transplanting, harvesting, husking, fishing, collection of fuel and vegetables etc. The principal implement of their main economic activity (i.e., cultivation) is plough, which is made of sal wood, the ploughshare being made of a straight piece of iron, about a foot long and inch broad. A yoke is fitted with the beam of the plough with the help of leather straps- the yoke along with the plough being harnessed on a pair of bullocks. Among other implements there are harrow, leveler, earthmover, husking lever, mortar, pestle and axe. The common livestock of the Oraons consists of cows, bullocks, buffaloes, goats, pigs, fowls etc.

The Oraon village is situated generally on the top of undulation, which is usually a cultivable wasteland. The houses are huddled together by the sides of narrow lanes, which run in all directions. The ground plan is rectangular and the huts are arranged on all sides of a small courtyard. The entrance to the courtyard is made through one of the huts. The roofs are of either two slopes, or four slopes and are made of country-made tiles. No window is provided with, though sometimes lattices are found to occur. The floor and walls are made of mud. An Oraon house is also provided with cattle-shed, pigsty and fowl-pen. An Oraon village consists of two classes of Oraon inhabitation, viz, the *Bhuinhars* and *Jeth-Raiyats*. The former are the descendants of the first settlers who cleared the forests and founded the village. The *Jeth-Raiyats* are subsequent settlers who

came to the village and settled on some *khunt* (family stock) land to which they were related by marriages. In each Oraon villages there are three Oraon officers viz., *Baiga* or *Pahan*, Pujar-assistant of *Pahan* and *Mahato*. The *Pahan* is the central figure in the Oraon village. He is the village priest who propitiates the village deities and keeps the villagers safe from the unwanted attention of the supernatural beings. The *Pujar* in priestly duties helps the *Pahan*. The *Mahato* is the secular headman who helps the landlord in collecting rent and settling disputes regarding rent. The *Mahato* also presides over the village panchayat constituted by the village elders. The authority of the panchayat is supreme in all matters, social or religious, concerning the villagers' complaints regarding marriage, theft, assault, witchcraft and disputes regarding partition of property that are brought to the *Mahato* and the *Pahan* who call the panchayat. Punishments enforced by the panchayat consist of fine, threshing, ex-communication and sometimes banishment from the village.

The ordinary clothing of an adult Oraon man is a piece of cotton cloth about a foot in width and three to six yards in length. In addition to the cloth there is always round the waist a girdle of cords. During the festivals, the Oraon male wears a little longer cloth with ornamental border. He covers the upper part of the body with a blanket. Sometimes he wears a red or white turban round the head. The ordinary dress of an Oraon woman is a piece of cotton clothes about 4 yards in length and 1.5 yards in width. An Oraon male wears his hair long, gathered in a knot behind. In the knot they often insert wooden combs, looking glass and numerous ornaments of brass. They also wear earrings, bracelets and other ornaments. An Oraon woman also wears her hair long, gathered not immediately behind but more or less on one side. Often they decorate their hair with the help of flowers and/or feathers. They use a variety of ornaments such as bracelets, bangles, necklace, earrings, nose-pins, hairpins etc. These are usually made of brass and rarely made of silver or gold. Bangles of glass and plastic, necklaces of beads and nickel have now become very much popular. The Oraon women are tattooed in childhood with the three marks on the brow and two on each

temple. Girls when adult, or nearly so, have themselves further tattooed on the arms and back. The young men burn on their forearm.

Boiled rice is the stable diet of the Oraons, though an ordinary Oraon cannot provide for himself a full diet of rice through out the year. Fried edible leaves form common side dishes or vegetables curry. Very few can afford to have pulses. If available, they take any and every fish and the flesh of almost all birds and animals except that of the monkey, asses, horses, elephants and the like. Average Oraons even eats the mouse and crow with relish. Presently such indiscrimination with regard to food is much modified due to Christianity and other religious cross currents in the life of the Oraon. Milk and curdled-milk are taken with much relish, when available, rice-beer (*haria*) is their favorite intoxicating beverage. *Haria* is indispensable in almost all social and religious festivals. Present day Oraons are more addicted to the distilled liquor than their traditional *haria*. The animal, bird, fish or plant that forms the totem of a particular clan, is taboo to the members of that clan. Formerly, when the men of a village would go out on a hunting expedition, it was the prohibition to the villagers to kill any bird or animal until the hunting party returned.

The Oraons constitute an endogamous tribe, i.e., the members are not allowed to marry outside but are expected to marry within the group. The tribe is divided into a number of exogamous totemic clans. There are five sub-tribes among the Oraons; Berga-Oraon, Dhanka Oraon, Kharia-Oraon and Munda- Oraon. The Oraons had a curious system of youth dormitories for bachelors and unmarried girls. In the bachelor's dhumkuria, as the dormitory was called, discipline was very strict, there being an elaborate system of flogging, the smaller boys waiting on the elders, rubbing their limbs and combing their hair. The girl's dormitory was usually in charge of an old woman and its location was not supposed to be known to anyone except its intimates and to those of the bachelor's dormitory. Boys and girls of the same village are not allowed to marry. It is respectable to bring home a bride from a distance. The Oraon practices monogamy as a rule and polygamy as an exception. Polyandry is never permitted. If an Oraon married

a person belonging to other tribe or caste he/she becomes excommunicated from the tribe until the non-Oraon partner is given up and the prescribed purification ceremony is observed. The Oraons also avoid marriage with certain kin. Neither parallel cousin nor cross cousin marriage is permitted. The marriage between two people who have milk relationship is forbidden. The marriage between the members of the two families sharing a ritual kinship is not permissible although they may belong to different clans. They also do not prefer the marriage of the eldest son of a family with the eldest daughter of another family. The payment of a bride price is a rule. Widow marriage is permitted and there is no restriction in selecting husband. If an unmarried girl becomes pregnant arrangements are made for her marriage quickly. She is expected to lead a virtuous life. Divorce is frequent in their society. The sexual life of the Oraon cannot be characterized as even moderately chaste. Premarital sex license prevails widely and generally overlooked by the community until it leads to pregnancy when a fine is imposed on the parties who provide a feast to the elders and are thereby excused from all guilt.

An Oraon family is constituted of a man, his wife and their unmarried children. Formerly, joint or extended families were common, but at present simple family is the present type. Within the family there is division of labour on the basis of sex and age. But a strong sense of cooperation is noticed between the sexes with respect to their principle economic activity. Women are tabooed from hunting and plowing; otherwise in all other activities they help their men counterparts. Still, within the family the husband exercises supreme authority. The Oraon system of kinship terminology is a kind of classificatory of the same term in addressing most, though not all persons of the same sex and generation. The term *ba* (father) not only means one's own male parent but also others whom that parent would call brother; similarly, the *aiyo* (mother) not only applies to one's own female parent but also to all whom his father might marry. Similar is the case with regard to the terms *babu* (brother) and *mai* (daughter). In certain cases, however, a distinction is made in addressing the elder and the younger member of the

same generation. There exist certain rules of avoidance between certain affined kin's. Avoidance prevails between a man and his younger brother's wife and his wife's elder sisters. Such persons cannot even call one another by name. A less rigorous type of avoidance is noticed between a man and his son's wife. Joking relationship exists between grandparent and grand children. Roy (1935) observes that there are reasons to believe in the former existence of a system of marriage or union between such persons, because it is considered as a trivial offence if such persons are found to have illicit sex relation. Such joking relation also exists between a man and his elder brother's wives, and his wife's younger sisters who are consider potentials spouses.

The religion of the Oraons is of a composite nature. The supreme deity is a spirit, known as Dharmi or Dharmesh. Dharmesh is regarded as the husband of Dharti Mata (Mother Earth). They equate Dharmesh with the sun and regard him as the source of light and life. The existence of the world, the gift of children, the growth of the children, the growth of the fruits and animals of the earth are all believed to be due to this almighty. He is worshipped during the harvest season or at any time in performance of a vow. In worshipping the deity they usually sacrifice a white fowl or goat. When sacrifices to the evil spirits in times of sickness and other calamity fail to bring the desired results, a prayer is offered and sacrifices are vowed to him to get the best favour.

The Oraons do not have the idea that their sins are visited upon them, either in this world or next. The Oraons have a belief that there are among them some powerful sorcerers or witches who by some appropriate *mantras* extract the liver of an intended victim without the latter perceiving it. For all these they depend on the witch doctor. In all tribal societies this kind of specialists occupies a high position in the society. They firmly believe in witchcraft and put to death any suspected witch. The Oraon priest is known as *Pahan*. In each and every Oraon villages there is a *Pahan*. He performs all the regular sacrifices to tutelary deities and also act as a witch doctor.

The *Karma* and *Sarhul* are the two important festivals of the Oraons. The *Karma* is celebrated in the season for transplanting paddy saplings in seedbeds and the *Sarhul* is observed at the end of March or at the beginning of April. It is believed that in this season the marriage of mother earth is celebrated. The dead among the Oraons is cremated. The fire is set to the funeral pyre made of wood by a son or a near relative of the deceased. Everyone present places few pieces of wood over the corpse. After cremation the fragments of the bones are gathered and placed in a new earthen jar and brought to the village. The jar is suspended to a post in front of the residence of the dead. Once a year usually in January, bones of all the members of a clan who have died in the village or elsewhere during that year are ceremonially brought and added to the clan crematory which is a pool of water or a stream where the bones of all the clan ancestors are deposited.

The Tribal Population of the Target and Non-Target Villages

Table 1 reflects the details of population and families of the tribal people of the target villages. The total number of tribal families in the target villages is 214. The number of families of the Santals and the Oraons are 120 (56.07 per cent) and 94 (43.93 per cent) respectively. The population of the target villages is 956 of which 492 (51.46 per cent) are males and 464 (48.54 per cent) are females. The Study reveals that out of the total Santal population (516) of the target village's male and female population constitutes 55.04 per cent and 44.96 per cent respectively. The total number of Oraons of the target villages is 440. The number of male among the Oraons is 208 (47.27 per cent) and the female is 232 (52.73 per cent). As regard to the family is concerned, most of the tribal families are of nuclear. This type of family is constituted of a man, his wife and their unmarried children. As high as 71.96 per cent are nuclear family where as only 28.04 per cent are joint or extended family. Among the Santal families, 75 per cent are nuclear family and 25 per cent are joint or extended family. In case of

Oraon families, 68.09 per cent are nuclear family and only 31.91 per cent are joint or extended family.

Table 1

Family and Population in the Target Villages

Tribal groups	Family			Population		
	Joint (%)	Nuclear (%)	Total (%)	Male (%)	Female (%)	Total (%)
Santal	30 (25)	90 (75)	120 (56.07)	284 (55.04)	232 (44.96)	516 (53.97)
Oraon	30 (31.91)	64 (68.09)	94 (43.93)	208 (47.27)	232 (52.73)	440 (46.03)
Total	60 (28.04)	154 (71.96)	214 (100)	492 (51.46)	464 (48.54)	956 (100)

Table 2 reflects the total number of tribal families and population of the non-target villages. The total number of tribal families is 270 having a total population of 1287. The male population of the non-target villages (663; 51.52 per cent) is slightly higher than that of female (624; 48.48 per cent). The total Santal population of the non-target villages' is 1044. The male population is 532 (50.96 per cent) and female population is 512 (49.04). However the total number of Oraons of the non-target villages is 243 of which the number of male is 131(53.91 per cent) and female is 112 (46.09 per cent). They have 65.19 per

cent nuclear family and 34.81 per cent joint or extended family. Among the Santals, 64.55 per cent are nuclear family and only 35.45 per cent are joint or extended family. In case of Oraon households, 68 per cent are nuclear family and 32 per cent are joint or extended family.

Table 2

Family and Population in the Non-Target Villages

Tribal groups	Family			Population		
	Joint (%)	Nuclear (%)	Total (%)	Male (%)	Female (%)	Total (%)
Santal	78 (35.45)	142 (64.55)	220 (81.48)	532 (50.96)	512 (49.04)	1044 (81.11)
Oraon	16 (32)	34 (68)	50 (18.52)	131 (53.91)	112 (46.09)	243 (18.89)
Total	94	176	270	663	624	1287

Literacy in the Target and Non-Target Villages

Social and economic status of the tribal people in the study area is very poor. Educationally also no significant changes have been found among the tribal people of both target and non-target villages. Though some of the tribals now show interest in sending their children to school. But due to poor economic status most of the tribals are not able to bear the cost of education. The light of modern education is far away from the tribal society. Most of the tribal people are not able to explore the benefit of the modern education. The tribal children in most of the cases help their parents in the economic activities and thus they are not able to attend the formal educational institutions. The Tagore Society for Rural Development runs non-formal education center for the tribal children in the target villages so that tribals can avail the benefit of education. The Tagore Society for Rural Development also organises motivational camps for the tribal parents to enhance the interest of the tribal people regarding their child education. In spite of that retention rate of the tribal students even in the non-formal center is very poor and the child education is yet to be included in the priority list of the tribal parents.

Table 3 reveals the educational status of the tribals of the target villages, which is not satisfactory at all. The Study shows that 65.04 per cent of the tribal males in the target villages are illiterate and the female illiteracy is as high as 85.34 per cent in the target villages. Only 15.85 per cent of the tribal males and 10.78 per cent of the tribal females in the target villages are having primary education. Only a few tribal people have education of fifth standard and above. It is reported that only 17.89 per cent of the male population and 3.88 per cent of the female population are having pre-Madhyamik education. There are only two Madhyamik (10+) passed, two Higher Secondary (10+2) passed and two Graduates among the tribal males of the target villages.

Among the Santals of the target villages, it is observed that 63.03 per cent of the Santal males are illiterate and as high as 83.19 per cent of the Santal female are

illiterate. We have found only 16.90 per cent literate male Santals having primary education, while only 12.67 per cent of female Santals are having primary education. It is observed that 17.96 per cent of the Santal males and only 4.74 per cent of the Santal females have pre-Madhyamik education. We have also observed that there are only two each among the Santal males who have passed Madhyamik (10+), Higher Secondary (10+2) and Graduation. Among the Oraons of the target villages the situation is appalling than that of Santals. It is observed that as many as 67.79 per cent of the Oraon males and 87.50 percent of the Oraon females are illiterate. It is also reported that only 14.42 per cent of the Oraon males are having primary education, but only 9.48 per cent of the Oraon females are having primary education. A few Oraons have education of 5th standard and above. There are only 17.79 per cent of the Oraon males reported to have pre-Madhyamik, whereas only 3.02 per cent of the Oraon females are pre- Madhyamik. In case of the Oraons of the target villages no one is there who have passed Madhyamik (10+), Higher Secondary (10+2) or Bachelor of Arts/Bachelor of Science.

Educationally the tribal people of the non-target villages are poor than that of the target villages. The table 4 highlights the educational status of the tribals of the non-target villages. In the non-target villages 77.83 per cent of the tribal males and 86.54 per cent of the tribal females are illiterate. It is observed that in the non-target villages 17.50 per cent of the tribal males and 12.98 per cent of the tribal females are having primary education. However only 4.52 per cent of the tribal males and only 3.69 per cent of the tribal females are having pre-Madhyamik level of education. There is only one male among the tribal people of the non-target villages who have passed madhyamik (10+).

Among the Santals of the non-target villages, it is observed that, as many as 77.44 per cent of males and 86.72 per cent of females are illiterate. We have found only 18.42 per cent literate male Santals have primary education, while only 13.28 per cent of female Santals are having primary education. It is observed that only 4.14 per cent of the Santal males and 3.91 per cent of the

Santal females are reported to have educational standard up to pre-Madhyamik level. Educationally the Oraons of the non-target villages is slightly in the better position. We have found that 79.39 per cent of the Oraon males and 85.71 per cent of the Oraon females are illiterate. While 13.74 per cent of the Oraon males and 11.61 per cent of the Oraon females are having primary education. However only 6.11 per cent of the Oraon males and 2.68 per cent of the Oraon females are having pre-madhyamik level of education. There is only one among the Oraons of the non-target villages who have passed madhyamik (10+).

Table 3

Literacy in the Target Villages

Tribal groups	Illiterate		Literate							
	M (%)	F (%)	I-IV		V-X		Madhyamik (10+)		High School & above. (10+2)	
			M (%)	F (%)	M (%)	F (%)	M (%)	F (%)	M (%)	F (%)
Santal	179 (63.03)	193 (83.19)	48 (16.90)	28 (12.07)	51 (17.96)	11 (4.74)	2 (0.70)	0 (0)	4 (1.40)	0 (0)
Oraon	141 (67.79)	203 (87.50)	30 (14.42)	22 (9.48)	37 (17.79)	7 (3.02)	0 (0)	0 (0)	0 (0)	0 (0)
Total	320 (65.04)	396 (85.34)	78 (15.84)	50 (10.78)	88 (17.89)	18 (3.88)	2 (0.40)	0 (0)	4 (0.80)	0 (0)

Table 4

Literacy in the Non-Target Villages

Tribal groups	Illiterate		Literate							
	M (%)	F (%)	I-IV		V-X		Madhyamik (10+)		High School & above. (10+2)	
			M (%)	F (%)	M (%)	F (%)	M (%)	F (%)	M (%)	F (%)
Santal	412 (77.44)	444 (86.72)	98 (18.42)	68 (13.28)	22 (4.14)	20 (3.91)	0 (0)	0 (0)	0 (0)	0 (0)
Oraon	104 (79.39)	96 (85.71)	18 (13.74)	13 (11.61)	8 (6.11)	3 (2.68)	1 (0.76)	0 (0)	0 (0)	0 (0)
Total	516 (77.83)	540 (86.54)	116 (17.50)	81 (12.98)	30 (4.52)	23 (3.69)	1 (0.15)	0 (0)	0 (0)	0 (0)

Land Holding Pattern of the Tribal People of the Target and Non-Target Villages

Land ownership is a crucial factor in the tribal society. In primitive tribal society lands belonged to the community but now-a-days individual land ownership is recognised. If we analyze the table 5, it is clear that 10.75 per cent of the tribals of the target villages are not having any land. However 57.01 per cent of the tribals of the target villages are having land less than or equal to 2.5 acres and

23.83 per cent of the tribals are having less than or equal to 5 acres but more than 2.5 acres. Only 8.41 per cent of the tribals of the target villages have more than 5 acres of land. Among the Santals of the target villages, 11.67 per cent households are not having any land. However, 55 per cent of the Santal households are having less than or equal to 2.5 acres of land, while 21.66 per cent of the Santal households are having less than or equal to 5 acres but more than 2.5 acres of land. Only 11.67 per cent of the Santal households have more than 5 acres of land. Among the Oraons of the target villages, 9.57 per cent households are not having any land. However, 59.57 per cent of the Oraon households are having less than or equal to 2.5 acres of land, while 26.60 per cent of the Oraon households are having less than or equal to 5 acres but more than 2.5 acres of land. Only 4.26 per cent of the Santal households have more than 5 acres of land.

Table 5

Land Holding Patterns (in acres) in the Target Villages

Tribal groups	Land holding pattern				
	Landless (%)	0-2.5 (%)	2.6- 5 (%)	5.1 and above (%)	Total (%)
Santal	14 (11.67)	66 (55)	26 (21.66)	14 (11.67)	120 (100)
Oraon	9 (9.57)	56 (59.57)	25 (26.60)	4 (4.26)	94 (100)
Total	23 (10.75)	122 (57.01)	51 (23.83)	18 (8.41)	214 (100)

The table 6 shows that 11.11 per cent of the tribals of the non-target villages are not having any land. However 59.26 per cent of the tribals of the non-target villages are having land less than or equal to 2.5 acres and 24.24 per cent of the tribals are having more than 2.5 acres but less than or equal to 5 acres and only 5.19 per cent of the tribals of the non-target villages have more than 5 acres of land. Among the Santals of the non-target villages, 10.91 per cent households are not having any land. However 59.55 per cent of the Santal households are having less than or equal to 2.5 acres of land, while 24.54 per cent of the Santal households are having more than 2.5 acres but less than or equal to 5 acres of land. Only 5 per cent of them have more than 5 acres of land. Among the Oraons of the non-target villages, 12 per cent households are not having any land. However, 58 per cent of the Oraon households are having less than or equal to 2.5 acres of land, while 24 per cent of the Oraon households are having less than or equal to 5 acres but more than 2.5 acres of land. Only 6 per cent of the Santal households have more than 5 acres of land.

Table 6

Land Holding Patterns (in acres) in the Non-Target Villages

Tribal groups	Land holding pattern				
	Landless (%)	<2.5 (%)	2.6- 5 (%)	5.1 and above (%)	Total (%)
Santal	24 (10.91)	131 (59.55)	54 (24.54)	11 (5)	220 (100)
Oraon	6 (12)	29 (58)	12 (24)	3 (6)	50 (100)
Total	30 (11.11)	160 (59.26)	66 (24.44)	14 (5.19)	270 (100)

Occupation of the Tribal People in the Target and Non-Target Villages

The main economic activity of the tribals is agriculture. Though majority of the tribal people have at least a small piece of land, most of them work as agricultural labourers for their livelihood. Sometimes both the tribal men and women do earth work in the road if available. Most of the tribals also rear cattle. The common livestock of the tribals consist of cows, bullocks, pigs, goats etc. The Table 7 shows that 53.27 per cent of the tribal respondents of the target villages depend on cultivation, while 31.31 per cent of the tribal family depends on agriculture labourer. However, 12.62 per cent of the tribal families, for their livelihood depend on both cultivation and agriculture labourer. Whereas only 1.87 per cent of the tribal respondents depend on service for their livelihood, but only 0.93 per cent of the tribals depend on trade.

Whereas among the Santals of the target villages, 58.33 per cent respondents are cultivators, while 32.20 percent of the respondents are agricultural labourer, but only 7.50 per cent of the respondents depend on both cultivation and agriculture labour. However, only 1.67 per cent of the Santals are service-holders and no one among them depend on trade. While among the Oraons of the target villages, 46.80 per cent of the respondents are cultivators, 29.79 percent of the Oraon respondents depend on agriculture labour, but 19.15 percent of them depend on both cultivation and agriculture labour. Whereas only 2.13 per cent of the Oraon respondents are service-holders and the same percentage (2.13 per cent) of them depend on trade.

Among the tribals of the non-target villages, 48.15 percent depend on cultivation, while 40 per cent family depend on agriculture labour. However, 8.15 per cent of tribal families, for their livelihood, depend on both cultivation and agriculture labour. Whereas only 2.22 per cent of the tribal respondents depend on service for their livelihood and only 1.48 per cent of the tribals depend on trade. Among the Santals of the non-target villages, 51.81 per cent of respondents are cultivators, while 39.09 per cent are agricultural labourers and only 5 percent

depend on both cultivation and agriculture labour. However, 2.73 per cent of the Santal families are in service and only 1.36 per cent of the respondents depend on trade. Among the Oraons of the non-target villages, 32 per cent of the households depend on cultivation, while 44 percent of them depend on agricultural labour, but 22 percent of them depend on both cultivation and agriculture labour. Only 2 per cent of the Oraon respondents depend on trade and no one among them depend on service.

Table 7

Occupation of the Santals and Oraons in the Target Villages

Tribal groups	Occupation				
	Cultivator (%)	Agricultural laborer (%)	Cultivator and Agricultural laborer (%)	Service (%)	Trade (%)
Santal	70 (58.33)	39 (32.50)	9 (7.5)	2 (1.67)	0 (0)
Oraon	44 (46.80)	28 (29.79)	18 (19.15)	2 (2.13)	2 (2.13)
Total	114 (53.27)	67 (31.31)	27 (12.62)	4 (1.87)	2 (0.93)

Table 8

Occupation of the Santals and Oraons in the Non-Target Villages

Tribal groups	Occupation				
	Cultivator (%)	Agricultural laborer (%)	Cultivator and Agricultural laborer (%)	Service (%)	Trade (%)
Santal	114 (51.82)	86 (39.09)	11 (5)	6 (2.73)	3 (1.36)
Oraon	16 (32)	22 (44)	11 (22)	0 (0)	1 (2)
Total	130 (48.15)	108 (40)	22 (8.15)	6 (2.22)	4 (1.48)

Annual Income of the Tribals in the Target and Non-Target Villages

The annual income distribution pattern of the target villages reflects heavy concentration of the households in certain categories. The table 9 reveals that among the tribals of the target villages, 58.88 per cent of the households have an annual income ranging from Rs 5001.00 to Rs 10000.00. Like wise we have found that among the Santals, 60.84 per cent of the households have an annual income from Rs 5001.00 to Rs 10000.00. Among the Oraons, we have found that 56.38 per cent of the households have an annual income from Rs 5001.00 to Rs 10000.00. However 15.89 per cent of the tribal households of the target villages have an annual income upto Rs 5000.00, while only 6.82 per cent of the tribal households have income from Rs 10001.00 to Rs 15000.00, and only 8.40 per cent of the tribal households of the target villages have an annual income of Rs 15001.00 and above. Among the Santals of the target villages, only 13.33 per cent of the respondents have an annual income upto Rs 5000.00 and an equal

percentage of the households are having of Rs 10001.00 to Rs 15000.00, but only 12.5 per cent of the households have an annual income of Rs 15001.00 and above. Similarly among the Oraons of the target villages, only 19.15 per cent of the households have an annual income up to Rs 5000.00, while 21.28 per cent of the households are concentrated in the category of Rs 10001.00 to 15000.00 and only 3.19 per cent of the Oraon households have an annual income of Rs 15001.00 and above.

Table 9

Annual Income (in Rs) of the Santals and Oraons in the Target Villages

Tribal groups	0-5000 (%)	5001-10000 (%)	10001- 15000 (%)	15001 and above (%)	Total (%)
Santal	16 (13.33)	73 (60.84)	16 (13.33)	15 (12.50)	120 (56.07)
Oraon	18 (19.15)	53 (56.38)	20 (21.28)	3 (3.19)	94 (43.93)
Total	34 (15.89)	126 (58.88)	36 (16.82)	18 (8.41)	214 (100)

The annual income distribution pattern of non-target villages reflects heavy concentration of households in certain categories. The table 10 reflects that among the tribals of the non-target villages, 60.37 per cent of the households have an annual income from Rs 5001.00 to Rs 10000.00. We have also found that among the Santals, 60.91 per cent of the households have an annual income ranging from Rs 5001.00 to Rs 10000.00. Among the Oraons, 60 per cent of the households have an annual income from Rs 5001.00 to Rs 10000.00. However, 18.52 per cent of the tribal households of the non-target villages have an annual income upto Rs 5000.00, while only 13.33 per cent of the tribal households share ranging from Rs 10001.00 to Rs 15000.00, and only 7.41 per cent of the tribal households of the non-target villages have an annual income of

Rs 15001.00 and above. In the non-target villages we have found that 18.64 per cent of the households belonging to the Santal community have an annual income upto Rs 5000.00 and only 3.18 percent of the Santal households have an annual income from Rs 10001.00 to Rs 15000.00, but only 7.27 per cent of the households belonging to the Santal community have an annual income of Rs 15001.00 and above. While among the Oraons of the non-target villages, only 18 per cent of the households have an annual income upto Rs 5000.00, but 14 per cent of the households are having earnings from Rs 10001.00 to 15000.00 and only 8 per cent of the Oraon households have an annual income of Rs 15001.00 and above.

Table 10

Annual Income (in Rs) of the Santals and Oraons of the Non-Target villages

Tribal groups	0-5000 (%)	5001-10000 (%)	10001- 15000 (%)	15001 and above (%)	Total (%)
Santal	41 (18.64)	134 (60.91)	29 (13.18)	16 (7.27)	220 (100)
Oraon	9 (18)	30 (60)	7 (14)	4 (8)	50 (100)
Total	50 (18.52)	163 (60.37)	36 (13.33)	20 (7.41)	270 (100)

CHAPTER 3

SOCIAL ENVIRONMENT AND HEALTH BEHAVIOUR AMONG THE TRIBES

Insanitary condition, ignorance, inaccessibility to the modern health facilities and lack of health education are some of the important contributing factors of the tribal health behaviour in the modern world. The concept and belief regarding illness, housing, environmental sanitation, personal hygiene, nutritional status and intoxication form integral parts of health behaviour and cultural dimensions of the tribal community. It has a strong bearing on the general health of the community. These aspects of health culture shall be discussed in details from a comparative perspective. Such comparison will be made between the Santal and the Oraon and between the tribal people of target and non-target villages. The concept of health, disease, and treatment among literate and illiterate tribal people will also be documented to analyse the impact of education, being a very important social factor how far it influences the health care practices of the individual. A formal education proves to be helpful to any community and has a strong bearing on medical behaviour and health culture. The literacy rate among the tribals of the study area is very low. Most of the literate tribals of both the target and non-target villages are having primary education only.

TRIBAL HEALTH BEHAVIOUR

The tribals do not know much about modern health and hygiene. Most of the tribal communities are not exposed to modern medicine and they still believe in their traditional system of medicine. Traditional medicine and their belief in wrath of gods, evil spirits, and magic just fit in with their culture and way of thinking. If they believe in wrath of gods, evil spirits and magic, it must be remembered that it pervades their whole life and does not apply to their view of medicine only (Singh 1996,p.208). The social position of the tribals is low, though the tribals have absorbed some of the Hindu mode of life. The traditional village council is on the wane. Many of the traditional beliefs and customs of the tribals have been modified. The dress pattern of the tribals could not be regarded as a part of the *adibasi* culture. It is seen that the interpersonal relations are less intimate and

personal. The individual have a social and economic tie with one another mainly on common interest by contract and by more abstract symbols. Community support for economic activity is less. The family members are not strictly occupied with clear-cut roles to play.

Most of the tribals of the target villages are the members of the self-help group run by the Tagore Society for Rural Development. We find changes in the concept and treatment of disease of the tribals. The tribals have started adopting modern health care facilities recently. In the study area, the government health centres situated at Balapur and Tapan are highly under-utilised. These two Primary Health Centres are not easily accessible to the majority of the tribals. Quality of the services available in these health centres is also not satisfactory. These health centres are the focal points for delivery of health and medical care in the study area. The operational responsibilities of these health centres are to cover medical care, maternal and child health services, family planning, nutrition, health education, school health, control of communicable diseases, protected water supply, environmental sanitation, and collection of vital statistics. These health centres are not well equipped with the medical equipments. There is a lack of proper accommodation and other amenities in these health centres. Doctors and health staff of these health centres are found frequently absent from their duty. The commitment and dedication to the causes on their part are very much lacking. Most of the time they blame others, if they cannot provide medicine they complain about the supply. Most of the time they blame the ignorance of the tribal people, as they are not seeking modern medical help. They also have lack of patience to listen to others. Another very interesting finding is that doctors' often remain busy with their private practices at their residence. At a glance it is observed that the health workers are conducting only immunisation both for child and mothers twice in a month in addition to the clinical treatment in the primary health centres. As a result, quite a large number of quacks and *ojha* are rendering health care services in the study area. The tribal people mostly depend on their services. All these services involve low cost compared to the services of the modern doctors.

Five types of treatment are available in the study area. These are, (i) the allopathic or western mode of treatment available at the Primary Health Centres, (ii) the allopathic private practitioners, which include unqualified quacks also, (iii) homeopathic treatment available from the qualified and under qualified homeopathic practitioners, (iv) we have found some specialists in some of the tribal villages, who perform both duties of a priest and a medicine man. Sometimes priest and medicine man are different persons also, and (v) in addition to all these, it is also observed that family medicine and household remedies are practiced mostly by experienced old tribal people who practise it within the family and neighbourhood, whereas professional medicines are practiced by the specialists like herbalists, midwife, bone-setter, cupper etc. Services of these people are taken at the time of illness. The use of tribal medicine, particularly the herbs have also been found to be used in illness in the study area. The herbal practitioners have complained that due to the massive deforestation they are not getting most of the herbs commonly used for the treatment of diseases. The social and cultural dimensions of tribal health in the study area have undergone a series of change since last hundred years. Like other human beings, tribals also want relief from diseases and as other means of treatments except traditional practitioners are not available in their doorsteps, they oblige to depend first on traditional practices of health. A mixed behaviour of modern and traditional concept in regard to health and diseases is being observed in the study area.

The Tribal Concept and Belief of Health, Disease and Treatment

The World Health Organisation has defined the concept of health as, 'Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity' (Lewis, 1976, p.94). The basic concept of health and disease, in this sense, needs an empirical investigation in various societies for acquiring specific details. The tribals normally expect, healthy body and the strength to perform normal duties so that one does not become a mental and financial burden of the family. We have found mixed responses in the tribal mind

about the concept of health, disease, and treatment in the target villages under the Tagore Society for Rural Development and in the non-target villages. To the tribals irrespective of the Santals and Oraons of the study area, the meaning of the term health is similar. It is the right condition of the body and proper functioning of the body as well. Those who are regarded as healthy, can take heavy food, have a good muscular body and are able to do hard work.

Rivers (1924:5-8) has subscribed that the diseases in primitive society are caused by (a) the projection of morbid objects or substances, (b) abstraction of something from the body, and (c) the action of sorcerers on some parts of the body or some objects once connected with the body of a person. Most of the tribals in the study area have similar concept of disease in respect of first and third conditions of diseases as subscribed by Rivers. As thought by the tribal mind most of the diseases are thought to be caused by supernatural being; a deity or a god or a non-human being such as ghost, ancestor or evil spirits or diseases are caused exclusively by magical means by sorcerers and witches and the diseases caused by natural means. Belief in supernatural beings occupies an essential part of their society. They believe that some of the diseases like, *basali*, white discharge, miscarriage and heavy bleeding during menstruation are caused due to wrath of supernatural being, sorcery, spirit intrusion, evil eye and breach of norm or taboo. Some of the diseases are caused due to physical work, climate changes and intake of wrong or excessive food; these diseases may be classified as non-supernatural diseases. We classify the tribal beliefs regarding the causes of illness as, (i) due to ill health; some of the diseases may be caused due to hard physical work, climate changes and intake of wrong or excessive food etc, i.e., scientific causes of illness (ii) traditional belief; dissatisfaction of the supernatural being, wrath of supernatural being, sorcery, spirit intrusion, evil eye, breach of norm or taboo and magical means, (iii) mixed belief regarding illness; belief on both the traditional and scientific causes of illness.

Table 11 depicts the views of the respondents about illness and treatment of diseases during illness in the villages under the Tagore Society for Rural

Development. As a whole 30.84 per cent of the tribals of the target villages believe that illness or suffering of the family members is due to dissatisfaction of the supernatural being or ancestral spirit and 36.92 per cent believe that it is due to ill health. Whereas 31.31 per cent of the tribals have the mixed concept of belief regarding illness: it may be attributed to one cause on one occasion and to some other cause on other occasion. The comparative analysis of the respondents of literate and illiterate tribals of the target villages gives us very interesting results. Among literate tribals, 28.33 per cent believe that illness or sufferings of the family members is due to dissatisfaction of the supernatural being or ancestral spirit, while 38.33 percent believe that it is due to ill health and 33.33 per cent of the literate tribals have mixed concept regarding the causes of illness. However in case of illiterate tribals, 31.82 per cent till have traditional belief regarding illness, while 36.36 per cent believe on the scientific causes of disease, which is due to ill health, and 30.52 per cent among the illiterate respondents have mixed concept regarding illness.

The differential view of the respondents of the Santals and the Oraons of the villages under the Tagore Society for Rural Development shows interesting findings. It is reported that 37.50 per cent of the Santals and 36.17 per cent of the Oraons have changed their attitudes towards modern practices and believe in the scientific causes of disease. However, 28.33 per cent of the Santals and 34.04 per cent of the Oraons still believe in the traditional causes of illness. But 34.17 per cent of the respondents belong to the Santal community and 29.79 percent of the Oraon respondents possess a mixed concept of belief regarding illness. The scenario between literate and illiterate varies significantly. It is reported that 38.88 per cent of the literate Santals have changed their attitudes towards modern medicine and believe in the scientific causes of illness, however 27.77 per cent of them till have traditional belief regarding the causes of illness and 33.33 percent have a mixed concept of belief regarding illness. Likewise, we have found that 37.50 per cent of the literate Oraon respondents believe in the scientific causes of disease, while 29.17 per cent of them have traditional belief regarding illness and 33.33 per cent have mixed concept about the causes of

disease. In case of illiterate Santals, 36.90 per cent believe in the scientific causes of illness, while 28.57 per cent of them still believe in the traditional causes of illness and 34.52 percent have mixed concept regarding illness. However 35.71 per cent of the illiterate Oraons believe in the scientific causes of illness, same percentage of Oraons have belief in the traditional causes of illness and 28.50 per cent among them have mixed concept regarding the causes of disease (Table 11).

Table 11 also shows that only 8.88 per cent of the tribals of the villages under the Tagore Society for Rural Development prefer to consult modern doctor first for treatment, 3.74 per cent of them prefer to consult *ojha* first for their treatment, while 14.01 per cent of the respondents in general prefer to consult either quack or *ojha* first, however 12.62 per cent prefer to consult quack or modern doctor first for their treatment and 60.75 per cent of the respondents prefer anything among available facilities like *ojha*, quack, modern doctor etc first for consultation in case of illness. In regard to the literate tribals, we find slightly different results, 11.67 per cent of the literate respondents prefer to consult modern doctor first for the treatment of diseases and no one of them prefer to consult *ojha* first for treatment in case of illness. Whereas 10 per cent of them prefer to consult either *ojha* or unqualified quack first in case of illness and the preferences of 21.67 per cent is to consult either quack or modern doctor, whichever is available first for their treatment but 56.66 per cent prefer to consult first any means available in their locality. However only 7.79 per cent of the illiterate tribals prefer to consult first modern doctor for treatment, 5.19 per cent prefer to consult only *ojha* first for treatment, 15.58 per cent prefer to consult either quack or *ojha* first, while 9.09 per cent of the illiterate tribals prefer to consult either quack or modern doctor first and 62.34 per cent of them prefer to consult any available facilities in their locality first. In general the tribals try *ojha* first for their treatment, if *ojha* fails then they go to the quacks or any other medicine accessible to them. Sometimes, they try one or more alternatives at the same time of their treatment. If modern medicine fails or fails to gain confidence among the tribals during treatment, they finally return back to the *ojha*.

We have found that, 11.67 per cent of the Santals of the target villages prefer to consult modern doctor first, while 5 percent prefer to consult *ojha* first, though 15 per cent of them prefer to consult either quack or *ojha*, whichever is available first and same percentage of the respondents prefer to consult either quack or modern doctor first and 60.83 per cent of them prefer to consult any available facilities at their locality first, if needed for the treatment of diseases. The difference of opinions between literate and illiterate respondents is prominent. In case of literate Santal, 13.89 per cent of the respondents prefer to consult modern doctor first for the treatment of diseases. No one of them prefers to consult *ojha* first. However 8.33 per cent of the literate respondents prefer to consult either *ojha* or quack first, whichever is available, while 22.22 per cent among them prefer to consult either quack or modern doctor first and 55.56 per cent prefer to consult anything available for their treatment first. The preference for the consultation of modern doctor first for treatment among illiterate respondents is only 10.71 per cent. While 7.14 per cent of them prefer to consult *ojha* first for the treatment of diseases, 17.86 per cent prefer to consult either *ojha* or quack first, only 1.19 per cent of them prefer to consult either quack or modern doctor first but 63.10 per cent prefer to consult anything available for the treatment of diseases first (see Table-11).

In case of the Oraon respondents (Table-11), we have found that in general only 5.32 per cent prefer to consult modern doctors first for their treatment. Very few respondents (2.12 per cent) of them prefer to consult *ojha* first. However, 12.76 per cent of the respondents prefer to consult either quack or *ojha*, whichever is available first for their treatment in case of illness. It is reported that 19.15 per cent of them prefer either quack or modern doctor first, while 60.64 per cent of the respondents prefer to consult any available facilities for treatment first. Only 8.33 per cent of the literate Oraon respondents prefer to depend on modern doctors first. However no one among the literate Oraons prefer to depend on

ojha first for their treatment. Whereas 12.50 per cent of them prefer to consult either quack or *ojha* first for treatment, while 20.83 per cent of the literate Oraon respondents prefer to depend first either on quacks or on modern doctors and 58.33 per cent prefer to depend first on any available facilities for the treatment of illness. In case of the illiterate Oraon respondents, a very few respondents (only 4.29 per cent and 2.86 per cent respectively) prefer to consult modern doctor first and depend on *ojha* first. However, 12.86 per cent prefer to consult first either quack or *ojha*, while 18.57 per cent prefer to consult first either quack or modern doctor and 61.43 per cent prefer to consult first anything available for treatment.

The picture of non-target villages is not the same, as the picture has described the tribals of the target villages regarding concept and belief of health, disease, and treatment. If we analyse the Table 12, it depicts that only 14.81 per cent of the tribals of the non-target villages believe that illness or suffering of the family members is due to ill health, 67.78 per cent of the tribal respondents believe that the causes of illness is due to the dissatisfaction of the supernatural being, whereas only 17.41 per cent of them believe in both. The comparisons of literate and illiterate respondents gives that 35.53 per cent of the literate respondents believe in the scientific causes of illness, 38.16 per cent of them still have faith in the traditional causes of illness and 26.32 per cent believe that illness might be caused by natural and supernatural both. However, only 6.70 percent of the illiterate respondents believe in the scientific causes of illness, 79.38 per cent of them believe that the causes of illness is due to the dissatisfaction of the supernatural being, and 13.92 per cent believe in both.

However, 15 per cent of the Santal respondents of the non-target villages believe in the scientific causes of illness, whereas 67.27 per cent believe that diseases are attributed to the dissatisfaction of the supernatural being and 17.73 per cent of them believe in both. Whereas 35.48 per cent of the literate Santal respondents and only 6.96 per cent of the illiterate Santal respondents believe in the scientific causes of illness, but 37.10 per cent of the literate Santal respondents and as much as 79.11 per cent of the illiterate Santal respondents

believe that diseases are due to the dissatisfaction of the supernatural being, while 27.42 per cent of the literate Santal respondents and 13.92 per cent of the illiterate Santal respondents have mixed concept and belief regarding illness. In case of the Oraons, only 14 per cent respondents believe in the scientific causes of illness, 70 per cent of them are still reported to believe in the traditional causes of diseases and only 16 per cent regard that both the ill health and dissatisfaction of the supernatural being are the causes of diseases. However, 35.71 per cent of the literate respondents and only 5.56 per cent of the illiterate respondents are reported to believe in the scientific causes of illness, but 42.86 per cent of the literate respondents and 80.55 per cent of the illiterate respondents has a belief in the dissatisfaction of the supernatural being, magical means for illness. Whereas 21.43 percent of the literates and 13.88 per cent of the illiterates regard that both the ill health and dissatisfaction of the supernatural being are the causes of illness (see Table-12).

In regard to the consult for treatment of the non-target villages (Table-12), we have found interesting results. Only 6.30 percent of the tribals of the non-target villages prefer to depend first on the modern doctors for their treatment, but 11.85 percent of them prefer first on *ojha*, while 41.85 per cent of the tribal respondents prefer first either on quack or *ojha*, however, 7.78 per cent of the tribals have reported to prefer first either quack or modern doctor for the treatment of diseases and 32.22 per cent of the tribals prefer to consult quack, modern doctor and *ojha*, whichever is available first for their treatment. The pictures of literate tribals is slightly different than that of illiterate tribals, as 10.53 per cent of the literate tribals and only 4.64 per cent of the illiterate tribals prefer to depend first on modern doctors for their treatment. However, 16.49 per cent of the illiterate tribals consult first *ojha* for treatment and no one of literate tribals prefer first on *ojha*. Only 17.11 per cent of the literate and 51.55 per cent of the illiterate tribals are reported to prefer first either *ojha* or quack for treatment, while 21.05 per cent of the literate tribals and only 2.58 per cent of the illiterate tribals prefer to consult first either quack or modern doctor. However, 51.32 per cent of

the literate tribals and 24 per cent of the illiterate tribals prefer to consult first anything available for the treatment of diseases.

We have found that only 6.82 percent of the Santals of the non-target villages prefer to consult modern doctor first for their treatment, while 11.36 per cent of them prefer to consult first *ojha*, but 41.82 per cent prefer first either quack or *ojha* for their illness, 7.73 per cent prefer to believe in quack or *ojha* first and 32.27 of them prefer to depend first on anything available in their area for treatment during illness. Whereas, the percentage of literate Santals prefer to consult modern doctor first for treatment (11.29 per cent) is more than double than that of the illiterate Santals (5.06 Per cent). No one of the literate Santals prefer first to depend on *ojha* for treatment during illness, but 15.82 per cent of the illiterate Santals prefer to consult first *ojha* for treatment. However, 16.13 per cent of the literate Santals and 51.90 per cent of the illiterate Santals prefer to consult either *ojha* or quack, whichever is available both for treatment first. It is reported that 20.97 per cent of the literate Santals and only 2.53 per cent of the illiterate Santals prefer to consult first either quack or modern doctor during illness. Though 51.61 per cent of the literate Santals and 24.68 per cent of the illiterate Santal prefer to consult first anything available for the treatment of diseases (see Table-12).

In case of the Oraons (Table-12), we have found that only 4 percent of the respondents are reported to prefer modern doctors first, whereas 14 per cent of them prefer to consult first *ohja*, but 42 per cent prefer to consult first either quack or *ojha*, however, 8 per cent of them prefer first to depend either on quack or modern doctors and 32 per cent of the respondents prefer first to consult *ojha*, quack, and modern doctor anything available for the treatment of diseases. Whereas only 7.14 per cent of the literate respondents prefer to consult first modern doctors and no one from illiterate respondents show first preferences for modern doctors. Similarly, no one from literate respondents shows first preferences for *ojha*, though 19.44 per cent of the illiterate respondents prefer first to consult *ojha* for the treatment of diseases. However, 21.43 per cent of the

literate respondents and 50 per cent of the illiterate respondents prefer to consult first either *ojha* or quack and 21.43 per cent of the literate respondents and only 2.78 per cent of the illiterate respondents prefer to consult first either quack or modern doctor. About half of the literate respondents (50 per cent) and one-fourth of the illiterate respondents (25 per cent) prefer first to try *ojha*, quack and modern doctor for the treatment of diseases.

We have found the significant differences in the tribal concept and belief in health, disease, and treatment between the respondents of the target and non-target villages and also among the literate and illiterate tribals. The tribals of both the areas still believe in the traditional concept of health, disease, and treatment. The study reveals that in spite of faith of the tribals in traditional folk healing tribals are not apathetic to accept modern health care practices. Tribals' minds have already been shifted to some extent to the modern concept of health, disease, and treatment due to their exposure to modern medicine and education. It is also observed that though the tribals believe that dissatisfaction of the supernatural being is the cause of some diseases, they may consult modern doctor, if available for treatment. In most of the cases tribals first call the available facilities for their treatment of diseases, *ojha*, if they fail the local *ojha* may call another *ojha* from outside the villages. If all these fail, the patient may consult quack, the other easy available means for consultation, which offer allopathic and indigenous system of medicine. Lastly, if all these fail, they consult modern doctor of the local health centre. This is common with little variation among all the tribals of the study area. Tribals of the target villages are slightly advanced in regard to the modern health care practices. The educated tribals of the study areas are also slightly advanced regarding modern health care practices. The comparison between the Santals and Oraons of both the areas shows that the Santals are little advanced regarding modern health care practices. Here we also have observed that the literate Santals and Oraons are advanced regarding modern health care practices than their illiterate counterparts.

Table 11
Views of the respondents regarding illness and preferences for treatment of diseases in the target villages

Tribal groups	Beliefs regarding illness			First consultation for treatment					Total
	Due to ill health (%)	Illness caused by supernatural beings (%)	Both (%)	MBBS Doctor (%)	Traditional Medicine man (%)	Quack / Folk medicine (%)	Quack / MBBS Doctor (%)	MBBS doctor / Traditional Medicine man or Quack (%)	
Santal	45 (37.50)	34 (28.33)	41 (34.17)	14 (11.67)	06 (5.00)	18 (15.00)	09 (7.50)	73 (60.83)	120 (100)
Literate	14 (38.89)	10 (27.78)	12 (33.33)	05 (13.89)	0 (0)	03 (8.33)	08 (22.22)	20 (55.56)	36 (30.00)
Illiterate	31 (36.90)	24 (28.57)	29 (34.52)	09 (10.71)	06 (7.14)	15 (17.86)	01 (1.19)	53 (63.10)	84 (70.00)
Oraon	34 (36.17)	32 (34.04)	28 (29.79)	05 (5.32)	02 (2.13)	12 (12.77)	18 (19.15)	57 (60.64)	94 (100)
Literate	09 (37.50)	07 (29.17)	08 (33.33)	02 (8.33)	0 (0)	03 (12.50)	05 (20.83)	14 (58.33)	24 (25.53)
Illiterate	25 (35.71)	25 (35.71)	20 (28.58)	03 (4.29)	02 (2.86)	09 (12.86)	13 (18.57)	43 (61.43)	70 (70.47)
Total	79 (36.92)	66 (30.84)	67 (31.31)	19 (8.88)	08 (3.74)	30 (14.02)	27 (12.62)	130 (60.75)	214 (100)
Literate	23 (38.34)	17 (28.33)	20 (33.33)	07 (11.67)	0 (0)	06 (21.67)	13 (56.66)	34 (56.66)	60 (28.04)
Illiterate	56 (36.36)	49 (31.82)	47 (30.52)	12 (7.79)	08 (5.19)	24 (15.59)	14 (9.09)	96 (62.34)	154 (71.96)

Table 12
Views of the respondents regarding illness and preferences for treatment of diseases in the non-target villages

Tribal groups	Beliefs regarding illness			First consultation for treatment					Total
	Due to ill health (%)	Illness caused by supernatural beings (%)	Both (%)	MBBS Doctor (%)	Traditional Medicine man (%)	Quack / Folk medicine (%)	Quack / MBBS Doctor (%)	MBBS doctor / Traditional Medicine man or Quack (%)	
Santal	33 (15.00)	148 (67.27)	39 (17.73)	15 (6.82)	25 (11.36)	92 (41.82)	17 (7.73)	71 (32.27)	220 (100)
Literate	22 (35.48)	23 (37.10)	17 (27.42)	07 (11.29)	0 (0)	10 (16.13)	13 (20.97)	32 (51.62)	62 (28.18)
Illiterate	11 (6.96)	125 (79.11)	22 (13.92)	08 (5.06)	25 (15.82)	82 (51.90)	04 (2.53)	39 (24.68)	158 (71.82)
Oraon	07 (14.00)	35 (70.00)	08 (16.00)	02 (4.00)	07 (14.00)	21 (42.00)	04 (8.00)	16 (32.00)	50 (100)
Literate	05 (35.71)	06 (42.86)	03 (21.43)	01 (7.14)	0 (0)	03 (21.43)	03 (21.43)	07 (50.00)	14 (28.00)
Illiterate	02 (5.56)	29 (80.56)	05 (13.88)	01 (2.78)	07 (19.44)	18 (5.00)	01 (2.78)	09	36 (72.00)
Total	40 (14.81)	183 (67.78)	47 (17.41)	17 (6.30)	32 (11.85)	113 (41.85)	21 (7.78)	87 (32.22)	270 (100)
Literate	27 (35.53)	29 (38.16)	20 (26.32)	08 (10.53)	0 (0)	13 (17.11)	16 (21.05)	39 (51.32)	76 (28.15)
Illiterate	13 (6.70)	154 (79.38)	27 (13.92)	09 (4.64)	32 (16.49)	100 (51.55)	05 (2.58)	48 (24.74)	194 (71.85)

Primary Health Centre and the Tribal people

The health services available in the Primary Health Centre are free of cost. In spite of this, most of the people are not interested to avail the services of the Primary Health Centre due to various reasons. Sometimes, as there are no other alternatives, most of the poor tribals are bound to take the services of the Primary Health Centre. Those who are not interested to visit the hospital have stated the reasons also. Some of the reasons for not visiting hospitals are identified as; (i) belief in folk medicine, (ii) inadequate medical facilities of the hospital, (iii) overall services are not satisfactory, (iv) negligence of the health staff, (v) lack of communication and high cost. The money required to avail the services of the doctor of the Primary Health Centre varies from Rupees 10.00 to Rupees 35.00. Most of the time doctor is not available in the Outdoor Patient Department who remains busy doing private practices in the residence. Most of the medicines prescribed by the doctor are also not available in the Primary Health Centre. These are to be purchased from the open market. All these increase the cost of treatment of a patient. It is also observed that same respondents have reported number of causes for not visiting the Primary Health Centre. If we analyse the Table 13 and 14, its clearly shows the comparative perspective of awareness of the Santals and Oraons of the target and non-target villages, regarding free health services and reasons of non-acceptance of the free health services and the comparative aspect of impact of literacy regarding acceptance and rejection of free health services.

Analysis of the table 13 shows that in general, 75.70 per cent of the tribal respondents in the target villages are aware of the free health services. The literate tribals (83.33 per cent) are more aware of free health services than the illiterate tribals (72.73 per cent). If we compare between the Santals and Oraons of the target villages, it is seen that 79.17 per cent of the Santal respondents are aware of free health services compared to 71.28 per cent of the Oraon respondents. However, 83.33 per cent of the literate Santals and the same percentage of literate Oraon respondents are aware of the free health services. And 77.38 per cent of the illiterate Santal respondents and 67.14 per cent of the

illiterate Oraon respondents are aware of the free health services. It is reported that 56.07 per cent in the tribals of the target villages are visiting the government hospital, though 65 per cent of the literate tribals are visiting hospital and 52.60 per cent of the illiterate tribals visit hospital. However, 60 per cent of the Santal respondents and 51.06 per cent of the Oraon respondents usually visit hospital. It is also observed that 63.89 per cent of the literate Santals and 66.67 per cent of the literate Oraons visit hospital. Among the illiterates, 58.33 per cent of the Santals visit hospital and 45.71 per cent of the Oraons visit hospital.

It is reported that, 8.51 per cent of patients of the target villages are not interested in visiting the government hospitals, as they still believe in folk medicine (see Table-13). Though no one of the literate tribals has belief in folk medicine as a reason for not visiting the hospital, 10.96 per cent of the illiterate tribals are not interested in visiting hospital as they have strong belief in folk medicine. While among the Santals, in general, only 12.50 per cent are not interested in visiting hospital as they have strong belief in folk medicine. No one of the literate Santals has belief in folk medicine as a reason for not visiting the hospital. Though 17.14 per cent of the illiterate Santals have been reported to have strong belief in folk medicine as a result they are not interested in visiting the hospital. Whereas among the Oraons, only 4.35 per cent are reported to have strong belief in folk medicine as they are not interested in visiting the hospital, but no one of the literate Oraons have identified the belief in folk medicine as a cause for not visiting the hospital, however 5.26 per cent of the illiterate Oraons are identified having belief in folk medicine as one of the reasons for not visiting the hospital.

It has been observed that, in general, as many as 79.79 per cent of the respondents of the target villages, are not interested in visiting the hospital due to inadequate medical facilities. As many as 80.95 per cent of the literate tribal respondents and 79.45 per cent of the illiterate tribal respondents have reported that they are not interested to visit the government hospital due to inadequate medical facilities. In case of the Santals, it is observed that as many as 83.33 per cent of the respondents are not interested to visit the government hospital, while

76.92 per cent of the literate and 85.71 percent of the illiterate respondents are not interested in visiting the hospital. In case of the Oraons, we have found that as many as 76.09 per cent of the Oraons in general are not interested to visit the hospital due to this reason. Where 87.50 per cent of their literate respondents and 73.68 per cent of the illiterate respondents are not interested to visit the hospital due to inadequate medical facilities (Table-13).

In general, it is reported that 65.95 per cent of the tribals in the target villages are not interested to visit the hospital, as overall services of the hospital are not satisfactory (Table-13). However, 66.67 per cent of the literate tribals and 65.75 per cent of the illiterate tribals are not interested to visit the hospital due to the same reason. In case of the Santals, in general 62.50 per cent of them are not interested to visit the hospital due to unsatisfactory overall services, of which, 61.54 per cent of their literate and 62.86 per cent of their illiterate are not interested to visit the hospital. Among the Oraons, 69.57 per cent are not interested to visit the hospital due to unsatisfactory service condition of the hospital. Among them, 75 per cent of the literate and 68.42 per cent of the illiterate do not visit the hospital due to the same reason.

In general, 59.57 per cent of the tribals in the target villages have identified negligence of the health staff as one of the reasons for not visiting the hospital, of whom, 57.14 per cent literate tribals have reported to identify the same reasons for not visiting the hospital, but as many as 60.27 per cent illiterate tribals are not interested in visiting the hospital due to the negligence of the health staff (Table-13). In case of the Santals, in general, 60.42 per cent of the respondents have reported that due to the negligence of the health staff, they are not interested to visit the hospital, among them, 53.85 per cent literate Santals and 62.86 per cent illiterate Santals have reported the same reasons. Among the Oraons, in general, 58.70 per cent of the respondents have reported that they are not interested to visit the hospital due to the same reason, of which, 62.50 per cent and 57.89 per cent are literate and illiterate (see Table-13).

The Primary Health Centres are situated in Balapur and Tapan. Inaccessibility is another reason and the tribals have been identified for not visiting the hospital for this reason. In general, 55.31 per cent of the respondents in the target villages are not visiting the hospital due to the lack of communication, of whom, 42.86 per cent are literate, and 58.9 per cent are illiterate. It is reported that among the Santals, in general, 45.83 per cent are not visiting the hospital due to poor communication. Among them, 53.85 per cent of the literate and 42.86 per cent of the illiterate Santals do not take services of the hospital for poor communication. Among the Oraons, it is observed that 65.22 per cent do not go to the hospital due to this reason. A larger section of the population of the Oraons, i.e, 62.50 per cent and 65.79 per cent of the literate and illiterate respondents respectively do not visit the hospital due to the same reason. It is reported that 65.95 per cent of the tribals in the target villages are not visiting the hospital due to the hidden cost of the services of the hospital of whom, 61.90 per cent and 67.12 per cent are literate and illiterate respectively. About, 66.67 per cent of the Santals are not interested to visit the hospital as the services seems to be costly for them, of those, 53.85 per cent and 71.43 per cent are literate and illiterate respectively. Among the Oraons, 65.22 per cent are not interested to visit the hospital due to high cost, of which, 75 per cent and 63.16 percent are literate and illiterate respectively (see Table-13).

Tribals of the non-target villages are lagging behind than their counterpart of the target villages in adopting modern medicine. Analysis of the Table 14 shows that in general, 57.41 per cent of the tribals in the non-target villages are reported to be aware of free health services of the government hospital. As many as 72.37 per cent literate respondents and 64.94 per cent illiterate respondents have reported that they are aware of this fact. Among the Santals, it is observed that 57.27 per cent respondents are aware this fact, of whom, 72.58 per cent and 51.27 per cent literate and illiterate respondents respectively are aware of free government health services. It is reported that among the Oraons, 58 percent are aware of free government health services and 71.43 percent literate Oraons and 52.78 per cent illiterate Oraons are aware of free government health services.

Table 13
Awareness in free health services and reasons for Non-acceptance of the target villages

Tribal groups	Awareness in free health services				Reasons for not visiting the hospital						Total (%)
	Aware (%)	Not Aware (%)	Visit Hospital (%)	Not Visiting Hospital (%)	<u>Belief in folk medicine</u> (%)	<u>Inadequate medical facilities</u> (%)	<u>Service not satisfactory</u> (%)	<u>Negligence of the health staff</u> (%)	<u>Lack of communication</u> (%)	Costly (%)	
Santal	95 (79.17)	25 (20.83)	72 (60)	48 (40)	06 (12.5)	40 (83.33)	30 (62.5)	29 (60.42)	32 (66.67)	32 (66.67)	120 (100)
Literate	30 (83.33)	06 (16.67)	23 (63.89)	13 (36.11)	0 (0)	10 (76.92)	08 (61.54)	07 (53.85)	07 (53.85)	07 (53.85)	36 (30.00)
Illiterate	66 (77.38)	19 (22.62)	49 (58.33)	36 (41.67)	06 (17.14)	30 (85.71)	22 (62.86)	22 (62.86)	15 (42.86)	25 (71.43)	84 (70.00)
Oraon	67 (71.28)	27 (28.72)	48 (51.06)	46 (48.94)	02 (4.35)	35 (76.09)	32 (69.57)	27 (58.70)	30 (65.22)	30 (65.22)	94 (100)
Literate	20 (83.33)	04 (16.67)	16 (66.67)	08 (33.33)	0 (0)	07 (87.50)	06 (75.00)	05 (62.50)	05 (62.50)	06 (75.00)	24 (25.53)
Illiterate	47 (67.14)	23 (32.86)	32 (45.71)	38 (54.29)	02 (5.26)	28 (73.68)	26 (68.42)	22 (57.89)	25 (65.79)	24 (63.16)	70 (74.47)
Total	162 (75.70)	52 (24.30)	120 (56.07)	94 (43.93)	08 (8.51)	75 (79.79)	62 (65.96)	56 (59.57)	52 (55.32)	62 (65.96)	214 (100)
Literate	50 (83.33)	10 (16.67)	39 (65.00)	21 (35.00)	0 (0)	17 (80.95)	14 (66.67)	12 (57.14)	09 (42.86)	13 (61.90)	60 (28.04)
Illiterate	112 (72.73)	42 (27.27)	81 (52.60)	73 (47.40)	08 (10.96)	58 (79.45)	48 (65.75)	44 (60.27)	43 (58.9)	49 (67.12)	154 (71.96)

In general, 41.86 per cent tribals in the non-target villages are interested to visit the government hospital, of which, 59.21 per cent are literate and 36.60 per cent are illiterate. In case of the Santals, it is reported that 43.18 per cent are interested to visit the hospital. Comparison between literate and illiterate Santals shows that, 59.68 per cent and 36.71 percent of the literate and illiterate respondents respectively are interested to visit the hospital. Among the Oraons, 42 per cent are interested to visit the hospital, of whom, 57.14 per cent are literate, and 36.11 per cent are illiterate. The analysis of the reasons for not visiting hospitals by the respondents of the non-target villages gives us interesting results. In general, 20.78 per cent of the tribals are not visiting the hospital due to their belief in folk medicine. However, 12.90 per cent literate tribals and 22.76 per cent illiterate tribals are not interested to visit the hospital due to their belief in folk medicine. Among the Santals, 20 per cent are not interested to visit the hospital due to their strong belief in folk medicine, of which, 12 per cent are literate, and 22 per cent are illiterate Santals. Among the Oraons, 24.14 per cent are not interested to visit the hospital due to their faith in folk medicine; of whom, 16.67 percent and 26.09 per cent are literate, and illiterate Oraons (Table 14).

It is observed that as many as 69.48 per cent respondents of the non-target villages who are not visiting the hospital have reported that inadequate medical facilities in the hospital are one of the reasons for not visiting the hospital (Table-14). About 74.19 per cent of the literate respondents and 68.29 per cent of the illiterate respondents respectively are not interested in visiting the hospital due to inadequate medical facilities. Among the Santals, as many as 68.8 per cent are not visiting the hospital due to inadequate medical facilities of which, 76 per cent of the literate Santals and 67 per cent of the illiterate Santals are not interested in visiting the hospital for the same reasons. In case of the Oraons, 72.41 per cent are not visiting the hospital for the same reasons. However, more illiterate respondents (73.91 per cent) than literate respondents (66.67 per cent) are not interested in visiting the hospital for the inadequate medical facilities. However, 61.04 per cent of the tribals in the non-target villages have reported that services of the hospital are not satisfactory. More literate tribals (64.52 per cent) than their

illiterate counterparts (60.16 per cent) are not satisfied with the overall services of the hospital. It is reported that more Oraon respondents (62.07 per cent) than their Santal counterparts (60.80 per cent) have the opinion that they are not interested in visiting the hospital as the services of the hospital are not satisfactory. More literate respondents (64 per cent of the Santals and 66.67 per cent of the Oraons) than their illiterate counterparts (60 per cent of the Santals and 60.87 per cent of the Oraons) are not interested in visiting the hospital, as overall services are not satisfactory (see Table 14).

However, 85.71 per cent of the tribals of the non-target villages have reported that they are not interested in visiting the hospital for the negligence of the health staff (see Table -14), of whom, 70.97 per cent are literate and 89.43 per cent are illiterate. Slightly more Oraons (86.21 per cent) than the Santals (85.60 per cent) have reported that for the negligence of the health staff they are not interested in visiting the hospital. Likewise, more literate Oraons (83.33 per cent) than their Santal counterparts (68 per cent) are not interested in visiting the hospital for the same reason. In case of illiterate respondents, 90 per cent of the Santals compared to the 86.96 per cent of the Oraons have identified the same reason for not visiting the hospital. Communication is not a barrier to the tribals of the non-target villages. Most of them are staying close to the Primary Health Centres. However, 26.62 per cent are not visiting the hospital, have reported lack of communication as one of the reasons. About 29.03 per cent and 26.02 per cent of the literate and illiterate respondents are not visiting the hospital for communication problem. Among the Santals, 25.60 per cent are not visiting the hospital due to the lack of communication; of whom, 32 per cent of the literate respondents, and 24 per cent of the illiterate respondents do not visit the hospital for this reason. In case of the Oraons, 31.03 per cent do not visit the hospital due to the lack of communication. Among them, 16.67 per cent and 34.78 per cent are literate and illiterate respectively who do not visit the hospital for the same reason. It is also reported that 61.69 per cent of the tribals are not visiting the hospital for the high cost, while almost same percentage of literate and illiterate respondents, i.e, 61.29 per cent literate and 61.79 per cent illiterate respondents have identified the high cost as one of the reasons for not visiting the hospital

(Table-14). In case of the Santals, 61.60 per cent of the respondents are not interested in visiting the hospital as it is expensive, of them, 60 per cent are literate respondents, and 62 per cent are illiterate respondents. In case of the Oraons, 62.07 per cent are not interested in visiting the hospital due to this reason. However, 66.67 per cent and 60.87 per cent of the literate and illiterate Oraons have reported expensive treatment in the health centre.

The awareness of free health services and the percentage of visit of the government hospital by the literate tribals are more than their illiterate counterparts of both the target and non-target villages. The Santals are more aware than the Oraons of both the target and non-target villages. Those who have availed the services of the government health centres are not at all satisfied with the quality of the services; most of the medicines are not available in the health centre, after treatment in most of the cases patients are not cured. Irrational behaviour of the health staff, non-availability of the medical officers, as well as medicines are some of the complaints of the tribals who visit the hospital. They prefer to refer most of the cases to the Balurghat District Hospital as in most of the cases pharmacist or other staff of the hospital treats the patients in the absence of medical officer at the Primary Health Centre. The tribals believe that modern medicine is good to cure diseases but it's not meant for the poor. If some one would like to treat a patient with modern doctor, the cost involved is beyond the limit of most of the tribals. However, quack treats patients more rationally as per the opinion of most of the tribals. They charge less than the modern doctors and the cost of medicines is also less in comparison to the cost of the medicines prescribed by a modern doctor. Further more the payment of fees to a quack may be kept due, which can be paid after harvesting or when the money is available.

Table 14
Awareness in free health services and reasons for Non-acceptance of the non-target villages

Tribal groups	Awareness in free health services				Reasons for not visiting the hospital						Total (%)
	Aware (%)	Not Aware (%)	Visit Hospital (%)	Not Visiting Hospital (%)	<u>Belief in folk medicine</u> (%)	<u>Inadequate medical facilities</u> (%)	<u>Service not satisfactory</u> (%)	<u>Negligence of the health staff</u> (%)	<u>Lack of communication</u> (%)	Costly (%)	
Santal	126 (57.27)	94 (42.73)	95 (43.18)	125 (56.82)	25 (20.00)	86 (68.80)	76 (60.80)	107 (85.60)	32 (25.60)	71 (61.60)	220 (100)
Literate	45 (72.58)	17 (27.42)	37 (59.68)	25 (40.32)	03 (12.00)	19 (76.00)	16 (64.00)	17 (68.00)	08 (32.00)	15 (60.00)	62 (28.18)
Illiterate	81 (51.27)	77 (48.73)	58 (36.71)	100 (63.29)	22 (22.00)	67 (67.00)	60 (60.00)	90 (90.00)	24 (24.00)	62 (62.00)	158 (71.82)
Oraon	29 (58.00)	21 (42.00)	21 (42.00)	29 (58.00)	07 (24.14)	21 (72.41)	18 (62.07)	25 (86.21)	09 (31.03)	18 (62.07)	50 (100)
Literate	10 (71.43)	04 (28.57)	08 (57.14)	06 (42.86)	01 (16.67)	04 (66.67)	04 (66.67)	05 (83.33)	01 (16.67)	04 (66.67)	14 (28.00)
Illiterate	19 (52.78)	17 (47.22)	13 (36.11)	23 (63.89)	06 (26.09)	17 (73.91)	14 (60.87)	20 (86.96)	08 (34.78)	14 (60.87)	36 (72.00)
Total	155 (57.41)	115 (42.59)	116 (41.86)	154 (57.04)	32 (20.78)	107 (69.48)	94 (61.04)	132 (85.71)	41 (26.62)	95 (61.69)	270 (100)
Literate	55 (72.37)	21 (27.63)	45 (59.21)	31 (40.79)	04 (12.90)	23 (74.19)	20 (64.52)	22 (70.97)	09 (29.03)	19 (61.29)	76 (28.15)
Illiterate	100 (51.55)	94 (48.45)	71 (36.60)	123 (63.40)	28 (22.76)	84 (68.29)	74 (60.16)	110 (89.43)	32 (26.02)	76 (61.79)	194 (71.85)

***Ojha*, Quacks, and the Treatment of Diseases; Few Case Studies**

We may cite here a few case studies of the treatment of diseases, to have a better understanding of the situation. Most of the tribals who prefer modern medicines would like to get treatment from the quack first. One such popular quack of the locality is Najrul, based at Balapur. Najrul has learned treatment from a qualified doctor of the Malancha Primary Health Centre. He has opened a medical shop at Balapur and is now doing good business. It is observed that the patient flow in his chamber is very good. He is also available on call. His fees depend on the ability to pay or economic standard of the patients.

Bharat Oraon of Dakshin Kesrail village is an *ojha*. He treats patient in a number of ways. He has learned this profession from his father. He treats the patient with the magical means, prayers, miracle drugs etc. He also uses herbs if required. His treatment may be summarised as follows. He mostly diagnoses diseases with three type of methods; (i) a cock is sacrificed and ritual ceremony is performed after which he mediates to find out the disease, (ii) reading of pulse and observation and (iii) intuition. The treatment being followed is also of three types: (i) magical treatment, (ii) supernatural worship, and (iii) herbal treatment. In magical treatment *mantras* play a significant role for the cure of diseases. This method of cure is usually taken up when spirit intrusion is suspected. There are different *mantras* for different spirits. When *mantras* are uttered, sometimes lots of actions are involved. In supernatural worship, the supernatural power believed to be responsible for the disease is worshipped with offerings made. This is done with a view to appeasing the deity and consequent withdrawal of the diseases. In herbal treatments, after the diagnosis of the disease herbs are being prescribed which are taken either orally or applied externally. He has reported that he is an expert bone setting with natural herbs.

There are some other tribal *pandit* who either does treatment with the help of the medical herbs or magical means and prayers. It is interesting to come across with an *ojha* in the study area who use all sorts of technique to treat the patient. He treats the patient with modern medicine along with *mantras* and worships. He

prefers prayer, magical means etc, just to satisfy the patient and the patient party. He also knows that it is the modern medicine, which cures the patient. As desired by him willingly we are not putting his name. Tribal even goes out of their village, even out side the study area to seek the help of *ojha* in case of illness. Another interesting observation is that some of the tribals are found to provide sacrifices even to the Hindu deities for the cure of diseases or some other purposes. We may cite a specific example of *Bolla Kali-Mata*. There is a *Kali Mandir*, Hindu goddess at Bolla, 26 kilometer away from the study area. This *Kali Mata* is not only *jagrata* (can do anything she wishes) for the Hindu communities but to the tribals also. Every year hundreds of the tribals come to Bolla to offer sacrifices to their *Kali Mata*.

Economic Conditions and the Treatment of Diseases; Few Case Studies

We already mentioned that the treatment of the diseases vary among the tribals. In addition to the educational status another important factor, which influence the health care practices of any family, is economic status. Though the economic status of the tribals is almost same, few cases are identified whose annual income is more than ^{Rs.} 30,000.00. There are only six cases, which will be cited here. In-depth case studies are done for all these cases, the perception of the respondents regarding causes of diseases and the treatment of it will be discussed in details to have a better understanding of the concept of health, disease and treatment among the tribals. These will also help us to assess the impact of economy on health care practices.

Jatin Murmu lives at Balapur. He has one son and two daughters. Jiten is working in a school and he has primary level of education. This year Marina, his younger daughter was infected by gastrointestinal disease. Jatin immediately admitted her to the nearby Malancha Primary Health Centre and she underwent treatment and came back home after complete cure. Balapur is not the target village of the Tagore Society for Rural Development. However, we have found the impact of modern medicine on Jatin's family. He mostly avails the services of the Primary Health Centre, though he is not at all satisfied with the quality the

services of the Primary Health Centre. Sometimes, he has to go to the private doctors either at Balapur or at Balurghat for treatment. He considers Najrul, a quack at Balapur as a good private doctor. As per Jatin, the incidence of a disease is disorder in certain conditions of human body. He also has a belief that illness is also believed to be caused by mental, spiritual and moral disorders. Likewise, Budhra Hemram of Balapur was also interested in modern medicine. Last year his son Ramen, aged 13 years was infected by gastrointestinal disease and he was treated at Primary Health Centre. Kain Murmu of Balapur also sought the help of modern doctor during illness and he has no faith in the traditional practices.

Khara Hasda, 55 years old, is the domicile of the village Sondapukur. His wife Baha had been suffering from various ailments for the last two years. After consultation of the village *ojha*, it was reported that she had been attacked by evil spirit and until this evil spirit was satisfied, it would attack the family members one after another and ruin the family. According to the advices of the *ojha*, every arrangement had been made for practising the art of witchcraft but nothing had happened. He then consulted another *ojha* from the neighboring village. The *ojha* gave him folk medicine, for the time being she was all right. After a few days, again she had severe headache and consulted quack at Balapur, who identified that it was a case of menopause. Khara has strong belief in folk medicine.

Banduram Oraon lives in Chamtakuri, a target villages of the Tagore Society for Rural Development. He was suffering from severe stomach pain. He had consulted modern doctor for his treatment and doctors identified that it was the case of gastric ulcer. With the financial support of the Tagore Society for Rural Development he had undergone long treatment at Balurghat and then he was fully cured after a surgery. Similarly Pradip, a Madhaymik passed cultivator living in the same village. He had no faith in traditional medicine, for any kind of treatment he consulted modern doctors. Both Pradip and Banduram were the active group members run by the Tagore Society for Rural Development. They agreed that they had faith in traditional practices but gradually inclined to develop faith in modern medicine.

Biswanath Oraon of Dakshin Kesrail village had been suffering from tuberculosis for a few years. It was identified by the doctor of the Tagore Society for Rural Development and was referred to Balurghat for further treatment. He had undergone full course of treatment and came back to the village after cure. Now he is teaching in a non-formal school run by the Tagore Society for Rural Development. He also works as a Health Educator of the Society. His wife runs a women group in their village. She has agreed that due to the intervention of the Tagore Society for Rural Development in their village, a lot of changes in health care practices are observed. People are now frequently going for modern treatment, and the faith in folk medicine is declining gradually.

Some prevalent Diseases among the Tribal People

The tribals are capable of identifying various kinds of ailments and diseases within the limit of their own respective world-view. The parochial names and the details of these are familiar to them. Whether their understanding and identifying are scientific or not is a different issue. We will discuss here some of the diseases; knowledge of the tribals regarding these diseases etc, in a comparative perspective. If the tribals at least know the name of the diseases, we will consider that they have some knowledge of the diseases.

Tuberculosis

Tuberculosis is a prevalent disease found in the study area. Most of the tribals of the study area are aware of the disease. Tables 15 and 16 show the percentage of respondents having some knowledge of the disease or at least they know the name of the disease. It is reported that 85.51 per cent of the tribals of the target villages have some knowledge about the disease (Table-15), of whom, 93.33 per cent are literate, and 82.47 per cent are illiterate. This disease is known to most of the Santals of the target villages being 86.67 per cent; among them, 94.44 per cent, and 83.33 per cent are literate and illiterate respectively. In case of the Oraons, 84.04 per cent of the respondents have some knowledge of tuberculosis, while among them, 91.67 per cent and 81.43 per cent are literate

and illiterate respectively. It has been observed that 81.48 per cent of the tribals of the non-target villages have some knowledge of the disease (Table-16). About, 85.53 per cent and 79.90 per cent of the literate and illiterate tribals respectively have some knowledge of this disease. In case of the Santals, 81.82 per cent have some knowledge of the disease. Among them, 85.48 per cent and 80.38 per cent are literate and illiterate. In case of the Oraons, 80 per cent have some knowledge of the disease. This knowledge is found among 85.71 per cent literate and 77.78 percent illiterate Oraons of the non-target villages.

According to the opinion of the respondents of the study area tuberculosis is caused due to excessive smoking, alcohol drinking and heavy work. It is observed that most of the tribals neglect this disease. If the illness turns to an acute stage, they visit the Primary Health Centre or the clinic of the Tagore Society for Rural Development for allopathic treatment. The usual practice of the Primary Health Centre is to refer the case to the district hospital at Balurghat for necessary examination and X-ray. X-ray is done mostly from private practitioners. Poor tribals quite often discontinue the treatment, as it is expensive to get the treatment at a distance place and for getting X-rays. The Tagore Society for Rural Development sometimes provides financial support to the poor tribal patients.

Leprosy

Leprosy is very common among the tribals of the study area. This is one of the prevalent diseases, which has social stigma even today. Leprosy is considered as the most dangerous disease. This not only affects the body but also affects the social position of the patient. Tribals believe that leprosy can be transmitted from generation to generation. Most of them also believe that sinful actions usually results into leprosy. As this disease is also believed to be a contagious one, the infected person generally tries to suppress the fact. Table 15 shows that 69.16 per cent of the tribals of the target villages have some knowledge of leprosy. However, awareness regarding leprosy varies between literate and illiterate tribals being 73.33 per cent and 67.53 per cent respectively. In case of

the Santals, 70 per cent have some knowledge of the disease, among them, 75 per cent and 67.86 per cent are literate and illiterate respectively. In case of the Oraons, 68.09 per cent have some knowledge of the disease. However, 70.83 per cent and 67.14 per cent literate and illiterate Oraons respectively have some knowledge of the disease. Whereas table 16 shows that 68.52 per cent of the tribals of the non-target villages have some knowledge of leprosy. About 71.05 per cent and 67.53 per cent of the literate and illiterate tribals respectively have some knowledge of leprosy. In case of Santals of the non-target villages, 69.09 per cent have some knowledge of the disease. Among them, 70.97 per cent and 68.35 per cent are literate and illiterate. In case of Oraons of the non-target villages, 66 per cent have some knowledge of the disease, 71.43 per cent and 63.89 per cent literate and illiterate Oraons respectively have some knowledge of this disease leprosy. Though most of the tribals have knowledge of leprosy, awareness level of the tribals is very low. By interviewing the Medical Officer In-charge of Malancha Primary Health Centre, Health Staff of the Tagore Society for Rural Development, village medicine men, and quacks, it was revealed that the tribals of both the target and non-target villages are quite ignorant about the cause and characteristic of the disease. In most of the cases the disease remains uncared for years together.

Malaria

Malaria is another prevalent disease of the study area. According to the report of the Medical Officer in-charge of the Malancha Primary Health Centre and Health Staff of the Tagore Society for Rural Development, the main reasons for the reappearance of malaria are unhygienic condition, stagnant water areas in the locality that help to grow mosquitoes and lack of knowledge of the tribals about preventive care of the disease. Tribals have their own beliefs and generally if a large section of the villagers suffer from this disease, they desert the village instead of taking modern treatment. Table 15 shows that 55.14 per cent of the tribals of the target villages have some knowledge of malaria, among them, 61.67 per cent and 52.60 per cent of the literate and illiterate tribals respectively have some knowledge of this. In case of the Santals of the target villages, 55.83 per

cent have some knowledge of malaria, of which, 61.11 per cent and 53.57 per cent are literate and illiterate. Among the Oraons of the target villages, 54.26 per cent have some knowledge of the disease. The knowledge of this disease is found among 62.50 per cent of the literate Oraons and 51.43 per cent of the illiterate Oraons. Table 16 shows that 54.81 per cent of the tribals of the non-target villages have some knowledge of malaria; 60.53 per cent and 52.06 per cent of the literate and illiterate tribals of the non-target villages have some knowledge of malaria. While 55 per cent of the Santals of the non-target villages have some knowledge of malaria; 61.29 per cent and 52.53 per cent of the literate and illiterate Santals have some knowledge about this disease. In case of the Oraons, 54 per cent of the respondents in general have some knowledge of malaria, of them, 57.14 per cent are literate, and 50 per cent are illiterate.

The analysis of the tables 17 and 18 gives the knowledge of the tribal communities of both the target and non-target villages about the causes of malaria and preventive care of malaria. The knowledge and awareness level of the tribal communities in the target villages regarding this is better than their counterparts in the non-target villages. In general, 87.85 per cent of the respondents of the target villages are aware of the harmful effects of mosquito bites, among them, 93.33 per cent and 85.71 per cent literate and illiterate respondents respectively are aware of the harmful effect of mosquito bites. Among the Santals, 90 per cent are aware of the harmful effect of mosquito bites, of which, 94.44 per cent are literate, and 88.10 per cent are illiterate. In case of the Oraons, 85.11 per cent are aware of the harmful effect of mosquito bites, among them, 91.67 per cent and 82.86 per cent of the literate and illiterate Oraons respectively are aware of the harmful effect of mosquito bites. The same table explains that 76.17 per cent of the tribals of the target villages know that some illness is caused by mosquito bites, but 64.49 per cent know the name of the disease. However, 80 per cent and 74.68 per cent of the literate and illiterate respondents respectively know that some illness is caused by mosquito bites. And 68.33 per cent and 62.99 per cent of the literate and illiterate respondents respectively know the name of the disease. In case of the Santals, 76.67 per cent know that some illness is caused by mosquito bites. While 80.56 per cent and 75

per cent of the literate and illiterate respondents know that some illness is caused by mosquito bites. However, 65 per cent of the Santals know the name of the disease. Though 69.44 per cent and 63.10 per cent of the literate and illiterate Santals respectively know the name of the disease. In case of the Oraons, 75.53 per cent know that some illness is caused by mosquito bites; of which, 79.17 per cent are literate, and 74.29 per cent are illiterate. It is reported that 63.83 per cent of them know the name of the disease; of which, 66.67 per cent, and 62.86 per cent literate and illiterate Oraons respectively know the name of the disease.

In regard to the knowledge to prevent mosquito bites or steps to prevent mosquito bites in general, 57.48 per cent tribals of the target villages know the steps to prevent mosquito bites and rest of the respondents have reported negatively, while 61.67 per cent literate respondents and 55.84 per cent illiterate respondents respectively know this. In case of the Santals, 65 per cent know the steps to prevent mosquito bites, among them, 69.44 per cent and 63.10 per cent are literate and illiterate. In case of the Oraons, 63.83 per cent know the steps to prevent mosquito bites, of which, 66.67 per cent, and 62.86 per cent literate and illiterate Oraons respectively know the steps to prevent mosquito bites. Regarding the knowledge of the breeding place, same Table reflects that in general, 57.48 per cent of the tribals of the target villages know the mosquito-breeding place. However, 61.67 per cent and 55.84 per cent of the literate and illiterate tribals respectively have this knowledge. In case of the Santals, 58.33 per cent know the mosquito-breeding place, among them, 63.89 per cent and 55.95 per cent are literate and illiterate Santals respectively. Among the Oraons, 56.38 per cent know the mosquito-breeding place; of which, 58.33 per cent, and 55.71 per cent of the literate and illiterate Oraons respectively know the mosquito-breeding place (see Table-17).

It is interesting to know the knowledge and awareness of the tribals of the non-target villages, which is just reverse to that in the target villages (see Table-18). Only 33.70 per cent are aware of the harmful effect of mosquito bites. However, 81.58 per cent and 14.95 per cent of the literate and illiterate tribals respectively are aware of this. Among the Santals, in general, 34.09 per cent are aware of it,

of them, 82.26 per cent are literate, and 15.19 per cent are illiterate. In case of the Oraons, 32 per cent have reported to have knowledge of the harmful effect of the mosquito bites; of which, 78.57 per cent, and only 13.89 per cent of the literate and illiterate Oraons respectively have knowledge of the harmful effect of mosquito bites. It is observed that 28.89 per cent of the tribals of the non-target villages have reported that illness is caused by mosquito bites; of which, 63.16 per cent literate tribals, and 15.46 per cent illiterate tribals have reported the same. In case of the Santals in general, 29.09 per cent of them know that illness is caused by mosquito bites; 62.90 per cent and 15.82 per cent literate and illiterate Santals respectively know this. If we consider the Oraons, it is reported that in general, 28 per cent know that illness is caused by mosquito bites, of them, 64.29 per cent, and 13.89 per cent are literate and illiterate.

It is observed that in general, 27.41 percent of the respondents of the non-target villages know the name of the disease caused by mosquito bites; 59.21 per cent literate respondents and only 14.95 per cent illiterate respondents know the exact name of the disease (Table-18). In case of the Santals, 28.18 percent of the respondents have reported to know the name of the disease; 59.68 per cent and 15.82 per cent literate and illiterate Santals respectively have reported positively. In case of the Oraons, only 24 per cent have reported positively, among them, 57.14 per cent are literate and 11.11 per cent are illiterate. In regard to the knowledge about the steps to prevent mosquito bites, same Table shows that only 2.22 per cent of the tribals of the non-target villages know the steps, while 7.89 per cent of the literate tribals and no illiterate tribals know the steps. Among the Santals, 2.27 per cent know the steps; all are literate (8.06 percent). In case of the Oraons, only 2 per cent of them know the steps; all literate (7.14 per cent). In regard to the knowledge of the mosquito breeding places, in general only 21.48 per cent tribals of the non-target villages know the mosquito breeding places; 59.21 per cent and 6.70 per cent are literate and illiterate respectively. In case of the Santals, 21.82 per cent have reported positively, among them, 59.68 per cent, and 6.96 per cent literate and illiterate Santals respectively have reported positively. Among the Oraons, 20 per cent have reported positively.

However, 57.14 per cent and 5.56 per cent literate and illiterate Oraons have reported positively (Table 18).

Diarrhoea

The Medical Officer In-charge of Malancha Primary Health Centre and the representatives of the Tagore Society for Rural Development have reported that diarrhoea comes twice in every year, during the rains and winters, which affect almost all the families. Children mostly below the age of five years are mostly affected by diarrhoea. Tribals collect their drinking water either from ring-well or from tube-well and put it in a dirty plate with high necks. The tribals also drink water stored in the ditches or field. Open-air defecation is common among them. As a result massive diarrhoea breaks out during rainy seasons every year. In the year 1991, diarrhoea epidemic took at least 60 lives (Annual Report of the Tagore Society for Rural Development; 1992,1993). The Tagore Society for Rural Development has been taken up a diarrhoea management programme since 1992 for the target villages. Home management of diarrhoea, distribution of Oral Re-hydration Solution packets, massive awareness programmes and one to one counseling by the trained health staff through home visit etc, are some of the activities taken up by the Tagore Society for Rural Development to control diarrhoea. Tables 15 and 16 also show the awareness of the tribals about the sign of dehydration and the knowledge regarding how to prepare re-hydration solution.

Symptoms of Diarrhoea:

Sinking of fontanel, loss of skin elasticity, reduced urine flow etc, are some of the signs of dehydration.

Sinking of fontanel

It is reported that the awareness of the tribals regarding the sign of dehydration is poor. Table 15 depicts that only 20.56 per cent of the tribals of the target villages

are aware that the sinking of fontanel is a sign of diarrhoea. However, 26.67 per cent and 18.18 per cent literate and illiterate tribals respectively are aware about this sign. In case of the Santals, 21.67 per cent are aware about this sign, while, 27.78 per cent, and 19.05 per cent of the literate and illiterate Santals respectively know this sign of diarrhoea. In regard to Oraon respondents, 19.15 per cent know this sign; 25 per cent and 17.145 per cent are literate and illiterate Oraons. In the non-target villages, 11.11 per cent respondents have reported to know that sinking of fontanel is a sign of diarrhoea; 17.11 percent are literate and 8.76 per cent are illiterate. In case of the Santals in general, 11.36 per cent are aware of the sign, while, 17.74 per cent literate Santals and 8.86 per cent illiterate Santals know this sign. In regard to the Oraons, only 10 per cent know that sinking of fontanel is a sign of dehydration, of which, 14.29 per cent and 8.33 per cent literate and illiterate Oraons know this sign (Table-16).

Loss of Skin Elasticity

In general, 24.77 per cent of the tribals of the target villages have reported to know this sign. However, 36.67 per cent of the literate tribals and 20.13 per cent of the illiterate tribals are aware of this sign of dehydration. Among the Santals, 26.67 per cent are aware of this sign. However, 38.89 per cent and 21.43 per cent of the literate and illiterate Santals respectively know the above sign. In case of the Oraons in general, 22.34 per cent of the respondents are aware of this sign, while 33.33 per cent of the literate and 18.57 per cent of the illiterate respectively know this sign of dehydration (see Table-15). In the non-target villages, 17.41 per cent of the respondents know the above sign; 22.37 per cent and 15.46 per cent of the literate and illiterate respondents respectively know the above sign (Table-16). It is reported that 18.18 per cent of the Santals are aware of this sign. Though 22.58 per cent and 16.46 per cent of the literate and illiterate Santals respectively have reported positively. In case of the Oraons, it is reported that 14 per cent know the sign. Though 21.42 per cent of the literate Oraons and 11.11 per cent of the illiterate Oraons know this sign.

Reduced Urine Flow

Reduced urine flow is a sign of dehydration and a very few tribals of the target and non-target villages are aware of this sign. In the target villages, 29.90 per cent of the tribals know this sign is a cause of diarrhoea, while, 46.67 per cent of the literate tribals and 23.38 per cent of the illiterate tribals know it. In case of the Santals, it is reported that 30.83 per cent in general, know the sign, and among them 47.22 per cent of the literate and 23.81 per cent of the illiterate Santals are aware of this sign. In case of the Oraons, 28.72 per cent of the respondents know this sign, while, 45.83 per cent literate Oraons and 22.86 per cent illiterate Oraons respectively know this sign of dehydration (see Table-15). In the non-target villages, 5.18 per cent of the tribals know this sign. However, 28.95 per cent of the literate tribals and 9.79 per cent of the illiterate tribals are aware of this sign. In case of the Santals, 15.91 per cent in general, are aware of the sign, while 29.03 per cent of the literate Santals and 10.76 per cent of the illiterate Santals know the sign. In case of the Oraons, only 12 per cent know this sign, but 28.57 per cent and 5.56 per cent literate and illiterate Oraons respectively have reported to know the above sign of dehydration (see Table 16).

Use of Oral Re-hydration Solution

Use of Oral Re-hydration Solution packets during diarrhoea is common among the tribals of the target villages. Most of the tribals of the target villages are also aware of the preparation of the re-hydration solution at home. In general, 42.06 per cent know how to prepare this solution, while 76.67 per cent of the literate and 23.33 per cent of the illiterate know this process. In case of the Santals, 43.33 per cent know the technique of preparation of the solution. Among them, 77.78 per cent literate and 28.57 per cent illiterate know this technique (Table-15). In the non-target villages, only 19.26 per cent of the tribals know this technique, though 40.79 per cent of the literate tribals and only 10.82 percent of the illiterate tribals know how to prepare the solution at home. In case of the Santals, 20.91 per cent know this technique, among them, 41.94 per cent literate and 12.66 per cent illiterate know the the preparation. Among the Oraons, only

18 per cent know the technique; among them, 35.71 per cent, and 11.11 per cent are literate and illiterate respectively (Table 16). As per the annual report of the Tagore Society for Rural Development the death toll of diarrhoea in every year is very much alarming. Most of the death occurs among the tribals. The awareness of diarrhoea among the tribals is very low. At the acute stage of the patient the tribals bring the patient to the hospital. We have observed some changes in practices among the tribals in the target villages. The literate tribals of both the target and non-target villages are aware of home management of diarrhoea. In most of the cases they try Oral Re-hydration Solution in case of diarrhoea, and if this is not available, they use the solution of sugar, salt and water in appropriate proportion. After that if patient is not cured, they take the patient to the Tagore Society for Rural Development, quack, and government hospital for treatment.

Skin Diseases

As per the annual report of the Tagore Society for Rural Development (Annual Report; 1994, 1995, 1996) many tribal adults of both sexes suffer from ringworm and most of the children have scabies. The lack of desire to take regular bath, the habit of using the same clothes at least for a week and not using soap for ablution of anus after defecation reflect the lack of knowledge and habit of the tribals of hygiene and cleanliness. Most of the tribals have no time to clean their surroundings. In case of skin disease, they apply the extract of *karanj* tree on the affected spot. Its bad smell prevents flies. Some times tribals, mostly in the target villages, visit the clinics of the Tagore Society for Rural Development for treatment of their children. In addition to the diseases discussed here, excessive bleeding of the women during the period, white-discharge, small pox, swelling of the body, back pain, miscarriage, prolapsed of the pregnant women, headache, bodyache, eyeache etc, are some of the other common diseases suffered by the tribals of the study area believed to be caused by the supernatural being.

Table 15
Some prevalent diseases and awareness about the oral re-hydration solution among the tribals of the target villages

Tribal groups	Diseases			Symptoms of dehydration			Awareness about the oral re-hydration solution		
	Tuberculosis (%)	Leprosy (%)	Malaria (%)	Sinking of fontanel (%)	Loss of skin elasticity (%)	Reduced urine flow (%)	Aware (%)	Not aware (%)	Total (%)
Santals	104 (86.67)	84 (70.00)	67 (55.83)	26 (21.67)	32 (26.67)	37 (30.83)	52 (43.33)	68 (56.67)	120 (100)
Literate	34 (94.44)	27 (75.00)	22 (61.11)	10 (27.78)	14 (38.89)	17 (47.22)	28 (77.78)	8 (22.22)	36 (30.00)
Illiterate	70 (83.33)	57 (67.86)	45 (53.57)	16 (19.05)	18 (21.43)	20 (23.81)	24 (28.57)	60 (71.43)	84 (100)
Oraons	79 (84.04)	64 (68.09)	51 (54.26)	18 (19.15)	21 (22.34)	27 (28.72)	38 (40.43)	56 (59.57)	94 (100)
Literate	22 (91.67)	17 (70.83)	15 (62.50)	6 (25.00)	8 (33.33)	11 (45.83)	18 (28.57)	6 (25.00)	24 (25.53)
Illiterate	57 (81.43)	47 (67.14)	36 (51.43)	12 (17.14)	13 (18.57)	16 (22.86)	20 (28.57)	50 (71.43)	70 (74.47)
Total	183 (85.51)	148 (69.16)	118 (55.14)	44 (20.56)	53 (24.77)	64 (29.91)	90 (42.06)	124 (57.94)	214 (100)
Literate	56 (93.33)	44 (73.33)	37 (61.67)	16 (26.67)	22 (36.67)	28 (46.67)	46 (76.67)	14 (23.33)	60 (28.04)
Illiterate	127 (82.47)	104 (67.53)	81 (52.60)	28 (18.18)	31 (20.13)	36 (23.38)	44 (28.57)	110 (71.43)	154 (71.96)

Table 16

Some prevalent diseases and awareness about the oral re-hydration solution among the tribals of the non-target villages

Tribal groups	Diseases			Symptoms of dehydration			Awareness about the oral re-hydration solution		
	Tuberculosis (%)	Leprosy (%)	Malaria (%)	Sinking of fontanel (%)	Loss of skin elasticity (%)	Reduced urine flow (%)	Aware (%)	Not aware (%)	Total (%)
Santals	180 (81.82)	152 (69.09)	121 (55.00)	25 (11.36)	40 (18.18)	35 (15.91)	46 (20.91)	174 (79.09)	220 (100)
Literate	53 (85.48)	44 (70.97)	38 (61.29)	11 (17.74)	14 (22.58)	18 (29.03)	26 (41.94)	36 (58.06)	62 (28.18)
Illiterate	127 (80.38)	108 (68.35)	83 (52.53)	14 (8.86)	26 (16.46)	17 (10.76)	20 (12.66)	138 (87.34)	158 (71.82)
Oraons	40 (80.00)	33 (66.00)	27 (54.00)	5 (10.00)	7 (14.00)	6 (12.00)	9 (18.00)	41 (82.00)	50 (100)
Literate	12 (85.71)	10 (71.43)	8 (57.14)	2 (14.29)	3 (21.43)	4 (28.57)	5 (35.71)	9 (64.29)	14 (28.00)
Illiterate	28 (77.78)	23 (63.89)	18 (50.00)	3 (8.33)	4 (11.11)	2 (5.56)	4 (11.11)	32 (88.89)	36 (72.00)
Total	220 (81.48)	185 (68.52)	148 (54.81)	30 (11.11)	47 (17.41)	41 (15.19)	52 (19.26)	218 (80.74)	270 (100)
Literate	65 (85.53)	54 (71.05)	46 (60.53)	13 (17.11)	17 (22.37)	22 (28.95)	31 (40.79)	45 (59.21)	76 (28.15)
Illiterate	155 (79.90)	131 (67.53)	101 (52.06)	17 (8.76)	30 (15.46)	19 (9.79)	21 (10.82)	173 (89.18)	194 (71.85)

Table 17

Awareness of the harmful effects of the mosquito bites, illness caused by the mosquito bites, name of the illness and steps to prevent mosquito bites etc of the target villages

Tribal groups	Mosquito bites are harmful		Illness		Name of the illness		Steps to prevent mosquito bites		Breeding place		Total
	Aware (%)	Not aware (%)	Aware (%)	Not aware (%)	Know (%)	Don't know (%)	Know (%)	Don't know (%)	Know (%)	Don't know (%)	
Santal	108 (90.00)	12 (10.00)	92 (76.67)	28 (23.33)	78 (65)	42 (35)	70 (58.33)	50 (41.67)	83 (69.17)	37 (30.83)	120 (100)
Literate	34 (94.44)	2 (5.56)	29 (80.56)	7 (19.44)	25 (69.44)	11 (30.56)	23 (63.89)	13 (36.11)	26 (72.22)	10 (27.78)	36 (30.00)
Illiterate	74 (88.10)	10 (11.90)	63 (75.00)	21 (25.00)	53 (63.10)	31 (36.90)	47 (55.95)	37 (44.05)	57 (67.86)	27 (32.14)	84 (70.00)
Oraon	80 (85.11)	14 (14.89)	71 (75.53)	23 (24.47)	60 (63.83)	34 (36.17)	53 (56.38)	41 (43.62)	53 (56.38)	41 (43.62)	94 (100)
Literate	22 (91.67)	2 (8.33)	19 (79.17)	5 (20.83)	16 (66.67)	8 (33.33)	14 (58.33)	10 (41.67)	17 (70.83)	7 (29.17)	24 (25.53)
Illiterate	58 (82.86)	12 (17.14)	52 (74.29)	18 (25.71)	44 (62.86)	26 (37.14)	39 (55.71)	31 (44.29)	36 (51.43)	34 (48.47)	70 (74.47)
Total	188 (87.85)	26 (12.15)	163 (76.17)	51 (23.83)	138 (64.49)	76 (35.51)	123 (57.48)	91 (42.52)	136 (63.55)	78 (36.45)	214 (100)
Literate	56 (93.33)	4 (6.67)	48 (80.00)	12 (20.00)	41 (68.33)	19 (31.67)	37 (61.67)	23 (38.33)	43 (71.67)	17 (28.33)	60 (28.04)
Illiterate	132 (85.71)	22 (14.29)	115 (74.68)	39 (25.32)	97 (62.99)	57 (37.01)	86 (55.84)	68 (44.16)	93 (60.39)	61 (39.39)	154 (71.96)

Table 18

Awareness of the harmful effects of the mosquito bites, illness caused by the mosquito bites, name of the illness and steps to prevent mosquito bites etc., of the non-target villages

Tribal groups	Mosquito bites are harmful		Illness		Name of the illness		Steps to prevent mosquito bites		Breeding place		Total
	Aware (%)	Not aware (%)	Aware (%)	Not aware (%)	Know (%)	Don't know (%)	Know (%)	Don't know (%)	Know (%)	Don't know (%)	
Santal	75 (34.09)	145 (65.91)	64 (29.09)	156 (70.91)	62 (28.18)	158 (71.82)	5 (2.27)	215 (97.73)	48 (21.82)	172 (78.18)	220 (100)
Literate	51 (82.26)	11 (17.74)	39 (62.90)	23 (37.10)	37 (59.68)	25 (40.32)	5 (8.06)	57 (91.94)	37 (59.68)	25 (40.32)	62 (28.18)
Illiterate	24 (15.19)	134 (84.81)	25 (15.82)	133 (84.18)	25 (15.82)	133 (84.18)	0 (100.00)	158 (100.00)	11 (6.96)	147 (93.04)	158 (71.82)
Oraon	16 (32.00)	34 (68.00)	14 (28.00)	36 (72.00)	12 (24.00)	38 (76.00)	1 (2.00)	49 (98.00)	10 (20.00)	40 (80.00)	50 (100)
Literate	11 (78.57)	3 (21.43)	9 (64.29)	5 (35.71)	8 (57.14)	6 (42.86)	1 (7.14)	13 (92.86)	8 (57.14)	6 (42.86)	14 (28.00)
Illiterate	5 (13.89)	31 (86.11)	5 (13.89)	31 (86.11)	4 (11.11)	32 (88.89)	0 (100.00)	36 (100.00)	2 (5.56)	34 (94.44)	36 (72.00)
Total	91 (33.70)	179 (66.30)	78 (28.89)	192 (71.11)	74 (27.41)	196 (72.59)	6 (2.22)	264 (97.78)	58 (21.48)	212 (78.52)	270 (100)
Literate	62 (81.58)	14 (18.42)	48 (63.16)	28 (36.84)	45 (59.21)	31 (40.79)	6 (7.89)	70 (92.11)	45 (59.21)	31 (40.79)	76 (28.15)
Illiterate	29 (14.95)	165 (85.05)	30 (15.46)	164 (84.54)	29 (14.95)	165 (85.05)	0 (0)	194 (100.00)	13 (6.70)	181 (93.30)	194 (71.85)

ENVIRONMENTAL SANITATION AND PERSONAL HYGIENE

We shall discuss here housing, sanitation, and personal hygiene of the tribals in some details from a comparative perspective. These are integral parts of the cultural and health behavior of a community.

Housing and its conditions

Almost all houses of the tribals are in similar condition with little differences. The houses are *kaccha* with one or two rooms without having any boundaries. In general almost 80 per cent of the houses have two rooms whereas rest of the houses have only one room. In most of the cases windows are not found. We also have seen a few double stored *kaccha* houses. The houses of the Santals are clean and well decorated than that of the Oraon houses. It is reported that 20 per cent of the houses of the target villages have tin roofs and the roofs of the rest of the houses are made by straw. It is interesting to note that, for fear of lifting cattle by thieves, 80 per cent of the families in the target villages use their living room to keep cattle at night. In some of the cases, we also have observed that those who have two storied houses, domestic animals are kept on the ground floor and in a few cases; cattles are kept under a separate shade. The scenario in the non-target villages is almost same. All the houses are *kaccha* ones with one or two rooms only. Most of the *kaccha* houses have no windows and with out any boundary wall. The roofs of most of the houses are made by straw. It has observed that the tribals in the non-target villages keep cattle in their living room in the night, though a few tribal uses separate shade for the domestic animals.

Sanitation

A community's idea of sanitation and hygiene determines to a large extent its health status. The condition of sanitation among the tribals in both the target and non-target villages is low. It is observed that sanitation condition of the tribals in the target villages is better than that in the non-target villages (Tables 19 and 20).

Similarly, the knowledge of sanitation among the literate tribals of both the areas are slightly better. The drainage system of both the target and non-target villages are almost missing. Sullage water allowed to pass out of the houses through narrow drains cut in the ground. The drains are not properly cut so water gets accumulated creating a breeding ground for mosquitoes and germs. Due to the poor drainage system rainwater fails to pass submerging the lanes in the rainy seasons. Table 19 shows that there are only 12 Santal houses of the target villages (10 percent of the total Santal respondents) have reported to have latrine facility; 5 belong to the literate Santals (13.89 per cent). These latrines are under utilised. However, there are no latrines of the Santals of the non-target villages, and the Oraons do not have latrines in both the target and non-target villages.

The concept and treatment of worm infection

The tribals of both the target and non-target villages defecate in the fields and bushes. As a result most of the tribal children suffer from worm infection. The awareness of the consequences of the open-air defecation of the respondents of the target villages is better than that of the non-target villages (Table 19). This might be due to the awareness programmes of the Tagore Society for Rural development regarding the sanitation and the treatment of the worm infected children. In the target villages, in general, 58.88 per cent tribals have reported to be aware that open-air defecation is one of the causes of worm infection; among them, 80 per cent are literate and 50.65 per cent are illiterate. In case of the Santals of the target villages, 63.33 per cent have reported positively, but 80.56 per cent and 55.95 per cent of the literate and illiterate respondents respectively have reported positively. However, we have found that 53.19 per cent of the Oraons have reported positively and 79.17 per cent and 44.29 per cent of the literate and illiterate Oraons respectively have reported positively.

In the non-target villages, the awareness of the tribals is poor. It is reported that 24.81 per cent of the respondents have reported that they are aware of the consequences of the open-air defecation, but 55.26 per cent and 11.34 per cent literate and illiterate respondents respectively have reported positively. In case of the Santals, 25 per cent have reported positively, but 54.84 per cent and only

13.29 per cent literate and illiterate respondents respectively have reported positively. Whereas 24 per cent of the Oraons know the consequences of the open-air defecation, but 57.14 per cent and 11.11 per cent literate and illiterate respondents respectively have reported positively (Table 20).

Worm infection and the use of de-worming medicine

The tables 19 and 20 show that use of modern de-worming medicine varies from tribe to tribe. The de-worming of the children below 14 years of age is an important child health programme run by the Tagore Society for Rural Development. As a part of this programme, the Society provides de-worming medicine twice in a year to all the children below the age of 14 years. It is observed that 41.12 per cent of the tribals of the target villages are seen to use modern medicine for de-worming, but 13.08 per cent tribals use traditional medicine and the rest use no medicine. It is interesting to note that 80 per cent and 25.97 per cent literate and illiterate tribals respectively use modern de-worming medicine. It is interesting that no one of the literate tribals depend on traditional medicine, but 18.18 per cent illiterate tribals still depend on traditional medicine for de-worming of their children.

It is reported that 44.16 per cent of the Santals in target villages use modern medicine, of which, 13.33 percent use traditional medicine and rest of them use no medicine for the de-worming of their children. It is interesting to note that 80.56 per cent and 28.57 per cent of the literate and illiterate Santals use modern medicine and 19.05 per cent illiterate tribals still depend on traditional medicine and no one of the literate tribals depend on traditional medicine. In case of the Oraons, 37.25 per cent depend on modern medicine, 12.77 per cent depend on traditional medicine and the rest use no medicine. However, 79.17 per cent and 22.86 per cent of the literate and illiterate Oraons depend on modern medicine. About 17.14 percent of the illiterate Oraons use traditional medicine and no one of the literate Oraons use traditional medicine. Only few families of the non-target villages are found to use de-worming medicine. About 14.44 per cent of the tribals use modern medicine, but 17.08 per cent use ^{ti}traditional medicine. However,

23.68 percent and 10.82 per cent of the literate and illiterate tribals respectively use modern medicine, but 18.42 per cent and 16.49 per cent of the literate and illiterate respondents have reported to still use traditional medicine (see Table 19 and 20).

Tribe wise comparison shows that 17.73 per cent Santals have reported to depend on modern medicine and 16.82 per cent depend on traditional medicine, but rest of them have reported to use no medicine for de-worming (Table-19). It is reported that 29.03 per cent and 13.29 per cent of the literate and illiterate Santals use modern medicine, while 17.74 per cent of the literate Santals use traditional medicine, whereas, 16.46 per cent of the illiterate Santals use traditional medicine for de-worming. The rest of the literate and illiterate Santals have not been using any de-worming medicine. In case of the Oraons, 18 per cent still depend on the traditional medicine and rest of them have not been using any de-worming medicine. While 21.43 percent literate Oraons use traditional medicine and 16.67 per cent illiterate Oraons use traditional de-worming medicine.

It is interesting to note that those who are aware of the worm infection in the non-target villages have reported to be aware that worm infection is dangerous to health. In general, 99.21 per cent respondents of the target villages have reported that worm infection is dangerous to health; of them, 97.92 per cent literate and all the illiterate have reported to be aware of worm infection and its negative impact. Tribe wise comparison shows that 98.68 per cent of the Santals have reported to be aware of worm infection as dangerous to health, but all the Oraons those who are reported to be aware of worm infection also know that it is dangerous to health. It is interesting to note that all the illiterate Santals and 96.55 per cent of the literate Santals respectively have reported positively (Table-19). Whereas, all the respondents of the non-target villages who have reported the consequences of open-air defecation is worm infection know that worm infection is dangerous to health.

Table 19
Environmental Sanitation and Personal Hygiene of the target villages

Tribal Groups	Deification		Consequences of the open air deification				Use of de-worming medicine		Total
	Open air (%)	Use of latrine (%)	Worm infection (%)	*Dangerous to health (%)	*Don't know (%)	Don't know (%)	Traditional (%)	Modern (%)	Total (%)
Santal	108 (90.00)	12 (10.00)	76 (63.33)	75 (98.68)	01 (1.32)	44 (36.67)	16 (13.33)	53 (44.17)	120 (100)
Literate	31 (86.11)	05 (13.89)	29 (80.56)	28 (96.55)	01 (3.45)	07 (19.44)	0 (0)	29 (80.56)	36 (30.00)
Illiterate	77 (91.67)	07 (8.33)	47 (55.95)	47 (100.00)	0 (0)	37 (44.05)	16 (19.05)	24 (28.57)	84 (70.00)
Oraon	94 (100.00)	0 (0)	50 (53.19)	50 (100.00)	0 (0)	44 (46.81)	12 (12.77)	35 (37.23)	94 (100)
Literate	24 (100.00)	0 (0)	19 (79.17)	19 (100.00)	0 (0)	05 (20.83)	0 (0)	19 (79.17)	24 (25.53)
Illiterate	70 (100)	0 (0)	31 (44.29)	31 (100)	0 (0)	39 (55.71)	12 (17.14)	19 (27.14)	70 (74.47)
Total	202 (94.39)	12 (5.61)	126 (58.88)	125 (99.21)	01 (0.79)	88 (41.12)	28 (13.08)	88 (41.12)	214 (100)
Literate	55 (91.67)	05 (8.33)	48 (80.00)	47 (97.92)	01 (2.08)	12 (20.00)	0 (0)	48 (80.00)	60 (28.04)
Illiterate	147 (95.45)	07 (4.55)	78 (50.65)	78 (100)	0 (0)	76 (49.35)	28 (18.18)	40 (25.97)	154 (71.96)

N=* Number of respondents out of the respondents who know that the consequences of the open-air deification is worm infection.

Table 20
Environmental Sanitation and Personal Hygiene of the non-target villages

Tribal Groups	Deification		Consequences of the open air deification				Use of de-worming medicine		Total
	Open air (%)	Use of latrine (%)	Worm infection (%)	*Dangerous to health (%)	*Don't know (%)	Don't know (%)	Traditional (%)	Modern (%)	Total (%)
Santal	217 (98.64)	3 (1.36)	55 (25.00)	55 (100.00)	0 (0)	165 (75.00)	37 (16.82)	39 (17.73)	220 (100)
Literate	61 (98.39)	01 (1.61)	34 (54.84)	34 (100)	0 (0)	28 (45.16)	11 (17.74)	18 (29.03)	62 (28.18)
Illiterate	156 (98.73)	02 (1.27)	21 (13.29)	21 (100)	0 (0)	137 (86.71)	26 (16.46)	21 (13.29)	158 (71.82)
Oraon	50 (100)	0 (0)	12 (24.00)	12 (100)	0 (0)	38 (76.00)	09 (18.00)	0 (0)	50 (100)
Literate	14 (100)	0 (0)	08 (57.14)	08 (100)	0 (0)	06 (42.86)	03 (21.43)	0 (0)	14 (28.00)
Illiterate	36 (100)	0 (0)	04 (11.11)	04 (100)	0 (0)	35 (97.22)	06 (16.67)	0 (0)	36 (72)
Total	267 (98.89)	03 (1.11)	67 (24.81)	67 (100)	0 (0)	203 (75.19)	46 (17.08)	39 (14.44)	270 (100)
Literate	75 (98.68)	01 (1.32)	42 (55.26)	42 (100.00)	0 (0)	34 (44.74)	14 (18.42)	18 (23.68)	76 (28.15)
Illiterate	192 (98.97)	02 (1.03)	22 (11.34)	22 (100)	0 (0)	172 (88.66)	32 (16.49)	21 (10.82)	194 (71.85)

N=* Number of respondents out of the respondents who know that the consequences of the open-air deification is worm infection.

Drinking Water

The provision of safe drinking water is one of the important components of water and sanitation programme of the Society. The analysis of the tables 21 and 22 reveals interesting picture regarding the source of drinking water of the target and non-target villages. The sources of drinking water of both the target and non-target villages are mainly tube wells and ring wells. It is observed that the majority of the tribals of the non-target villages draw drinking water from ring well as they do not have any tube well facilities nearby and the main source of drinking water of the tribals of the target villages is tube well.

In the target villages, 66.36 per cent of the tribals depend on tube well for drinking water, but as many as 90 per cent literate respondents draw drinking water from tube well and 57.14 per cent illiterate respondents draw drinking water from tube well. The rest depend on ring well for drinking water. However, only 10.74 per cent tribals of the non-target villages draw drinking water from tube well; of which, 15.79 per cent are literate and 8.76 per cent are illiterate. Among the Santals of the target villages, 76.67 per cent draw drinking water from tube well and the rest depend on ring well for drinking water; 91.67 per cent literate and 70.24 per cent illiterate draw drinking water from tube well. Whereas, only 10.45 per cent Santals of the non-target villages draw drinking water from tube well and rest of them depend on ring well. It is reported that 14.52 per cent literate respondents and 8.86 per cent of the illiterate respondents have reported to draw drinking water from tube well and others draw from ring well. Among the Oraons, 53.19 per cent draw drinking water from tube well and the rest draw from ring well. It is observed that as many as 87.50 per cent and 41.43 per cent literate and illiterate respondents draw drinking water from tube well and others draw from ring well. However, only 12 percent respondents of the non-target villages have reported to draw drinking water from tube well and the rest depend on ring well. It is observed that 21.43 per cent literate respondents and 8.33 per cent illiterate respondents draw drinking water from tube well and others draw from ring well (see Table-21 and 22).

It is commonly believed that the water from the tube well is safe, but the health staff of the Tagore Society for Rural Development shows concern for boiling of drinking water. There is possibility of contamination of the tube well water. In most of the cases, first layer water is being tapped for sinking of tube well. There is no deep tube well. All the ring wells are open and some times washing of clothes and bathing are done near the tube well and ring well. Though the common places of bathing and washing of clothes are ponds. The purification of water by at least boiling before drinking is not the practice of any of the tribal families. Most of the tribals of the non-target villages do not have any concept of safe drinking water. According to them ring well water is tastier than that of the tube well water. We may cite here the concept of Khara, an old tribal of Sondapukur village. He thinks there is no harm to drink the water from *Khari* (Canal) and he views this as safe water. In their young age every one used to drink water from the *Khari* or pond only and nothing happened to them. He has narrated, "Till now I prefer to drink water from *Khari*. Now people are taking water from the heart of the earth and *Dharti-mata* will not forgive you". He has viewed that the water from the tube well and ring well is the crying of our *Dharti-ma*.

Personal Hygiene

Now we shall analyse some aspects of personal hygiene of the tribals of both the target and non-target villages. Though it is commonly believed that the tribals do not bother about personal hygiene. The tribe wise analysis of personal hygiene of some of the aspects like boiling of milk every time for the baby, washing hand before feeding the baby, washing hand before and after taking the food, bathing baby, using soap while taking bath, using detergent for washing of clothes etc, reveal an interesting picture (Table 23 and 24). Tribals usually boil milk only once. This might be due to the shortage of the fuel wood. Even today tribals in both the target and non-target villages, for fuel wood mainly depend on forest.

Table 21
Sources of the drinking water and hygienic method adopted for the drinking water of the target villages

Tribal groups	Tube well (%)	Ring well (%)	Pond (%)	Boil drinking Water (%)	Do not boil drinking water (%)	Total (%)
Santal	92 (76.67)	28 (23.33)	0 (0)	0 (0)	120 (100)	120 (100)
Literate	33 (91.67)	03 (8.33)	0 (0)	0 (0)	36 (100)	36 (30.00)
Illiterate	59 (70.24)	25 (29.76)	0 (0)	0 (0)	84 (100)	84 (70.00)
Oraon	50 (53.19)	44 (46.81)	0 (0)	0 (0)	94 (100)	94 (100)
Literate	21 (87.50)	03 (12.50)	0 (0)	0 (0)	24 (100)	24 (25.53)
Illiterate	29 (41.43)	41 (58.57)	0 (0)	0 (0)	70 (100)	70 (74.47)
Total	142 (66.36)	72 (33.64)	0 (0)	0 (0)	214 (100)	214 (100)
Literate	54 (90.00)	06 (10.00)	0 (0)	0 (0)	60 (100)	60 (28.04)
Illiterate	88 (57.14)	66 (42.86)	0 (0)	0 (0)	154 (100)	154 (71.96)

Table 22
Sources of the drinking water and hygienic method adopted for the drinking water of the non-target villages

Tribal groups	Tube well (%)	Ring well (%)	Pond (%)	Boil drinking Water (%)	Do not boil drinking water (%)	Total (%)
Santal	23 (10.45)	197 (89.55)	0 (0)	0 (0)	220 (100)	220 (100)
Literate	09 (14.52)	53 (985.48)	0 (0)	0 (0)	62 (100)	62 (28.18)
Illiterate	14 (8.86)	144 (91.14)	0 (0)	0 (0)	158 (100)	158 (71.82)
Oraon	06 (12.00)	44 (88.00)	0 (0)	0 (0)	50 (100)	50 (100)
Literate	03 (21.43)	11 (78.57)	0 (0)	0 (0)	14 (100)	14 (28.00)
Illiterate	03 (8.33)	33 (91.67)	0 (0)	0 (0)	36 (100)	36 (72.00)
Total	29 (10.74)	241 (89.26)	0 (0)	0 (0)	270 (100)	270 (100)
Literate	12 (15.79)	64 (84.21)	0 (0)	0 (0)	76 (100)	76 (28.15)
Illiterate	17 (8.76)	177 (91.24)	0 (0)	0 (0)	194 (100)	194 (71.85)

In the target villages (Table-23), 77.57 per cent of the tribals are reported to wash their hands before feeding their baby. It constitutes 80 per cent literate and 74.68 per cent illiterate. Majority of the tribals (90.19 per cent) wash their hands before and after taking food. It is reported that 93.33 per cent literate and 88.96 per cent illiterate tribals have reported positively regarding washing of hands before and after taking food. It is reported that 46.26 per cent of the tribals give bath to their baby daily, while 61.67 per cent and 40.26 per cent of the literate and illiterate tribals respectively have reported positively regarding bathing of their baby. Regarding daily bath, majority of the tribals (95.79 per cent) have reported positively. It is reported that 98.33 per cent of the literate tribals and 94.81 per cent of the illiterate tribals take their bath daily. Regarding the using of soap while taking of bath, in general, 79.44 per cent of the tribals have reported positively, however 81.67 per cent and 78.57 per cent literate and illiterate tribals respectively have reported positively. It is observed that 55.61 per cent of the tribals use detergent for washing the clothes of their baby, of them, 81.67 per cent are literate, and 44.81 per cent are illiterate. Majority of the tribals (more than 97 per cent) wash their face and clean their teeth daily. It is reported that all the literate respondents and more than 96 per cent illiterate respondents wash their face and clean their teeth daily. The majority of the tribals usually use twig to clean their teeth, while toothbrush, cream or tooth powder are also being used by some of the tribals. Washing of hands after latrine is a common practice of the tribals but the use of soap is very rare. Wearing of shoes seems to be not very popular, as a few tribals have reported to wear shoes.

In the non-target villages (Table-24), 66.22 per cent wash their hands before feeding their baby, while 72.37 per cent and 58.25 per cent literate and illiterate respondents respectively have reported positively. Majority of the respondents (91.85 per cent) use to wash their hands before and after taking food. It is reported that 94.74 per cent literate and 90.72 per cent illiterate respondents respectively have reported positively regarding washing of hands before and after taking food. It is reported that most of the tribals here are not interested in giving bath to their baby daily. Only 40.37 per cent of the respondents give bath to their baby daily, while 55.26 per cent and 38.66 per cent of the literate and

illiterate respondents respectively have reported positively. Regarding daily bath, all the respondents have reported to take bath daily. Regarding the using of soap while taking bath, in general, 47.78 per cent of the respondents have reported positively, however 64.47 per cent and 41.24 per cent literate and illiterate respondents respectively have reported positively. The use of the detergent for washing of the clothes is also not very common. It is reported that 28.52 per cent of the respondents use detergent for washing the clothes of their baby, while 44.74 per cent literate respondents and 22.16 per cent illiterate respondents use detergent for the washing of their baby's clothes. The remaining respondents use traditionally prepared alkaline for washing of the clothes. This is mainly prepared from the banana tree. They fire the leaves and other parts of the plant and use the ash as alkaline and boil the clothes in water using the ash. Majority of the respondents wash their face and clean their teeth daily. Most of them have reported to use twig for cleaning teeth though it is observed that some of the respondents have reported to use modern tooth powder now-a-days. Washing of hands after latrine is also a common practice of the respondents but the use of soap is very rare. Wearing of shoes does not seem to be very popular at all and a few respondents are found wearing shoes.

Tribe wise analysis of the target villages reflects that majority of the Santals (78.33 percent) have reported to wash their hands before feeding their baby; 86.11 percent are literate and 75 per cent are illiterate (Table-23). Majority of them (92.50 per cent) use to wash their hands before and after taking food. It is reported that 94.74 per cent literate and 90.72 per cent illiterate Santals respectively have reported positively regarding washing of hands before and after taking food. It is reported that 46.67 per cent of the Santal respondents give bath to their baby daily, of which, 61.11 per cent are literate and 40.48 per cent are illiterate. All the Santals taking bath daily and majority of them (80 per cent) use soap while taking of bath, while 83.33 per cent and 78.57 per cent literate and illiterate Santals respectively have reported positively. It is observed that 51.67 per cent of the Santal respondents use detergent for washing the clothes of their baby, while majority of the literate Santals (86.11 per cent) and only 36.90 per cent illiterate Santals use detergent for the washing of their baby's clothes.

Majority of the Santals (more than 95 per cent) wash their face and clean their teeth daily. It is reported that all literate Santals and more than 94 percent of the illiterate Santals wash their face and clean their teeth daily. Washing of hands after latrine is a common practice of the Santals but the use of soap is not popular. Wearing of shoes seems to be not very popular, as a few tribals have reported to wear shoes.

In case of Oraons (Table-23), 76.60 percent wash hands before feeding their baby; 83.33 per cent and 74.29 per cent are literate and illiterate respectively. Majority of the Oraons (87.23 per cent) wash their hands before and after taking food, of which, 91.67 per cent are literate and 85.71 per cent are illiterate. It is observed that 45.74 per cent Oraon respondents give bath to their baby daily, while 62.50 per cent and 40 per cent literate and illiterate respondents respectively have reported positively. It is reported that 90.42 per cent respondents take bath daily, its constitute 95.83 per cent literate respondents and 88.57 per cent illiterate respondents and majority of the respondents (78.72 per cent) use soap while taking of bath, of them, 79.17 per cent and 78.57 per cent are literate and illiterate respectively. It is observed that 60.64 per cent Oraon respondents use detergent for washing the clothes of their baby, of them, 79.17 per cent are literate and and 54.29 per cent are illiterate. Majority of the Oraons (almost 95 per cent) wash their face and clean their teeth daily. It is reported that all the literate Oraons and more than 92 percent illiterate Oraons wash their face and clean their teeth daily. Washing of hands after latrine is a common practice of the Oraons but the use of soap is limited to a very few cases. Wearing of shoes does not seem to be very popular and a few tribals have reported to wear shoes.

In the non-target villages (Table-24), among the Santals, 63.18 percent wash their hands before feeding their baby, of them, 72.58 percent are literate and 59.49 per cent are illiterate. It is interesting to note that majority of them (92.73 per cent) wash their hands before and after taking food, of which, 95.16 per cent are literate, and 91.77 per cent are illiterate. It is reported that 41.82 per cent give bath to their baby daily, of which, 58.06 per cent are literate and 39.24 per cent

are illiterate. It is observed that all the Santals take bath daily and 48.18 per cent use soap while taking of bath, of which, 64.52 per cent are literate and 41.77 per cent are illiterate. It is observed that only 30 per cent Santal respondents use detergent for washing the clothes of their baby, while 48.39 per cent and 22.78 per cent literate and illiterate respectively use detergent for the washing of their baby's clothes. Majority of the Santals (90 per cent) wash their face and clean their teeth daily, of them, 96.77 per cent are literate and more than 87 per cent are illiterate. Washing of hands after latrine is a common practice of the Santals but the use of soap is not popular. Wearing of shoes does not seem to be very popular and a few tribals have reported to wear shoes.

In case of the Oraons (see Table-24), 58 per cent wash their hands before feeding their baby, of them, 71.43 per cent are literate and 52.78 per cent are illiterate. Majority of them (88 per cent) wash their hands before and after taking food. It is reported that 92.86 per cent literate and 86.11 per cent illiterate respondents respectively have reported positively regarding washing of hands before and after taking food. It is observed that 34 per cent give bath to their baby daily, while 42.86 per cent are literate and 36.11 per cent are illiterate. It is reported that all the Oraons take bath daily. However, 46 percent use soap while taking of bath, of which, 64.29 per cent are literate and 38.89 per cent are illiterate. It is reported that 22 per cent use detergent for washing the clothes of their baby, of them, 28.57 per cent literate and 19.44 per cent illiterate Oraons use detergent for the washing of their baby's clothes. Majority of the Oraons (88 per cent) wash their face and clean their teeth daily, of which, 92.86 per cent literate and more than 86 per cent illiterate Oraons wash their face and clean their teeth daily. Washing of hands after latrine is a common practice of the Oraons but the use of soap is limited to a very few cases. Wearing of shoes does not seem to be very popular and a few tribals have reported to wear shoes.

Table 23
Hygienic method adopted by the respondents of the target villages

Tribal groups	Boil milk every time the baby is fed (%)	Wash hand before feeding baby (%)	Wash hand before and after taking food (%)	Bath baby daily (%)	Bath daily (%)	Use soap while taking bath (%)	Wash baby's cloth with soap (%)	Wash face and clean teeth daily (%)	Washing of hand after latrine (%)	Total (%)
Santal	0 (0)	94 (78.33)	111 (92.50)	56 (46.67)	120 (100)	96 (80.00)	62 (51.67)	115 (95.83)	120 (100)	120 (100)
Literate	0 (0)	31 (86.11)	34 (94.44)	22 (61.11)	36 (100.00)	30 (83.33)	31 (86.11)	36 (100.00)	36 (100.00)	36 (30.00)
Illiterate	0 (0)	63 (75.00)	77 (91.67)	34 (40.48)	84 (100.00)	66 (78.57)	31 (36.90)	79 (94.05)	84 (100)	84 (70.00)
Oraon	0 (0)	72 (76.60)	82 (87.23)	43 (45.74)	85 (90.43)	74 (78.72)	57 (60.64)	89 (94.68)	94 (100)	94 (100)
Literate	0 (0)	20 (83.33)	22 (91.67)	15 (62.50)	23 (95.83)	19 (79.17)	19 (79.17)	24 (100.00)	24 (100.00)	24 (25.53)
Illiterate	0 (0)	52 (74.29)	60 (85.71)	28 (40.00)	62 (88.57)	55 (78.57)	38 (54.29)	65 (92.86)	70 (100)	70 (74.47)
Total	0 (0)	166 (77.57)	193 (90.19)	99 (46.26)	205 (95.79)	170 (79.44)	119 (55.61)	208 (97.20)	214 (100)	214 (100)
Literate	0 (0)	51 (85.00)	56 (93.33)	37 (61.67)	59 (98.33)	49 (81.67)	50 (83.33)	60 (100)	60 (100)	60 (28.04)
Illiterate	0 (0)	115 (74.68)	137 (88.96)	62 (40.26)	146 (94.81)	121 (78.57)	69 (44.81)	148 (96.10)	154 (100.00)	154 (100.)

Table 24
Hygienic method adopted by the respondents of the non-target villages

Tribal groups	Boil milk every time the baby is fed (%)	Wash hand before feeding baby (%)	Wash hand before and after taking food (%)	Bath baby daily (%)	Bath daily (%)	Use soap while taking bath (%)	Wash baby's cloth with soap (%)	Wash face and clean teeth daily (%)	Washing of hand after latrine (%)	Total (%)
Santal	0 (0)	139 (63.18)	204 (92.73)	92 (41.82)	220 (100)	106 (48.18)	66 (30.00)	198 (90.00)	220 (100)	220 (100)
Literate	0 (0)	45 (72.58)	59 (95.16)	36 (58.06)	62 (100)	40 (64.52)	30 (48.39)	60 (96.77)	62 (100)	62 (28.18)
Illiterate	0 (0)	94 (59.49)	145 (91.77)	62 (39.24)	158 (100)	66 (41.77)	36 (22.78)	138 (87.34)	158 (100)	158 (100)
Oraon	0 (0)	29 (58.00)	44 (88.00)	17 (34.00)	50 (100)	23 (46.00)	11 (22.00)	44 (88.00)	50 (100)	50 (100)
Literate	0 (0)	10 (71.43)	13 (92.86)	06 (42.86)	14 (100)	09 (64.29)	04 (28.27)	13 (92.86)	14 (100.00)	14 (100.00)
Illiterate	0 (0)	19 (52.78)	31 (86.11)	13 (36.11)	36 (100)	14 (38.89)	07 (19.44)	31 (86.11)	36 (100)	36 (100)
Total	0 (0)	168 (62.22)	248 (91.85)	109 (40.37)	270 (100)	129 (47.78)	77 (28.52)	242 (89.63)	270 (100.00)	270 (100.00)
Literate	0 (0)	55 (72.37)	72 (94.74)	42 (55.26)	76 (100)	49 (64.47)	34 (44.74)	73 (96.05)	76 (100)	76 (28.15)
Illiterate	0 (0)	113 (58.25)	176 (90.72)	75 (38.66)	194 (100)	80 (41.24)	43 (22.16)	169 (87.11)	194 (100)	194 (71.85)

FOODS AND INTOXICATION

Food and intoxication have much to do with disease. A community's food habit and intoxication determine to a large extent the prevalence of diseases in that community. Food habits have a direct or indirect bearing on the disease causation. We will separately deal with food and intoxication here.

Foods

All the activities of the tribal societies spin around the problems of seeking food. Many ecological factors and environmental conditions influence the food getting activities of the tribals. The tribals are living mainly on the natural food of forest produce including animals, birds, insects etc. It is often said that the diet of the tribals is insufficient in quantity and poor in quality. On the other hand Roy Barman (1986, p95-96) has illustrated a review article of Sengupta and brought out a number of interesting dimensions about the nutrition of the tribal food. From the deities of the different aborigines he suggests that unsophisticated dieters of those tribes who could make self-selection were almost complete in every respect, namely, calories, essential protein, fat, mineral elements and vitamins. Either they take plenty of meat, bird, egg, or fish or they take plenty of curdled milk and pulses, which supply essential amino acids and vitamins. They take plenty of green vegetables that meet their requirements of calcium, iron, mineral elements as well as carotene (precursor of vitamin A) and other vitamins. They take enough cereals or millets that supplies calories and thiamine (Vitamin B1). They take fruits whenever available and honey for vitality and energy. They take many vegetables and tubers, wild or cultivated, to enrich their diets. Lastly, the home brewed alcoholic beverages reduce their nutritional deficiencies to a large extent. The degenerated lay and weak tribes eat less nutritious diets due to their injudicious choice of foods. They do not take honey; rarely take vegetables and green leaves. They depend mainly on tubers and millets instead of cereals and do not make fermented beverages. In recent time some scholars question the validity of such views. The disappearance of wild life has in turn deprived the tribes of their traditional sources of protein.

Our study reveals that the diet of the tribes is inadequate. There are deficiencies in diet in both the quality and quantity. Basic calories requirements are hardly met. The intake of protein is very marginal. The intake of vitamins and minerals fall far short of the desirable level. Majority of the tribals in the target villages irrespective of the Santals and Oraons, generally take food thrice a day, in the morning, noon, and night. Though few take food twice a day only, in the morning and night. Most of the tribals' morning food is *pantha* (rice prepared in the previous day). There are few tribes who have reported to take *roti* and tea in the morning. At noon they usually take rice and at night they take rice, vegetables and sometimes *dal*. The consumption of meat or milk is very rare. The fish is consumed almost daily during the rainy seasons and meat once or twice in a month. They eat meat during festival. The buying of food items is not done as per their nutritive values. The drinking of milk is not a taboo; simply they cannot afford it. Those who own cow sell milk and sometimes give to their children. The consumption of liquor is prevalent. The food habit of the tribes in the non-target villages is almost same as that in the target villages. There is a variation regarding the consumption of vegetables. Most of the tribals in the target villages have their own kitchen garden supported by the Tagore Society for Rural Development. The children below 5 years of age in the target village receive nutritious food free of cost from the Society.

Intoxication

Country-made liquor forms an integral part of the tribal life and culture. Drinking of the country-made beverages is considered a distinct phenomenon of the tribal society and almost all the tribals record their use as a stimulant. The tribal people do, of course, enjoy the sensation of being drunk. They express that they feel like king when they drink liquor fully. No social and religious festivals are performed practically without liquor. During dance, the dancers of both the sexes have a belief in getting more energy, spirit and rhythm. They drink indiscriminately and openly without any shyness, the distilled and un-distilled liquor. *Mahua* and *haria* are used as compulsory offering to their *bongas* (gods), namely *Maran buda*,

Mareko, *Jather era*, *Gosain era*, *Pargana era*, and *Manjhi bonga* are all supernatural beings and deities residing at the *jatherthan* (a sacred grove of four *sal* trees and a *mohua*) and at the *majhirthan* situated at the village outskirts during propitiation. Mourners take country-made liquors at funeral and revelers at wedding. Drink is levied to excommunicate person as fine for penalties and for readmission to his own society. *Gunin* is generally offered drinks for his service and activities. Orthodox tribals sprinkle a few drops of the liquor on the ground before sipping in honor of their deceased forefathers' souls and to please the evil spirits roaming around for not being ill after drinking (Bhowmick, 1989, p213).

Tables 25 and 26 reflect that most of the tribals enjoy drinks. Country-made liquor and *haria* are very common drinks of them. It is reported that 92.52 per cent of the tribals of the target villages have been found of drinking *haria*, rice beer, or country made liquor. Sometimes they consume country-liquor or even foreign liquor. It is observed that 93.33 per cent of the literate respondents have reported to be fond of drinks, while 92.21 per cent of the illiterate respondents have been found to drink *haria* or country made liquor. In case of the Santals of the target villages, it is reported that 90 per cent have reported to consume liquor. However 91.67 per cent of the literate respondents have reported to be fond of drinks and 89.29 per cent of the illiterate respondents have been found to drink *haria*. In case of the Oraons of the target villages, 95.74 per cent consume liquor, while 95.83 per cent of the literate respondents and 95.71 per cent of the illiterate respondents consume liquor.

Smoking is also prevalent among the Santals and Oraons of the target villages (Table-25). In general, 84.58 per cent respondents have reported to have the habit of smoking, 86.67 per cent, and 83.77 per cent of the literate and illiterate respondents respectively have reported to be fond of smoking. In case of the Santals, 76.67 per cent have smoking habit; while 86.11 per cent literate respondents have reported to have smoking habit and 72.62 per cent illiterate respondents have reported to have smoking habit. In case of the Oraons, 94.68 per cent have smoking habit, while 87.50 per cent literate Oraons have reported to have smoking habit, and 97.14 per cent illiterate Oraons have reported to have

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smoking habit. The trend of drinking and smoking among literate respondents is more in comparison to their illiterate counterpart. More than 70 per cent tribal respondents have reported to be aware about the harmful effects of consuming liquor and smoking *bidi*. The awareness of the literate respondents (80 per cent) is higher than the illiterate respondents (66.88 per cent). The tribe wise variation of the awareness regarding harmful effects of the consumption of liquor and smoking of *bidi* is negligible. It is reported that 72.50 per cent of the Santals have reported to be aware of the fact, whereas 77.78 per cent and 70.24 per cent literate and illiterate Santals respectively have reported to be aware of the harmful effects. However 68.09 per cent of the Oraons have reported to be aware of harmful effects; 83.33 per cent are literate and 62.86 per cent are illiterate.

Table 26 reflects the smoking and liquor consumption pattern among the tribals of the non-target villages. All the tribals are habituated to consume liquor. The majority of the tribes have the habit of smoking *bidi*. In general, it is reported that 93.70 per cent tribals have reported to have smoking habit, while 97.37 percent literate and 92.27 per cent illiterate respondents respectively have reported to have smoking habit. In case of the Santals, 92.27 per cent have reported to have smoking habit, of them, 96.77 per cent literate 90.51 per cent illiterate have reported to have smoking habit. In case of the Oraons, it is reported that all the respondents have reported to have smoking habit. Though majority of the tribes are aware that smoking of *bidi* or consumption of liquor is not good for health. It is reported that 68.15 per cent have reported to be aware of harmful effects, 88.16 per cent literate, and 60.31 per cent illiterate are aware of the harmful effects. In case of the Santals, 68.64 per cent are aware of the fact; 88.71 per cent are literate and 60.76 per cent are illiterate. In case of the Oraons, 66 per cent are aware of the harmful effects, 85.71 per cent are literate, and 52.78 per cent are illiterate. They drink almost every day about a litter or more at a time. Haria is believed not to be harmful and other drinks like country liquor or foreign liquor are considered harmful.

The drinking habit of the tribals of both the target and non-target villages is an important problem from the social and economic point of view. The tribal cannot think of any social and religious occasion without a supply of drink. The addiction has accentuated their poverty. Excessive drinking causes anemia, turgidity of limbs, jaundice and tuberculosis. A limited use of drinks is a habit for good health. Limited use increases appetite and digestion causing tribal people to eat a large quantity of food that gives them to possess good health, energy and strength for work. The tribals regard drinking as an exquisite pleasure, it inspires courage, confidence, bestows powers and self-trust. The moderate drinking might be acceptable, but excessive drinking makes intoxication. Drinking of excess liquor is harmful. The tribes generally take drinks at all times to quench their thirst. The *haria* is enriching the nutritional value of their diet and also corrects the deficiencies of some of their essential food. The distilled country made liquor consumed for intoxication is very harmful. Some times tribals put some harmful ingredients to *haria* for intoxication.

Table 25
Smoking and consumption of liquor among the tribals of the target villages

Tribal groups	Smoking habit		Consumption of liquor		Awareness about the harmful effects		Total (%)
	Yes (%)	No (%)	Yes (%)	No (%)	Aware (%)	Not aware (%)	
Santal	92 (76.66)	28 (23.33)	108 (90.00)	12 (10.00)	87 (72.50)	33 (27.50)	120 (100)
Literate	31 (86.11)	05 (13.89)	33 (91.67)	03 (8.33)	28 (77.78)	08 (22.22)	36 (30.00)
Illiterate	61 (72.62)	23 (27.38)	75 (89.29)	09 (10.71)	59 (70.24)	25 (29.76)	84 (70.00)
Oraon	89 (94.68)	05 (5.32)	90 (95.74)	04 (4.26)	64 (68.09)	30 (31.91)	94 (100)
Literate	21 (87.50)	03 (12.50)	23 (95.83)	01 (4.17)	20 (83.33)	04 (16.67)	24 (25.53)
Illiterate	68 (97.14)	02 (2.86)	67 (95.71)	03 (4.29)	44 (62.86)	26 (37.14)	70 (74.47)
Total	181 (84.58)	33 (15.42)	198 (92.52)	16 (7.47)	151 (70.56)	63 (29.44)	214 (100)
Literate	52 (86.67)	08 (13.33)	56 (93.33)	04 (6.67)	48 (80.00)	12 (20.00)	60 (28.04)
Illiterate	129 (83.77)	25 (16.23)	142 (92.21)	12 (7.79)	103 (66.88)	51 (33.12)	154 (71.96)

Table 26
Smoking and consumption of liquor among the tribals of the non-target villages

Tribal groups	Smoking habit		Consumption of liquor		Awareness about the harmful effects		Total (%)
	Yes (%)	No (%)	Yes (%)	No (%)	Aware (%)	Not aware (%)	
Santal	203 (92.27)	17 (7.73)	220 (100)	0 (0)	151 (68.64)	69 (31.36)	220 (100)
Literate	60 (96.77)	02 (3.23)	62 (100)	0 (0)	55 (88.71)	07 (11.29)	62 (28.18)
Illiterate	143 (90.51)	15 (9.49)	158 (100)	0 (0)	96 (60.76)	62 (39.24)	158 (71.82)
Oraon	50 (100)	0 (0)	50 (100)	0 (0)	33 (66.00)	17 (34.00)	50 (100)
Literate	14 (100)	0 (0)	14 (100)	0 (0)	12 (85.71)	02 (14.29)	14 (28.00)
Illiterate	36 (100)	0 (0)	36 (0)	0 (0)	19 (52.78)	17 (47.22)	36 (72.00)
Total	253 (93.70)	17 (6.29)	270 (100)	0 (0)	184 (68.15)	86 (31.85)	270 (100)
Literate	74 (97.37)	02 (2.63)	76 (100)	0 (0)	67 (88.16)	09 (11.84)	76 (28.15)
Illiterate	179 (92.27)	15 (7.73)	194 (100)	0 (0)	117 (60.31)	77 (39.69)	194 (71.85)

CHAPTER 4

MATERNAL AND CHILD HEALTH CARE PRACTICES

Both tradition and culture determine the attitudes, belief, and practices in regard to the mother and child health care. Majority of the tribal communities in India live under abject poverty, yet it is not the culture of poverty, which determines the value of children for these groups, but the tribal worldview. Tribal philosophy regards children as gifts of the nature. Procreation is the essence of life for them. Whether male or female; children are not commodities for them but chains which bind life in continuity. Prevalence of bride price in many tribal communities makes women more important than men. Children are valued for being children and not for their positive values and negative costs. Mother and child health status amongst tribals become a victim of their ignorance, economic deprivation and inaccessibility to medical facilities. Tribal communities have evoked their own systems of prevention and cure. They also prescribe especial care for would-be-mothers and new mothers, but have no answer to tetanus, which is normally caused by the use of an un-sterilised sickle for cutting the umbilical cord (Mehata. 1989, p6-7). We shall deal with maternal care and child health care separately in a comparative perspective to have better understanding about the existing maternal and child health care, reasons for acceptance or non-acceptance of modern practices in the tribal worldview.

MATERNAL CARE

As per the India's Family Welfare Programmes, maternity care should be designed to prevent maternal mortality and morbidity and hence to ensure timely detection of pregnancy, management and referral of complications during pregnancy. Maternal care is an important aspect of health care given to the expectant women in order to maintain good health before and after delivery. It aims at facilitating delivery of a healthy baby and helps the mother for maintaining good health. Maternal mortality is reported to be high amongst tribals. As per the records of the Tagore Society for Rural Development two maternal deaths were recorded in the target villages during last one year. The records of the Primary

Health Centres are not sufficient enough to say the actual number of death due to maternal problem. Not a single death has been recorded during the time of investigation of the target and non-target villages. Tribals of both the target and non-target villages are very much concerned about maternal death but are also helpless.

The main cause of maternal mortality is unhygienic and primitive practices for parturition. Some of the other causes of maternal death may be described as hemorrhage, infection, obstructed labour, eclampsia etc. Poor tribal pregnant women during delivery may die of hemorrhaging, violently pumping blood onto the floor of bus or bullock cart or blood-soaked stretcher as their families and friends search in vain for help. Tribal pregnant women also goes through primitive practices of abortion mostly conducted by traditional *dais* and most of them survive, though often with crippling discomfort, pelvic inflammatory disease, and a continuing foul discharge. The rest do not survive with punctured uterus, infected wounds, and creeping sepsis. Some tribal pregnant women may die from brain and kidney damage in the convulsion of eclampsia. Sepsis, severe anemia, obstructed labour etc. Many injuries sustained during pregnancy and childbirth is distressingly obvious. Rupture of the uterus, prolapsed, pelvic inflammatory disease lower genital tract injuries and fistula make life miserable for the tribal women. Some of the aspects of maternal health like pre-natal and post-natal check-ups by the qualified health staff, special diet for the pregnant women, immunisation against tetanus, need for consulting modern doctors during pregnancy, gynaecological problems faced by the tribal women and their treatment, the changing trend of maternal care have been studied in a comparative perspective.

Tribal women are basically engaged in agricultural work, road, or other construction work. During pregnancy women are permitted to work unto the advance stage of the delivery. Most of the tribals of the target and non-target villages work till 7-9 months of their pregnancy. Though changes have already

been noticed in some cases among tribals of the target villages. It has been observed that some of the pregnant women of the target villages work till 6 months only. During pregnancy Rupa, wife of Biswanath Ekka of Chhiraikuri village, was permitted to work only upto 6 months so that she could maintain good health to facilitate an easy delivery. We have also been observed same kind of practices when Jamuna, wife of Esmail Oraon of Chamtakuri villages was pregnant. To understand the pattern of resumption of work outside the home after delivery, almost similar picture is being seen among the tribal women of the target and non-target villages. In general, most of the mothers resume work within three months of their delivery.

Pre-natal check-up

Pre-natal services can detect and manage complications such as anemia, infection, pre-eclampsia and mal-nutrition as well as can provide an opportunity for immunisation against tetanus, iron-supplementation, counselling on health, nutrition, and family planning, and the treatment of pre-existing diseases, such as tuberculosis, malaria etc. All these services are supposed to be provided by the Primary Health Centres. The concept of pre-natal checkups for pregnant women is not felt necessary among the tribals even a few years back. But now-a-days some of the tribals have felt that pre-natal checkups for the pregnant women is necessary for maintenance of good health of both the mother and the baby. Those women who have undergone pre-natal check-ups have consulted either local Primary Health Centres or other agencies such as Non Government Organisations like the Tagore Society for Rural Development, private doctors, or quacks. The Tagore Society for Rural Development provides pre-natal services in the target villages, which include check-ups by trained health staff, immunisation against tetanus, iron supplementing, counselling on health, nutrition and family planning and the treatment of pre-existing disorders, such as tuberculosis, malaria etc. The Tagore Society for Rural Development conducts immunisation session with the support of the Primary Health Centres. Iron tablets,

immunisations against titenus are also available with the private doctors and quacks.

Table 27 and table 28 show the evidence of slow changes in the perception of the tribals regarding pre-natal check-ups. Previously the concept of pre-natal check-ups was totally absent among the tribals and for any kind of problem during pre-natal period they mainly used to consult *ojha* for relief. Table 27 shows that in general, more than half of the respondents of the target villages are reported to have no check-up for pregnant women (53 per cent of the total respondents); of whom, 61.70 percent are illiterate and 32.76 per cent are literate. Tribe wise analysis shows almost same picture. Among the Santals of the target villages, 51.79 per have no check-ups for pregnant women, whereas, 55.17 per cent respondents belonging to the Oraons are not concerned for pre-natal check-ups. However, 61.84 per cent literate households belonging to the Santal community are concerned for pre-natal check-ups. And 61.54 per cent literate households belonging to the Oraons have followed suit. While 30.55 per cent Santal respondents are reported to have no check-up of the pregnant women, similarly, 36.36 per cent Oraon respondents have taken no step for the check-ups of the pregnant women.

The analysis of the source of the pre-natal checkup of the pregnant women shows interesting results. In general, it is observed that majority of the tribals consult either the staff of the Tagore Society for Rural Development or quacks for pre-natal check-ups. It is reported that in general, 33.66 per cent households consult the health staff of the Tagore Society for Rural Development for pre-natal check-ups of the pregnant women, and 60.34 per cent of the literate tribals and 22.70 per cent of the illiterate tribals consult those staff. However, rests of the respondents visit the local Primary Health Centre for pre-natal check-ups. Pregnant women basically consult quack for the treatment of the pre-existing diseases and also they get titenus injection and iron tonic from quacks. It has been observed that 13.06 percent tribals visit the Primary Health Centre for the

same purposes, of whom, 10.34 per cent are literate, and 14.18 per cent are illiterate (See Table-27).

Tribe wise analysis gives the interesting results (Table-27). In general, 33.03 per cent Santal respondents and 34.48 per cent Oraon respondents depend either on the Tagore Society for Rural Development or quacks for pre-natal check-ups. However, most of the literate Santals and Oraons depend either on the Tagore Society for Rural Development or quacks for pre-natal check-ups. It is reported that 58.33 percent literate Santals and 63.64 per cent literate Oraons consult either the Tagore Society for Rural Development or quacks for pre-natal check-ups. However, it is reported that 21.05 percent illiterate Santals and 24.62 per cent illiterate Oraons are on the same track of their literate counterparts. Most of the tribals have no faith on the Primary Health Centre for pre-natal check-ups during pregnancy. Non-availability of the health staff, indifferent attitude of the health staff towards tribals, distance of the health centre and the waiting time of the pregnant women at the health centre etc, are reported as some of the causes for non-visiting Primary Health Centre for pre-natal check-up during pregnancy. It is reported that only 15.18 per cent Santal respondents visit the Primary Health Centre for pre-natal check-ups of the pregnant women, whereas, only 11.11 per cent literate Santals and 17.11 per cent illiterate Santals depend merely on the Primary Health Centre for the pre-natal check-ups of the pregnant women.

In the non-target villages (Table-28), in general, most of the pregnant women among tribals have no check-ups during pregnancy. It is reported that in general, 83.97 percent of the tribals, 56.58 percent of the literate tribes, and 95.16 per cent of the illiterate tribes have reported to have no check-ups of the pregnant women. Tribe wise analysis shows almost the same picture. Among the Santals, 81.60 per cent have reported to have no check-ups of the pregnant women, whereas 94 per cent Oraon respondents are reported the same. It is reported that as many as 94 per cent illiterate Santal respondents and all-illiterate Oraon respondents have reported to have no check-ups of the pregnant women. However, 51.61 percent

literate Santals and 78.57 percent literate Oraons have not arranged check-ups of the pregnant women.

The analysis of the source of pre-natal check-ups of the pregnant women of the non-target villages (see Table-28) shows interesting results. In general majority of the tribals consult the Primary Health Centre for pre-natal check-ups of the pregnant women, though the literate tribals prefer to visit private doctors or even quacks for pre-natal check-up. In general, 7.63 per cent depend on the Primary Health Centre for the check-ups of the pregnant women, of whom, 11.84 per cent are literate, and 4.84 per cent are illiterate. The rest 8.40 per cent visit other agencies like private doctors, quacks etc. All of these tribes are literate and constitute 28.95 of the literate tribes. Tribe wise analysis gives the interesting results. In general, only 8.02 per cent Santal respondents and 6 per cent Oraon respondents depend merely on the Primary Health Centre for pre-natal check-ups of the pregnant women, whereas, 12.90 per cent literate Santals and 21.43 per cent literate Oraons depend merely on the Primary Health Centre for pre-natal check-ups of the pregnant. However, 10.38 per cent Santals in general, depend either on private doctors or quack for pre-natal check-ups of the pregnant women, whereas, no one among the Oraons depend either on quack or on private doctors. Likewise no one among the illiterate Santals depend on other agencies.

The wide difference in seeking services for pre-natal check-ups during pregnancy either from other agencies or the Primary Health Centre of the target villages is due to the mother care programmes of the Tagore Society for Rural Development. Health workers of the Tagore Society for Rural Development closely monitor the pregnant women for pre-natal check-ups through home visit, counselling etc. Most of the tribes of the target villages are basically depend on the Tagore Society for Rural Development for pre-natal check-ups of the pregnant women. This trend is much more among the literate tribals. The dependency of the literate Oraons of the target villages is slightly more than their Santal counterparts, whereas dependency of the Santals on the Primary Health Centre for pre-natal check-ups

is slightly more than the Oraons. This might be due to distances; the Oraon villages are slightly closer to the Tagore Society for Rural Development. Though there are large number of pregnant women (more than 50 per cent of the total households) is yet to be covered under the mother care programmes of the Tagore Society for Rural Development.

In the non-target villages majority of the pregnant mothers (more than 80 per cent households) have no pre-natal check-ups. This picture has revealed the failure of mother care programmes of the Government Health Department. As per multipurpose scheme of the West Bengal Health Department, Health Workers are supposed to visit pregnant mothers at least thrice during pregnancy, which is not properly done. Health Workers are basically stationed either at district town Balurghat or some other places that is far away from their fields and they least bother to visit fields as per their prescribed duty. They mostly organise immunisation camp in their Sub-center twice a month only.

The tribals of the non-target villages is not yet aware of the need of the pre-natal check-ups during pregnancy. Very few tribals have reported to have pre-natal check-ups during pregnancy either at Balapur or at Tapan and most of them are literate. It is interesting to note that majority of the literate tribals prefer to visit private doctors or quacks during pregnancy. It has also been observed that the Santals of the non-target villages are slightly advanced than the Oraons in regard to the check-ups of the pregnant women. Majority of the tribals, who have visited the Primary Health Centres of both the target and non-target villages do not have a good notion about the services of the Primary Health Centres but they visit the Primary Health Centre due to their lack of sufficient means to consult private doctors. In addition to this, lack of awareness, lack of sufficient means to seek expensive care of private facilities are some of the reasons for avoiding check-ups during pregnancy.

Table 27

Sources of Pregnancy check-ups of the target villages

Tribal groups	Prenatal Checkup			Postnatal Checkup			Total
	Health center (%)	Other Agencies (%)	No-checkup (%)	Health center (%)	Other Agencies (%)	No-checkup (%)	
Santal	17 (15.18)	37 (33.04)	58 (51.79)	06 (5.36)	17 (15.18)	89 (79.46)	112 (100)
Literate	04 (11.11)	21 (58.33)	11 (30.56)	0 (0)	12 (33.33)	24 (66.67)	36 (32.14)
Illiterate	13 (17.11)	16 (21.05)	47 (61.84)	06 (7.89)	05 (6.58)	65 (85.53)	76 (67.86)
Oraon	09 (10.34)	30 (34.48)	48 (55.17)	0 (0)	0 (0)	87 (100)	87 (100)
Literate	02 (9.09)	14 (63.64)	08 (36.36)	0 (0)	0 (0)	22 (100)	22 (25.29)
Illiterate	07 (10.77)	16 (24.62)	40 (61.54)	0 (0)	0 (0)	65 (100)	65 (74.71)
Total	26 (13.06)	67 (33.67)	106 (53.27)	06 (3.02)	17 (8.54)	176 (88.44)	199 (100)
Literate	06 (10.34)	35 (60.34)	19 (32.76)	0 (0)	12 (20.69)	46 (79.31)	58 (29.15)
Illiterate	20 (14.18)	32 (22.70)	87 (61.70)	06 (4.26)	05 (3.55)	130 (92.20)	141 (70.85)

Table 28

Sources of Pregnancy check-ups of the non-target villages

Tribal groups	Prenatal Checkup			Postnatal Checkup			Total
	Health center (%)	Other Agencies (%)	No-checkup (%)	Health center (%)	Other Agencies (%)	No-checkup (%)	
Santal	17 (8.02)	22 (10.38)	173 (81.60)	0 (0)	0 (0)	212 (100)	212 (100)
Literate	08 (12.90)	22 (35.48)	32 (51.61)	0 (0)	0 (0)	62 (100)	62 (29.24)
Illiterate	09 (06)	0 (0)	141 (94)	0 (0)	0 (0)	150 (100)	150 (70.76)
Oraon	03 (06)	0 (0)	47 (94)	0 (0)	0 (0)	50 (100)	50 (100)
Literate	03 (21.43)	0 (0)	11 (78.57)	0 (0)	0 (0)	14 (100)	14 (28)
Illiterate	0 (0)	0 (0)	36 (100)	0 (0)	0 (0)	36 (100)	36 (72)
Total	20 (7.63)	22 (8.40)	220 (83.97)	0 (0)	0 (0)	262 (100)	262 (100)
Literate	11 (14.47)	22 (28.95)	43 (56.58)	0 (0)	0 (0)	76 (100)	76 (29)
Illiterate	09 (4.84)	0 (0)	177 (95.16)	0 (0)	0 (0)	186 (100)	186 (71)

Post-natal Check-up

A postpartum service includes early detection and management of infection; hemorrhage and counselling in breast-feeding, nutrition, and family planning. All these services are supposed to be available at the Primary Health Centres. Though the post-natal services are basically absent at the Primary Health Centre and limited to only the major complications, where doctor is needed to be consulted. Post-natal services available at the Tagore Society for Rural Development are limited to the counselling in breast-feeding, health, nutrition, and family planning. The concept of post-natal check-ups is not very common among the tribals of the target and non-target villages. However, the tribals of the non-target villages have reported to have no concept of post-natal check-ups after delivery. Only few tribals of the target villages have reported to have post-natal check-ups with the support of the Tagore Society for Rural Development . They visit quacks, Primary Health Centres, or private doctors for major problems after delivery.

Table 29 shows that 88.44 per cent tribals of the target villages, in general, do not go for post-natal check-ups after delivery, of whom, 79.31 per cent are literate tribals and 92.20 per cent are illiterate. However, 79.46 per cent Santal respondents have not undergone any post-natal check-ups, of which, 66.67 per cent literate and 85.53 per cent illiterate do not have post-natal check-ups. In case of the Oraons of the target villages, no one has post-natal check-ups. In general, 8.54 per cent tribals depend on the Tagore Society for Rural Development for post-natal check-ups; of whom, 20.69 per cent are literate, and only 3.55 per cent are illiterate. For post-natal check-ups, 15.18 per cent Santals in general depend mainly on the Tagore Society for Rural Development, of which, 33.33 per cent are literate Santals and 6.58 per cent are illiterate Santals.

Dependency on the Primary Health Centre among tribals of the target villages for post-natal check-ups is negligible. It is reported that only 3.02 per cent tribals consult the Primary Health Centre for post-natal check-ups. It has been observed that only 4.26 per cent illiterate tribes are reported to consult the Primary Health Centre for post-natal check-ups. In case of the Santals, only 5.35 per cent visit Primary Health Centre for post-natal check-ups and all are illiterate. Post-natal check-ups are limited to the problems related to mothers and child for which the support of a doctor is needed. None of the pregnant women of the non-target villages (Table 30) are reported to have done post-natal check-ups after delivery. Health workers of the Tagore Society for Rural Development do home visit regularly and meet the mother as a part of the post-natal care services. The coverage of pre-natal and post-natal care is low for both the Tagore Society for Rural Development and Primary Health Centres and need to be greatly extended. The health staffs of the Tagore Society for Rural Development have been reported that for maternity care services tribals have no other way but to depend on the Primary Health Centres, and that is the reason for low coverage. The slow awakening among the tribals regarding pre-natal and post-natal care is mainly due to the good efforts of the Tagore Society for Rural Development.

Pregnancy and Delivery

Traditional midwives (*dais*) deliver almost 2/3 of babies in the developing world. Tribals depend merely on traditional midwives for deliveries. Unhygienic and primitive practices for parturition are very common among the tribals. For example, some times delivery was conducted by the mother herself in a half squatting position, while holding a rope tied down from the roof of the hut. This helped her in applying pressure to deliver the child. In complicated labour this might lead to maternal as well as child mortality. The visit of modern doctor during pregnancy is not very common among the tribals of the study area. It has been observed that only 0.89 per cent of the households belonging to the Santal community in the target villages have visited doctors during 7-9 months of the pregnancy and all are literate. No one else has visited modern doctors any time of

their pregnancy. Table 29 shows that in general, 57.78 per cent respondents of the target villages have felt necessity to visit doctors during pregnancy at least in case of the emergency, while as many as 63.79 per cent of the literate respondents and 55.32 per cent of the illiterate respondents have felt the necessity of visiting doctors at least in case of the emergency during pregnancy. Among the Santals, in general, 53.57 per cent respondents have felt that the visit of doctors during pregnancy is a must at least during emergency, but 63.89 per cent of the literate Santals have felt the same necessity. Among the Oraons, in general, 51.72 per cent respondents have reported the necessity to visit doctors during pregnancy; 63.63 per cent of the literate Oraons and 47.69 per cent of illiterate Oraons have reported to have same view.

The picture of the non-target villages (table 30) depicts that most of the tribals irrespective of Santals and Oraons have indifferent view regarding the necessity of visiting doctors during pregnancy at least in case of the emergency. Only 21.76 per cent of the tribals have felt necessity to visit doctors when necessary. Tribe wise analysis also does not show any significant differences. It has been reported that 21.70 per cent of the Santals have felt the necessity of visiting doctors during pregnancy and similarly, 22 per cent Oraon respondents have felt the necessity of visiting doctors during pregnancy. Literacy wise analysis shows significant differences of practices. In general, 44.74 per cent literate tribals prefer to visit doctors if necessary, whereas only 16.13 per cent illiterate tribals have felt the same necessity. In case of the literate Santals, 45.16 per cent have felt the necessity to visit doctors during emergency and only 12 per cent illiterate Santals feel the same. However, 42.86 per cent of the literate Oraons have felt the necessity to visit doctors when necessary and only 13.89 per cent of the illiterate Oraons feel likewise.

The delivery among the tribals of both the target and non-target villages basically depends on the traditional midwives. The health staff of the Tagore Society for Rural Development reports the existence of trained *dais* in the target villages.

Institutional deliveries are almost absent. The deliveries conducted by the trained *dais* are much safer than those conducted by the traditional *dais*. The trained *dais* can identify high-risk pregnant women and for this they advise them to consult doctors. Table 29 also reflects that most of the pregnant mothers of the target villages have delivered their children with the help of traditional *dais*. And only 6.53 per cent households have reported to have institutional deliveries. Whereas among 9.82 per cent of the Santal houses, mothers have delivered their children either at block hospital or at district hospital and only 2.29 per cent households belonging to the Oraons have institutional deliveries. Literacy wise analysis shows slight differences in regard to the nature of delivery. In general, 8.62 per cent literate tribals depend on the health centres for delivery. However, among literate Santals and Oraons, 11.11 percent and 4.5 per cent respectively depend on health centres. Only 5.67 per cent illiterate tribals depend on health centres, while, 9.21 per cent illiterate Santals and 1.54 per cent illiterate Oraons respectively depend on the health centres for delivery.

The health staffs of the Tagore Society for Rural development have reported that the trained *dais* conducts all the home deliveries of the target villages. Though most of the deliveries of the non-target villages have conducted by the indigenous and untrained *dais*. It has been reported by the doctors of the health centres that the tribals come to the hospital at the last stage and for critical cases of delivery. As a result in most the cases either mother or child or both die. Table 30 shows that 93.46 per cent tribals of the non-target villages depend entirely on *dais*. However, 91.98 percent Santals and 96 per cent Oraons of the non-target villages respectively depend entirely on *dais* for delivery. The literacy wise analysis shows slight differences, which is not at all significant. In general, 90.79 per cent of the literate tribals depend on *dais*. It has been reported that 90.32 percent of the literate Santals and 92.86 percent of the literate Oraons depend on the services of *dais* for delivery. Among the illiterate, 93 per cent depend on *dais*. Where, 92.67 percent illiterate Santals and 94.44 percent illiterate Oraons depend on *dais* for delivery.

Table 29

Knowledge regarding the month of pregnancy during which women should contract doctor and the nature of delivery of the target villages

Tribal groups	Month of pregnancy during which women should contract doctor						Nature of Delivery		Total
	Every month	1 st -3 rd month	4 th -6 th month	7 th -9 th month	As and when necessary	Not essential	Traditional	Health Center	
Santal	0 (0)	0 (0)	0 (0)	02 (.89)	60 (53.57)	50 (44.64)	101 (90.17)	11 (9.83)	112 (100)
Literate	0 (0)	0 (0)	0 (0)	02 (5.56)	23 (63.89)	11 (30.56)	32 (88.89)	04 (11.11)	36 (32.14)
Illiterate	0 (0)	0 (0)	0 (0)	0 (0)	37 (48.68)	39 (51.34)	69 (90.79)	07 (9.21)	76 (67.86)
Oraon	0 (0)	0 (0)	0 (0)	0 (0)	45 (51.72)	42 (48.28)	85 (97.70)	02 (2.29)	87 (100)
Literate	0 (0)	0 (0)	0 (0)	0 (0)	14 (63.63)	08 (36.37)	21 (95.45)	01 (4.55)	22 (25.29)
Illiterate	0 (0)	0 (0)	0 (0)	0 (0)	31 (47.69)	34 (52.31)	64 (98.46)	01 (1.54)	65 (74.71)
Total	0 (0)	0 (0)	0 (0)	02 (1.00)	115 (57.78)	82 (41.20)	186 (93.46)	13 (6.53)	199 (100)
Literate	0 (0)	0 (0)	0 (0)	02 (3.45)	37 (63.79)	19 (32.76)	53 (91.38)	05 (8.62)	58 (29.15)
Illiterate	0 (0)	0 (0)	0 (0)	0 (0)	78 (55.32)	63 (44.68)	133 (94.33)	08 (5.67)	141 (70.85)

Table 30

Knowledge regarding the month of pregnancy during which women should contract doctor and the nature of delivery of the non-target villages

Tribal groups	Month of pregnancy during which women should contract doctor						Nature of Delivery		Total
	Every month	1 st -3 rd month	4 th -6 th month	7 th -9 th month	As and when necessary	Not essential	Traditional	Health Center	
Santal	0 (0)	0 (0)	0 (0)	0 (0)	46 (21.70)	166 (78.30)	195 (91.98)	17 (8.01)	212 (100)
Literate	0 (0)	0 (0)	0 (0)	0 (0)	28 (45.16)	34 (54.84)	56 (90.32)	06 (9.68)	62 (29.25)
Illiterate	0 (0)	0 (0)	0 (0)	0 (0)	18 (12)	132 (88)	139 (92.67)	11 (7.33)	150 (70.75)
Oraon	0 (0)	0 (0)	0 (0)	0 (0)	11 (22)	39 (78)	48 (96)	02 (04)	50 (100)
Literate	0 (0)	0 (0)	0 (0)	0 (0)	06 (42.86)	08 (57.14)	13 (92.86)	01 (7.14)	14 (28)
Illiterate	0 (0)	0 (0)	0 (0)	0 (0)	05 (13.89)	24 (66.67)	34 (94.44)	01 (2.78)	36 (72)
Total	0 (0)	0 (0)	0 (0)	0 (0)	57 (21.76)	205 (78.24)	242 (92.36)	20 (7.63)	262 (100)
Literate	0 (0)	0 (0)	0 (0)	0 (0)	34 (44.74)	42 (55.26)	69 (90.79)	07 (9.21)	76 (29)
Illiterate	0 (0)	0 (0)	0 (0)	0 (0)	30 (16.13)	156 (83.87)	173 (93)	13 (6.99)	186 (71)

Pregnancy related Diseases and the Treatments

Some of the pregnancy related problems are white discharge, back pain, proleptoses, less bleeding, no breast milk supply and miscarriage. All the women have taken it granted, as their fate. Though the changes in the concept regarding the above problems have been noted in a health check-up camp organised by the Tagore Society for Rural Development, and participated by more than three hundred women. The result of the clinical and pathological test of the camp has been revealed that 90 percent of the women are suffering from reproductive tract infection and all the women have the problem of white discharge. The urge of the women for the test and for modern medicine for treatment indicates the change of perception about gynaecological problems.

There is a mix concept of the causes of diseases among women of the target and non-target villages. Most of the tribal women do not even consider white discharge as a disease. Those who consider this as a disease, describe that white menses, watery discharge, pain in legs and hands, weight loss and white discharge with bad smell are some of the symptoms of white discharge, while frequent intercourse, weakness and mental tension are identified as causes for above disease and no treatments are known by the participants of a focus group discussion. Heavy workload, frequent intercourse etc have been identified as causes of the back pain and except massage no treatment is known by the participants. Prolapsed is very much painful while walking and women cannot carry heavy loads. This condition is thought to be caused by mishandling at the time of delivery or due to miscarriage. Most of the women are not aware of the causes of this disease. The treatment is not clear to them. They consult *ojha* for the treatment of proleptoses. *Ojha* tells that some times due to evil influence miscarriage takes place and causes prolapses. If immediate treatment to avoid the evil influence is not taken up, she cannot give live birth in future. The process of treatment is very long and *ojha* is not ready to explain it at all. Important symptom of miscarriage is heavy bleeding during pregnancy. The following modern and primitive causes have been identified as causes of this disease.

Heavy workload is identified as most important cause of miscarriage though some of the women explain that intercourse during pregnancy may be the cause of miscarriage. Few women in a focus group discussion argue that if the shadow of a menstruating female falls on the pregnant lady, pregnancy results in miscarriage.

Evil spirits are responsible for illness of some of the women, and consultation of *ojha* is to be needed though majority of the women are unaware of the treatment. For them death of mother during pregnancy is not due to Titenus or lack of proper care but some evil spirits possess the mothers during pregnancy. New mothers are also vulnerable to the influences of witches, and that is the reasons why fire is constantly kept burning for few days after delivery. The world of the modern medicine is not alien to them. The Tagore Society for Rural Development has been constantly trying to change the tribal worldview of maternal health care practices. Their problem is essentially a problem of availability and reach. Health workers of the Tagore Society for Rural Development merely depend on the health centres for services, and health centres are not at all equipped with instruments for delivery. If some one carries the pregnant women for delivery at the health centre at Malancha by a bullock cart, in most of the cases doctor refers the cases to the Balurghat District Hospital. They can hardly reach there, as there is no vehicle available to transport them to the Balurghat District Hospital.

Beliefs and Behaviour of the Tribals regarding Diet during Pregnancy

Food intake during pregnancy is partly the outcome of complex cultural beliefs, a fact that has been documented in a number of studies in different part of India (Ferro-Luzzi, 1980; Nichter and Nichter, 1983; Jesudasan and Shirur, 1980; Khan et al., 1986). A common belief is that the mother should avoid eating more during pregnancy so as to have a baby of manageable size and thus minimise the risk of a difficult labour. There are different perceptions about prescriptions for and restrictions on different kinds of food during pregnancy. One would expect larger food intakes during pregnancy to lead to increase weight

gains by the mothers and consequently to improve birth weights. Birth weight is the commonly used descriptive parameter of baby's size at birth, particularly in studies correlating pregnancy outcomes with maternal nutrition. It has been shown that weight gain during pregnancy, pre-pregnant weight of the mother and mother's height are most important among a large number of factors influencing birth weight. Together, these factors contribute around 14 per cent to the variation in birth weight, with weight gain during pregnancy being the largest contribution (Metcoff, 1981). Birth weight is also almost the only factor amenable to short term nutritional interventions. The reality is less straightforward.

The tribal women of the study area rarely take any special attention during their pregnancy for taking special diet before and after delivery. One of the important components of mother care programmes of the Tagore Society for Rural Development is health education regarding diet during pregnancy. The change in the knowledge of dietary habits of the mother is recorded in tables- 31 and 32. The poor socio-economic condition of the tribals is the reason for not taking any special kind of food during pre and post-natal period. Most of the tribal households provide rice, *shak* (green vegetables), fried rice etc to pregnant women. Potatoes are commonly used as vegetables; rarely other vegetables are used. *Dal*, meat, fish, egg etc considered as luxury food are rarely consumed. Though the meat of snail and diluted *dal* taken commonly, they consume fruits, milk etc rarely. Among beverages, tea with or without milk and salt is taken commonly. The use of rice-beer (*Haria*) is common among the tribal pregnant women. They usually take food item thrice a day; the morning food is basically *pantha* (rice gruel; rice prepared in the previous day), they take mid-day meal and a meal in the evening.

The analysis of the tables 31 and 32 show no differences in providing special diet before and after delivery of the target and non-target villages. In general, 11.56 percent respondents of the target villages have reported observance of the practice. Nearly 12.50 per cent Santal households have arranged special diet

before delivery, while it is only about 10.34 per cent belonging to the Oraons have observed this practice. In general, 31.03 per cent literate tribals have observed this practice, whereas, 3.55 per cent illiterate tribal households are keen in providing the same before delivery. However, 30.56 per cent of the literate Santals and 31.82 percent literate Oraons have reported observance of this practice. But, 3.95 percent illiterate Santals and 3.08 percent illiterate Oraons have taken that diet. The picture of providing special diet before delivery is different among the tribals of the non-target villages (Table- 32). Majority of the tribals of the non-target villages are not keen in providing special diet before delivery. In general, 5.72 per cent households have reported do observe the practice of providing special diet before delivery. However, 4.42 per cent households of the Santals and only 4 per cent households belonging to the Oraon community have reported providing special diet before delivery. Comparison between literates and illiterates shows slightly different picture. In general, 14.47 per cent literate households have reported in providing special diet before delivery, while 14.52 per cent literate households belonging to the Santal community and 14.29 per cent literate households belonging to the Oraons have provided special diet. However, among the illiterate tribals no concern in providing special diet before delivery is noticed. In general, it is observed that the consciousness in providing special diet after delivery is almost absent among the tribals of both the target and non-target villages. Only 8 per cent of the households of the Santals have followed the practice but all of them are literate, whereas no households belonging to the Oraons is keen in providing special diet after delivery. No one of the non-target villages also has shown concern in providing special diet after delivery.

Immunisation and Iron Tablet Supplementation during Pregnancy

The status of immunisation against Titenus and the taking of iron tablet supplementation during pregnancy show the concern of the tribals regarding modern maternal care practices. Tables 31 and 32 show the status of immunisation against Titenus and iron tablet supplementation during pregnancy.

In general, 57.28 per cent respondents of the target villages have reported to receive two doses of Titenus toxide immunisation and 100-iron folic supplementation, commonly known as I.F.A. (Iron Folic Acid) tablets during pregnancy (Table-31). While among the Santals, 56.25 per cent have received two doses of Titenus toxide immunisation and iron tablet supplementation during pregnancy, 58.62 per cent households belonging to the Oraons have received this immunisation and iron folic supplementation during this period. The comparison between literate and illiterate tribals shows a big difference in respect of taking Titenus toxide immunisation and iron folic tablets during pregnancy. In general, 82.76 per cent belonging to the literate tribal community have received two doses of immunisation and iron folic supplementation. Tribe-wise analysis shows almost same picture. Among the literate Santals, 83.33 per cent have reported that pregnant women have received two doses of titenus toxide immunisation and iron folic supplementation, while among the literate Oraons, 81.82 per cent have reported that their pregnant women have availed these two medicines. In case of illiterate tribals, as a whole, 46.81 per cent respondents have received these medicines. However, 43.42 percent illiterate Santals and 50.77 percent illiterate Oraons have received two doses of titenus toxide immunisation and 100-iron folic supplementation.

The picture of the non-target villages is different in respect of recipients of the Titenus toxide immunisation during pregnancy (Table-32). In general, 25.66 per cent pregnant women have received two doses of Titenus toxide immunisation, while 24.52 per cent women belonging to the Santal community and 20 per cent pregnant women belonging to the Oraon community have received the same. The comparison between literate and illiterate tribals of the non-target villages shows slightly a different picture. In general, 42.11 per cent pregnant women belonging to the literate tribals have received two doses of Titenus toxide immunisation, while, 17.20 per cent illiterate households have reported to receive two doses of Titenus toxide immunisation. In case of the Oraons, 42.86 per cent belonging to the literate households and only 16.67 per cent belonging to the illiterate Oraon

households have received Titenus toxide immunisation during pregnancy. Among the Santals, 41.94 per cent literate respondents and 17.33 per cent illiterate respondents have received two doses of Titenus toxide immunisation (see table-32). It is reported that 21.37 per cent pregnant women of the non-target villages have received 100-iron tablets during pregnancy. However, 21.69 per cent pregnant women belonging to the Santals and 20 per cent pregnant women belonging to the Oraons have received the same numbers of iron tablets. It is reported that 42.11 per cent tribal pregnant women of the non-target villages belonging to the literate households are found to receive iron folic supplementation, while 41.94 per cent of the pregnant women belonging to the literate Santals and 42.86 per cent of the pregnant women belonging to the literate Oraon households are reported to receive iron folic supplementation. However, 12.90 per cent pregnant women belonging to the illiterate households have received iron folic supplementation, out of them, 13.33 per cent belong to the Santals households and 16.67 per cent of the pregnant women belonging to the Oraons.

It has been observed that the percentage of beneficiaries of titenus toxide immunisation and iron supplementation of the target villages is same, whereas we find the difference in respect of the percentage of availing of Titenus toxide immunisation and iron folic supplementation by the pregnant women of the non-target villages. Tribal pregnant women come to the Primary Health Centre basically to receive the Titenus toxide immunisation and iron supplementation on a same day, either 2nd or 4th Wednesday of every month. These days are immunisation-days. On that particular day, iron tablet may not be available at the Primary Health Centre. Tribals mostly ignore to come again to the Primary Health Centre to collect the iron tablets as some times they fail to get the iron tablets after coming there for three to four times. The tribals are not interested to purchase iron tablet from the open market mainly for their poor economic condition and lack of awareness regarding the need of iron tablet supplementation during pregnancy.

Table 31
Care of Pregnant women of the target villages

Tribal groups	Special diet before delivery (%)	Special diet after delivery (%)	Iron tablet supplementation (%)	TT-immunization (%)	Total (%)
Santal	14 (12.50)	08 (7.14)	63 (56.25)	63 (56.25)	112 (100)
Literate	11 (30.56)	08 (22.22)	30 (83.33)	30 (83.33)	36 (32.14)
Illiterate	03 (3.95)	0 (0)	33 (43.42)	33 (43.42)	76 (67.86)
Oraon	09 (10.34)	0 (0)	51 (58.62)	51 (58.62)	87 (100)
Literate	07 (31.82)	0 (0)	18 (81.82)	18 (81.82)	22 (25.29)
Illiterate	02 (3.08)	0 (0)	33 (50.77)	33 (50.77)	65 (74.71)
Total	23 (11.56)	08 (4.02)	114 (57.28)	114 (57.28)	199 (100)
Literate	18 (31.03)	08 (13.79)	48 (82.76)	48 (82.76)	58 (29.15)
Illiterate	05 (3.55)	0 (0)	66 (46.81)	66 (46.81)	141 (70.85)

Table 32
Care of Pregnant women of the non-target villages

Tribal groups	Special diet before delivery (%)	Special diet after delivery (%)	Iron tablet supplementation (%)	TT-immunization (%)	Total (%)
Santal	09 (4.24)	0 (0)	46 (21.69)	52 (24.52)	212 (100)
Literate	09 (14.52)	0 (0)	26 (41.94)	26 (41.94)	62 (29.25)
Illiterate	0 (0)	0 (0)	20 (13.33)	26 (17.33)	150 (70.75)
Oraon	02 (04)	0 (0)	10 (20)	10 (20)	50 (100)
Literate	02 (14.29)	0 (0)	06 (42.86)	06 (42.86)	14 (28)
Illiterate	0 (0)	0 (0)	04 (16.67)	04 (16.67)	36 (72)
Total	11 (4.20)	0 (0)	56 (21.37)	62 (25.66)	262 (100)
Literate	11 (14.47)	0 (0)	32 (42.11)	32 (42.11)	76 (29)
Illiterate	0 (0)	0 (0)	24 (12.90)	32 (17.20)	186 (71)

Awareness of the Titenus Toxide- Immunisation

As per the report of the Tagore Society for Rural Development, titenus toxide immunisation coverage of both the target and non-target villages is satisfactory. The immunisation is no more refused by the tribal pregnant women. But the knowledge and awareness level of the tribals regarding titenus toxide-immunization is very poor at both the target and non-target villages (see Table 33 and Table 34). The health staff of the Tagore Society for Rural Development mobilises pregnant women for titenus toxide immunisation camp, mainly organised by the Society in collaboration with the Primary Health Centre. The Tagore Society for Rural Development organises series of awareness camp on mother immunisation.

The analysis of the table 33 reflects interesting results. The results to the questions on (i) usefulness of two doses of titenus toxide immunisation, (ii) the worst possible result of non-immunisation by titenus toxide injection and (iii) the effects of taking only one dose of titenus toxide injection are quite different. As high as 62.50 per cent Santal respondents and 79.79 per cent respondents belonging to the Oraons, are not aware of the usefulness of titenus toxide immunisation. The picture in cases of the literate tribals is slightly different. It is observed that 52.78 percent literate Santals and 58.33 percent literate Oraons respectively are unaware of the outcomes of the usefulness of titenus toxide immunisation. The table 33 further puts clearly the responses of the tribals of target villages' different outcomes of the use of titenus toxide immunisation and reflects their poor level of awareness. It has been reported that 2.5 per cent Santal respondents of the target villages have responded that; titenus toxide toxide immunisation maintain good health, 1.67 per cent think that it prevents sickness, 16.67 per cent consider that it prevents disability as well as death.

In case of literate Santal respondents, 5.55 per cent have responded that the use of titenus toxide immunisation prevents sickness, though 22.22 per cent of them

realise that it prevents disability and 19.44 per cent of the literate Santals consider that it prevents death. On the other hand, 3.97 per cent of the illiterate Santals have the conviction that it maintains health, while 14.29 of them have reported that it prevents disability, and to 15.48 percent of them it prevents death. In case to the Oraons, it has been observed that only 1.06 per cent in general and 4.17 per cent literate have the idea that it prevents sickness and to 12.77 per cent it prevents disability and to 6.38 per cent it prevents death. It has also been observed that 16.67 per cent and 11.43 per cent of the literate and illiterate Oraons respectively are aware of the fact that the use of titenus toxide immunisation prevents disability, though 20.83 per cent and 1.43 per cent of the literate and illiterate Oraons realises that it prevents death (see table 33).

They do not have any knowledge of what may happen if a mother is not immunised with titenus toxide injections. We have found that 65 per cent of the Santals and 79.79 per cent of the Oraons are not aware of the worst possible outcome, if a mother is not immunised. However, 52.78 per cent of the literate Santal respondents and 66.67 per cent of the literate Oraon respondents are also not aware of the titenus injection incidences among the non-immunised mothers. Further analysis gives us interesting findings in regard to the poor awareness level among the tribals. It has been observed that 11.67 per cent of the Santals have reported about the illness of mother and 21.67 per cent have reported about death of mothers, whereas, very few of them (only 1.67 percent) have reported about disability as worst possible outcome (Table 33).

Literacy wise analysis reflects that 47.22 per cent of the literate Santals have responded only death as the worst possible outcome, though 16.67 per cent illiterate Santals have reported illness as the worst possible result and 10.71 per cent have marked death and 2.38 per cent, disability if mothers not immunised with titenus injections. In case of Oraons, 11.66 per cent believe that mothers will be ill, and 21.66 per cent believe in death of mothers, whereas very few (only 1.66 percent) have reported disability of mothers. Literacy wise analysis reflects that

10.63 per cent of the literate Oraons have responded about mothers' illness and 14.29 per cent of the illiterate Oraons possess the same view. Only 8.51 per cent of the literate Oraons have recorded death of non-immunised mothers, whereas a very few literate and illiterate respondents i.e, 1.06 per cent and 1.43 per cent respectively have recorded disability if a mother is not immunised (see Table 33).

It has been observed that majority of the mothers of the target villages are unaware of the merits and demerits of partial immunization (table 33). About 66.67 per cent of the Santals as a whole and 63.89 percent of the literate Santals are unaware of the results of the partial immunisation. But 79.59 per cent of the respondents belonging to the Oraon community are not aware of the effects of the partial immunisation, while 66.67 per cent of this literate person and 80 per cent of their illiterate persons are unaware of the result of partial immunisation. Further analysis of the positive responses shows the poor awareness among the tribals regarding partial immunisation.

It has been observed that 2.5 per cent of the Santals have admitted of partial benefit from only one dose of titenus toxide injection given to a mother. However, 9.17 per cent of them have marked single dose of titenus toxide immunisation as harmful and 21.67 per cent have admitted it to be of no use. The knowledge of the Oraons regarding partial immunisation is almost same. Only 2.12 per cent of them know that partial immunisation is harmful and 21.27 percent of them have reported that partial immunisation is of no use. Comparison between literate and illiterate respondents gives us interesting findings. It has been reported that 8.33 per cent of the literate Santals and 2.86 per cent of the illiterate Oraons have admitted that partial immunisation to be harmful. However, 27.78 per cent of the literate and 19.05 per cent of the illiterate Santals have marked partial immunisation is of no use. But 33.33 per cent of the literate and 17.14 per cent of the illiterate Oraons have opined the same (see Table 33).

Table 33
Showing the awareness of the TT-Immunization during pregnancy of the target villages

Question asked	Responses		Number of individuals			Number of individuals		
			Santal (%)	Literate (%)	Illiterate (%)	Oraon (%)	Literate (%)	Illiterate (%)
What is the use of TT-Immunization?	1.	Maintain health	03 (2.5)	0 (0)	03 (3.97)	0 (0)	0 (0)	0 (0)
	2.	Prevent Sickness	02 (1.67)	02 (5.56)	0 (0)	01 (1.06)	01 (4.17)	0 (0)
	3.	Prevent Disability	20 (16.67)	08 (22.22)	12 (14.29)	12 (12.77)	04 (16.67)	08 (11.43)
	4.	Prevent death	20 (16.67)	07 (19.44)	13 (15.48)	06 (6.38)	05 (20.83)	01 (1.43)
	5.	Don't Know	75 (62.50)	19 (52.78)	56 (66.67)	75 (79.79)	14 (58.33)	61 (57.14)
	Total		120 (100)	36 (30)	84 (70)	94 (100)	24 (25.53)	70 (74.47)
What is worst possible outcome if a mother is not immunized?	1.	Disease	14 (11.67)	0 (0)	14 (16.67)	10 (11.67)	0 (0)	10 (14.29)
	2.	Death	26 (21.67)	17 (47.22)	09 (10.71)	08 (21.66)	08 (8.51)	0 (0)
	3.	Disability	02 (1.67)	0 (0)	02 (2.38)	01 (1.66)	0 (0)	01 (1.43)
	4.	Don't know	78 (65)	19 (52.78)	59 (70.24)	75 (79.79)	16 (66.67)	59 (84.29)
	Total		120 (100)	36 (30)	84 (70)	94 (100)	24 (25.53)	70 (74.47)
What will happen if only one injection of TT is given to a mother?		Full benefit	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
		Partial benefit	03 (2.5)	0 (0)	03 (3.57)	0 (0)	0 (0)	0 (0)
		Harmful	11 (9.17)	03 (8.33)	08 (9.52)	02 (2.12)	0 (0)	02 (2.86)
		Not use	26 (21.67)	10 (27.78)	16 (19.05)	20 (21.27)	08 (33.33)	12 (17.14)
		Don't know	80 (66.67)	23 (63.89)	57 (67.86)	72 (76.59)	16 (66.67)	56 (80)
	Total		120 (100)	36 (30)	84 (70)	94 (100)	24 (25.53)	70 (74.47)

It appears from the table 34 that majority of the tribals of the non-target villages are totally ignorant of the usefulness of titenus toxide immunisation. They also lack the knowledge of the worst possible outcomes if mothers are not immunised and also they don't know the merits and demerits of the single dose of titenus injection. It has been observed that 97.72 per cent of the respondents belonging to the Santals are unaware of the effectiveness of titenus toxide immunisation, whereas, 91.94 per cent of the literate belonging to the Santals are unaware of the benefit of the same injections. About 98 per cent of the Oraons are not aware of the outcome of titenus toxide immunisation, while 92.86 per cent of their literate persons are unaware of the result of the same.

It is also observed that 96.36 per cent of the Santals and 98 per cent of the Oraons lack the knowledge of the worst possible outcomes, if mothers are not immunised. However, 88.71 per cent of the respondents belonging to the literate Santal community and 92.86 per cent of the respondents belonging to the literate Oraon community respectively are unaware of the worst possible outcomes, if mothers are not immunised. Again 94.09 per cent of the respondents belonging to the Santals and 94 per cent of the respondents belonging to the Oraons respectively are unaware of the merits and demerits of the single dose of titenus toxide immunisation. However, 90.32 per cent and 78.57 per cent of the literate Santals and literate Oraons respectively are not aware of the merits and demerits of the partial immunisation, i.e. single dose of titenus toxide immunisation. Those who have responded positively have different concepts regarding usefulness of titenua toxide injection; the worst possible outcome if a mother is not immunised and partial immunisation. It gives ample proof of the poor awareness level of the tribals of the non-target villages (Table-34).

Considering the above discussion, it can be mentioned here that the role of health workers of both the Tagore Society for Rural Development and the Government Health Department in health education regarding the titenus toxide immunisation is not at all satisfactory. Tagore Society for Rural Development organise meetings

and group discussions to promote titerus toxide immunisation among the tribal pregnant women. Along with the group discussions, slides and short films, effective communication strategy by involving tribal folk art carefully on chosen themes, e.g. the horrors of titerus etc, should be used to educate the tribal folk regarding the titerus toxide immunisation, which is not yet taken up by the Tagore Society for Rural Development even. The Tagore Society for Rural Development can play a vital role in creating awareness of the community for bringing changes about the understanding of the community regarding titerus toxide immunisation. The role of Government health functionaries in this regard is very important. Titerus toxide immunisation is mostly available at the Sub-centres and Primary Health Centres in the immunisation day. The poor information, education and communication programmes of the Government Health Departments are not sufficient to change the understanding of the tribals on titerus toxide immunisation.

The health care of the tribal women still depends mostly on the traditional *dais*, *ojha* etc. The benefit of modern medicine is not yet fully utilised by the tribal women. The problem remains not only with the tribal women, but also faulty implementation of health programmes is responsible for this. ' A serious attempt to improve the health of the women must deal firstly with their biased social customs and cultural traditions that play an important role in maintaining their health status'. (Health and Family Welfare Policy Document of the Government of India, 1992). This statement clearly articulates the need to adopt an integrated and holistic approach towards improving the health of the women. The programme implementation process does not reflect this thinking in the health and family welfare policy document of the Government of India. Health Programmes direct towards improving the health of the women. Though the focus is still on family planning.

Table 34
Showing the awareness of the TT-Immunization during pregnancy of the Non-target villages

Question asked	Responses		Number of individuals			Number of individuals		
			Santal (%)	Literate (%)	Illiterate (%)	Oraon (%)	Literate (%)	Illiterate (%)
What is the use of TT-Immunization?	1.	Maintain health	05 (2.27)	05 (8.06)	0 (0)	0 (0)	0 (0)	0 (0)
	2.	Prevent Sickness	0 (0)	0 (0)	0 (0)	01 (02)	01 (7.14)	0 (0)
	3.	Prevent Disability	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	4.	Prevent death	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	5.	Don't Know	215 (97.72)	57 (91.94)	158 (100)	49 (98)	13 (92.86)	36 (100)
	Total		220 (100)	62 (28.18)	158 (71.82)	50 (100)	14 (28)	36 (72)
What is worst possible outcome if a mother is not immunized?	1.	Disease	08 (3.64)	07 (11.29)	01 (0.63)	0 (0)	0 (0)	0 (0)
	2.	Death	0 (0)	0 (0)	0 (0)	03 (06)	03 (21.43)	0 (0)
	3.	Disability	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	4.	Don't know	212 (96.36)	55 (88.71)	157 (99.37)	47 (94)	11 (78.57)	36 (100)
	Total		220 (100)	62 (28.18)	158 (71.82)	50 (100)	14 (28)	36 (72)
What will happen if only one injection of TT is given to a mother?		Full benefit	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
		Partial benefit	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
		Harmful	02 (0.90)	0 (0)	02 (1.27)	0 (0)	0 (0)	0 (0)
		Not use	11 (05)	06 (9.68)	05 (3.16)	03 (06)	03 (21.43)	0 (0)
		Don't know	207 (94.09)	56 (90.32)	151 (95.57)	47 (94)	11 (78.57)	36 (100)
	Total		220 (100)	62 (28.18)	158 (71.82)	50 (100)	14 (28)	36 (72)

CHILD HEALTH CARE

Child health can be determined by interaction between the children on the one hand and the environment along with the society in which he lives on the other (Das & Ghosh, 1986, p, 146). It is hardly possible to measure or evaluate condition of the child health without the aid of specific parameters. Social factors concerned with the childcare in a society relate particularly to the neighbourhood and of course the family. The family has the duty to prepare the child so that he/she can live with others. The process of socialisation starts almost as soon as the infant is born. Culturally defined methods of bringing up children may either improve child health or cause health problems in child development.

India, according to the United Nations report, is making steady progress in child survival and family planning, but its performance in combating child malnutrition and promoting the status of girls and women remains weak. The son is much preferred to a daughter because of the economic gains from and obligations of the sons to their parents. Malnutrition, diarrhoea etc are very common among the tribals. Life of a child among the tribals is regarded less precious than that of an adult and very little attention is paid to them when they are sick. It is commonly known that high infant mortality rate among people with low social and economic status is due to the adults' lack of interest in the childhood years. Very often tribals depend on *Guniyas* or *Ojhas* for treatment of any kind of child diseases.

In the study area, in most of the cases irrespective of the Santals and Oraons of the target and non-target villages, the midwife or any other near relative who acts during delivery takes primary health care of a newborn baby. The process includes after detaching the umbilical cord and washing of the mouth with honey by a piece of cloth. Most of the families of the Santals and Oraons are found to massage their children with turmeric mixed oil for about twenty days to one month and cleaning of the newborn is done with tepid water. Some families have been found to take more care by giving their children regular bath, massaging the

children with warm mustard oil and cleaning their dress daily. It has been observed that some of the families have become interested to modern care while some others are found to protect their children from witchcraft with the help of *ojha*.

Child Rearing Practices: Belief and Tradition connected with the method of Feeding

Under child rearing practices the tribal concept of breast feeding, weaning and of the age of the baby when solid food is to be given, child immunisation and the existence of traditional practices regarding child health have been studied to assess the tribal concept of child health in a comparative perspective.

Mothers' breast milk is the main form of food for the infants. No other stable diet has been introduced to the baby until is five or six months old. Tribal mothers breast feed their child for a longer period of time. There are certain beliefs among the tribals regarding breast-feeding. They believe that breast milk of a sick mother is harmful to the health of a baby. In such cases cow milk is preferred as alternative of the mothers' milk. Another very important belief among the tribals is that the baby is to be deprived of mothers' milk for one to three days after birth. During this period honey, water, cow milk etc is given. Das and Ghosh have pointed out that Santals do not know the positive aspects of breast-feeding but it is provided with scientific approaches (Das and Ghosh; 1986, p148).

The use of canned food is not yet introduced in the tribal villages. Ellestad-Sayed et al. (1979, p.295-298) mention in their paper that breast-feeding protects against infection of Indian infants and have pointed out, "Fully bottle-fed infants were hospitalised with infectious diseases 10 times more often and spend 10 times more days in hospital during the first year of life than breast-fed infants... Breast-feeding is strongly protective against severe infection requiring hospital admission and also against minor infection. The protective effect, which lasts

even after discontinuation of breast-feeding, is independent of family size, overcrowding in the home, family income and education of parents. Measures to achieve breast-feeding, virtually for all infants, particularly in northern communities, should be given high priority'.

The analysis of table 35 shows almost 80 per cent of the mothers of the target villages breast-feed their children for a long period (more than two years). The analysis of the literate and illiterate tribals reflects that illiterate tribal breast-feed their children slightly longer time than their literate counterparts. It is observed that only 20.10 per cent of the tribals of the target villages prefer to breast-feed their children till 12 months to 2 years of their child age. Where as 22.41 per cent of the literate tribals of the target villages prefer to breast feed their children till 12 months to 2 years of their child age, however, only 19.15 per cent of the illiterate tribals of the target villages do breast-feed their children for the same period. Tribe wise analysis gives us interesting results. In case of the Santals, it has been observed that as a whole 80.36 per cent of the mothers breast-feed their children for more than 2 years, while 77.78 per cent of the literate Santal mothers and 81.58 per cent of the illiterate Santal mothers follow the same practice. However, it is reported that 19.64 per cent of the Santal mothers breast feed their children till 12 months to 2 years, while 22.22 per cent of the literate Santals and about 18.42 per cent of the Santal mothers belonging to the illiterate families breast feed their children for the same period.

In case of the Oraons of the target villages, same table shows that as a whole 79.31 per cent of the respondents breast-feed their children for more than 2 years of their age. But 77.27 per cent of the literate Oraon respondents and 80 per cent of the mothers belonging to the illiterate Oraon families breast-feed their children for more than 2 years. It has been reported that 20.69 per cent of the Oraon mothers breast-feed their children till 12 months to 2 years of their age, while 22.73 per cent of the literate respondents and 20 per cent of the illiterate respondents respectively have reported that they breast feed their child till 12

months to 2 years of their child. The same table (Table 35) reflects the weaning practices of the tribals and the age of the child when normal food is given to the children. In general, scientific concept of weaning practices reflects not only the health consciousness on the part of mothers but also that of the community to which she belongs and it is almost missing among the tribals of the study area. In certain age of their children, tribals provide some semisolid food in addition to the breast milk, is considered as weaning food. They occasionally provide rice-water, vegetables, melted rice etc in the form of weaning food and after that a child eats whatever an adults take. In general, 53.27 per cent of the tribal respondents of the target villages start weaning within 6 months of their age, while 48.28 per cent of the literate tribal mothers and 55.32 per cent of the illiterate tribal mothers start weaning within 6 months of age of their children. However, 46.73 per cent of the tribals of the target villages and 51.72 per cent of the literate tribal mothers have reported to start weaning when their babies reach the age of 7-9 months and 44.68 per cent of the illiterate tribal mothers followed suit the literate tribal mothers.

The tribe wise analysis of the target villages shows almost the same picture. In general, 54.46 per cent of the Santal mothers have started weaning within 6 months of the age of their children but 50 per cent of the literate Santal mothers and 56.58 per cent of the illiterate Santal mothers have reported to start weaning within 6 months age of their children. It has been reported that 45.54 per cent of the Santal mothers have weaned their babies when their babies reached the age of 7-9 months, while 50 per cent of the literate Santals and 43.42 per cent of the illiterate Santal mothers have reported to start weaning their babies at their age of 7-9 months. It has been observed that the Oraon mothers of the target villages have followed more or less similar practices. In general, 51.72 per cent of the Oraon mothers have started weaning within 6 months of the age of their children, while 45.45 per cent of the literate mothers and about 53.85 per cent of the illiterate Oraon mothers have started weaning within 6 months of birth of their children. About 48.28 per cent of the Oraon mothers have weaned their babies

when their babies reached the age of 7-9 months, while 54.55 per cent of the literate Oraons and 46.15 per cent of the illiterate Oraon mothers have started weaning when their babies have reached the age of 7-9 months (see Table 35).

As far as giving solid foods (adults food) to babies is concerned, it has been observed from the same table that 68.84 per cent of the tribal mothers of the target villages have started the practice of giving solid food to their babies below the age of 9 months, while 63.79 per cent of the tribal mothers belonging to literate families and about 70.92 per cent of the illiterate mothers have given solid foods to their babies at the same age. However, 31.16 per cent of the tribal mothers have given solid foods when their babies are 10-12 months old, while 36.21 per cent of the literate tribals and about 29.08 per cent of the illiterate tribals have started to give solid foods to their babies when they are 10-12 months old.

Tribe wise analysis gives us the same picture regarding use of solid foods. It has been reported that 69.64 per cent of the Santal mothers, in general, 63.89 per cent of the literate Santal mothers and about 72.37 per cent of the illiterate mothers respectively give solid foods to their children below the age of 9 months. However, 30.36 per cent of the Santals as a whole give adult type of foods to their babies when their babies are 10-12 months old, while about 36.11 per cent of the Santal families belonging to the literate community and 27.63 per cent of the illiterate Santals give adult foods to their children when their babies are 10-12 months old. In case of the Oraons , it has been observed that as a whole 67.82 per cent give solid foods, when their babies are below the age of 9 months, while 63.64 per cent of the Oraon mothers belonging to the literate families and about 69.23 per cent of the Oraon mothers belonging to the illiterate families give solid foods to their babies below the age of 9 months. However, 32.18 per cent of the Oraon mothers, in general, give solid foods to their babies at the age of 10-12 months, while 36.36 per cent of the Oraon mothers belonging to the literate families and about 30.77 per cent of the Oraons belonging to the illiterate families provide solid foods to their babies aged 10-12 months (see Table 35).

Table 35

Age of baby till breast-feed is given, age at weaning and age of baby when normal food is given of the target villages.

Tribal groups	Age of baby till breast-feed is given				Age at weaning				Age of normal food is given			Total (%)
	Below 9 month (%)	10-12 month (%)	12 month- 2 years (%)	More than 2 years (%)	6 month (%)	7-9 month (%)	10- 12 month (%)	12-18 month (%)	Below 9 month (%)	10- 12 mo(%)nth	12 month and above (%)	
Santal	0 (0)	0 (0)	22 (19.64)	90 (80.36)	61 (54.46)	51 (45.54)	0 (0)	0 (0)	78 (69.64)	34 (30.36)	0 (0)	112 (100)
Literate	0 (0)	0 (0)	08 (22.22)	28 (77.78)	18 (50)	18 (50)	0 (0)	0 (0)	23 (63.89)	13 (36.11)	0 (0)	36 (32.14)
Illiterate	0 (0)	0 (0)	14 (18.42)	62 (81.58)	43 (56.38)	33 (43.42)	0 (0)	0 (0)	55 (73.37)	21 (27.63)	0 (0)	76 (67.86)
Oraon	0 (0)	0 (0)	18 (20.69)	69 (79.31)	45 (51.72)	42 (48.28)	0 (0)	0 (0)	59 (67.82)	28 (32.18)	0 (0)	87 (100)
Literate	0 (0)	0 (0)	05 (22.73)	17 (77.27)	10 (45.45)	12 (54.55)	0 (0)	0 (0)	14 (63.64)	08 (36.36)	0 (0)	22 (25.29)
Illiterate	0 (0)	0 (0)	13 (20)	52 (80)	35 (53.85)	30 (46.15)	0 (0)	0 (0)	45 (69.23)	20 (30.77)	0 (0)	65 (74.71)
Total	0 (0)	0 (0)	40 (20.10)	159 (79.90)	106 (53.27)	93 (46.73)	0 (0)	0 (0)	137 (68.84)	62 (31.16)	0 (0)	199 (100)
Literate	0 (0)	0 (0)	13 (22.41)	45 (77.59)	28 (48.28)	30 (51.72)	0 (0)	0 (0)	37 (63.79)	21 (36.21)	0 (0)	58 (29.15)
Illiterate	0 (0)	0 (0)	27 (19.15)	114 (80.85)	78 (55.32)	63 (44.68)	0 (0)	0 (0)	100 (70.92)	41 (29.08)	0 (0)	141 (70.85)

It can be noted here that the Tagore Society for Rural Development provided packed weaning food for the infants as a part of its health and nutrition programmes during 1993 and 1994 to all the children of the target villages and from 1995 onwards the Tagore Society for Rural Development has stopped providing weaning food considering the cost involved on that and in no way the tribals can afford the expense without the support of the Tagore Society for Rural Development. The Tagore Society for Rural Development now gives emphasis on nutritional education programmes and organises nutritional demonstration training for the mothers so that they can be able to prepare low cost weaning food within the available means at their home by using rice, *dal*, vegetables etc.

In case of the tribals of the non-target villages' almost same practices are followed regarding breast-feeding, weaning food and normal food of their children (Table 36). The analysis of the table 36 reflects that 79 per cent of the tribals breast-feed their children for more than 2 years, while 73.68 per cent of the tribals belonging to the literate families and about 81.19 per cent of the tribals belonging to the illiterate families prefer to breast feed their children for more than 2 years. However, 21 per cent of the tribals, in general, and 26.32 per cent of the tribals belonging to the literate families breast-feed their children till 10- 12 months age of the children, but about 18.82 per cent of the tribals belonging to the illiterate families have reported to breast feed their children of 10- 12 months age. Tribe wise analysis shows almost the same picture. In case of the Santals, 80.18 per cent of the mothers breast-feed their children for more than 2 years, while 74.19 per cent of the literate Santals and 82.67 per cent of the illiterate Santal mothers breast-feed their children for more than 2 years. However, it has been reported that 19.81 per cent of the Santal mothers breast feed their children when their babies reach the age of 12 months to 2 years, while 25.80 per cent of the literate Santals and about 17.33 per cent of the Santal mothers belonging to the illiterate families breast-feed their children till 12 months to 2 years of the age of their children (Table 36). In case of the Oraons, as a whole, 74 per cent breast-feed their children for more than 2 years of their age, whereas 71.43 per cent of the

literate respondents and 77.78 per cent of the mothers belonging to the illiterate Oraon families breast-feed their children aged more than 2 years. of their child age. However, 26 per cent of the Oraon mothers breast-feed their children till 12 months to 2 years of their age, while 28.57 per cent of the literate respondents and 22.22 per cent of the illiterate Oraon respondents have reported to breast-feed up to the same age of their children (see Table 36). In regard to the weaning practices of the non-target villages (Table 36), it has been observed that nearly 45.04 per cent of the tribals, in general, and 42.11 per cent of the literate tribals and 46.24 per cent of the illiterate tribal mothers have started weaning within 6 months of the age of their children respectively. However, 54.96 per cent of the tribals have reported to start weaning when their babies reached the age of 7-9 months, Among them 57.89 per cent are literate tribals mothers and about 53.76 per cent belonging to the illiterate families.

The tribe wise analysis of the non-target villages shows almost the same picture (Table 36). In general, 44.81 per cent of the Santal mothers have started weaning within 6 months' age of their children, however, 41.94 per cent of the literate Santal mothers and about 46 per cent of the illiterate Santal mothers start weaning of their children aged 6 months. However, 55.19 per cent of the Santal mothers have weaned their babies when their babies reached the age of 7-9 months, while 58.06 per cent of the literate Santals and 54 per cent of the illiterate Santal mothers start weaning their babies on their reaching 7-9 months' age. In case of Oraons, it has been observed that 46 per cent mothers have started weaning within 6 months of their child age, while 42.86 per cent of the literate mothers and about 47.22 per cent of the illiterate mothers have started weaning within 6 months' age of their children. However 54 per cent of the Oraon mothers have weaned their babies when their babies reached the age of 7-9 months, while 57.14 per cent of the literate Oraons and about 52.78 per cent of the illiterate Oraon mothers have started weaning when their babies have reached the age of 7-9 months. As far as giving solid food (adults food) to babies of the non-target villages, it has observed from the same table that 51.91 per cent of the tribal

mothers have started the practice of giving solid food when their babies age below the age of 9 months, while 50 per cent of the tribal mothers belonging to literate families and about 52.69 per cent of the illiterate mothers have given solid foods to their babies below the age of 9 months. However, 48.09 per cent of the tribal mothers, in general, 50 per cent of the literate tribals and about 47.31 per cent of the illiterate tribals give solid food when their babies are 10-12 months old respectively.

Tribe wise analysis gives us slightly different picture regarding use of solid food (Table 36). It has been reported that 51.89 per cent of the Santal mothers give solid foods to their babies aged below 9 months, while 48.39 per cent of the literate Santal mothers and about 53.33 per cent of the illiterate mothers give solid food to their children reaching the age of 9 months. However, 48.11 per cent of the Santals, as a whole, have reported to give adult type of food to their babies when their babies are 10-12 months old, while about 51.61 per cent of the Santal families belonging to the literate community and 46.67 per cent of the illiterate Santals give adult food to their children when their babies are 10-12 months old. In case of the Oraons (Table 36), it has been observed that as a whole 52 per cent give solid food when their babies are aged below 9 months, while 57.14 per cent of the Oraon mothers belonging to the literate families and about 50 per cent of the Oraon mothers belonging to the illiterate families give solid foods to their babies aged below 9 months. However, 48 per cent of the Oraon mothers, 42.86 per cent of the Oraon mothers belonging to the literate families and about 50 per cent of the Oraons belonging to the illiterate families are giving solid food when their babies are 10-12 months old.

Tribal mothers breast-feed their children till a subsequent one is born. Mothers do not feed the babies spontaneously or at regular intervals. They feed the babies when they cry for it, thereby indicating hunger. The difference in observation of weaning practices of the target and non-target villages belonging to the literate families is easily noticed. Some of the tribals of both the target and non-target

villages have expressed that the children may be given all sorts of solid food except animal protein after the sucking period is over. They believe that protein food should be given at the later age. The average diet of the children is rice, pulse and vegetables. Only in few families the children are found to take milk. In some of the families fish or meat are given to the children once in a week with rice, pulse and vegetables.

In theory, the infants of the tribals should be better off as most of the tribal mothers breast-feed their babies for a long period of time. But they are not. Evidence from the study area suggests that the growth curve of many tribal infants begins to fall as early as from the fourth month of the age of their children. Breast-feeding meets all the nutritional needs of a child for the first six months. There are some possibilities. One is the breast-feeding is somehow inadequate because babies are not being breast-feed in the right way. If feeding is not frequent enough, then the child's nutritional needs will obviously not be met. If breast-feeding is not started within a few hours of birth, then this may hamper lactation. The difference between the period of breast-feeding and the timing of the introduction of other food, at this vital and vulnerable stage of a child's growth is possibly the most important reason for malnutrition of the tribal children.

Child Immunization

There are six killer diseases, which are commonly known as vaccine preventable diseases. These diseases are Tuberculosis, Diphtheria, Tetanus, Whooping Cough, Polio and Measles. All these diseases are common among the children below the age of 5 years. The vaccination programme of the health department is meant to reduce the prevalence of the vaccine preventable diseases. Vaccine for tuberculosis, D.P.T., polio doses and vaccine for measles should be taken within one year of the age of a child, though there are booster doses also. Booster doses may be taken till 16 years age of a child. Tribal knowledge on immunization against these diseases, the age limit of the child immunisation, and on the six killer diseases has been studied in a comparative perspective.

Table 36

Age of baby till breast-feed is given, age at weaning and age of baby when normal food is given of the non-target villages.

Tribal groups	Age of baby till breast-feed is given				Age at weaning				Age of normal food is given			Total (%)
	Below 9 month (%)	10-12 month (%)	12 month- 2 years (%)	More than 2 years (%)	6 month (%)	7-9 month (%)	10- 12 month (%)	12-18 month (%)	Below 9 month (%)	10- 12 month (%)	12 month and above (%)	
Santal	0 (0)	0 (0)	42 (19.81)	170 (80.19)	95 (44.81)	117 (55.19)	0 (0)	0 (0)	110 (51.89)	102 (48.11)	0 (0)	212 (100)
Literate	0 (0)	0 (0)	16 (25.81)	46 (74.19)	26 (41.94)	36 (58.06)	0 (0)	0 (0)	30 (48.39)	32 (51.61)	0 (0)	62 (29.25)
Illiterate	0 (0)	0 (0)	26 (17.33)	124 (82.67)	69 (46)	81 (54)	0 (0)	0 (0)	80 (53.33)	70 (46.67)	0 (0)	150 (70.75)
Oraon	0 (0)	0 (0)	13 (26)	37 (74)	23 (46)	27 (54)	0 (0)	0 (0)	26 (52)	24 (48)	0 (0)	50 (100)
Literate	0 (0)	0 (0)	04 (28.57)	10 (71.43)	06 (42.86)	08 (57.14)	0 (0)	0 (0)	08 (57.14)	06 (42.86)	0 (0)	14 (28)
Illiterate	0 (0)	0 (0)	08 (22.22)	28 (77.78)	17 (47.22)	19 (52.78)	0 (0)	0 (0)	18 (50)	18 (50)	0 (0)	36 (972)
Total	0 (0)	0 (0)	55 (21)	207 (79)	118 (45.04)	144 (54.96)	0 (0)	0 (0)	136 (51.91)	126 (48.09)	0 (0)	262 (100)
Literate	0 (0)	0 (0)	20 (26.32)	56 (73.68)	32 (42.11)	44 (57.89)	0 (0)	0 (0)	38 (50)	38 (50)	0 (0)	76 (29.01)
Illiterate	0 (0)	0 (0)	35 (18.82)	151 (81.18)	86 (46.24)	100 (53.76)	0 (0)	0 (0)	98 (52.69)	88 (47.31)	0 (0)	186 (70.99)

The analysis of the table 37 and 38 gives us sharp differences regarding knowledge of the tribals of the target and non-target villages and also between the literate and illiterate tribals of the target and non-target villages on the aspects of immunisation. The analysis of the table 37 reflects that 51.78 per cent of the tribals of the target villages have immunised their children against six killer diseases. The comparison between the literate and illiterate tribals of the target villages shows that 63.79 per cent families belonging to the literate families and 46.81 per cent of the families belonging to the illiterate families have immunised their children against six killer diseases. Tribe wise analysis shows that in general immunisation coverage of the Santal families is slightly more (56.25 per cent) than that of the Oraon families (45.97 per cent). Whereas almost same percentage of literate families (63.89 per cent and 63.63 per cent) belonging to the Santal and Oraon communities have reported to immunise their children against six killer diseases. While 53.63 per cent of the families belonging to the illiterate Santals have immunised their children, 40 per cent of the illiterate families belonging to the Oraon community have immunized their children against these diseases. The families who have not vaccinated their children do not take up any alternative measures against these diseases.

The knowledge of the tribals of the target villages on the age limit of child immunisation is not at all commendable (Table 37). In general, 42.99 per cent respondents know the age limit of the child immunisation. Literate respondents are slightly more aware (52.62 per cent) than their illiterate counterparts (41.13 per cent). The same trend has been observed between the Santals and the Oraons. In general, 45 per cent of the Santals have the knowledge of age limit of the child immunisation, while 55.56 per cent of the literate Santal families and 44.74 per cent of the illiterate Santals know the age limit of the child immunisation. In case of the Oraons, 40.42 per cent, in general, and 63.63 per cent of the literate families and 36.92 per cent of the illiterate families respectively are familiar with the age limit.

The knowledge of six killer diseases of the tribals of the target villages is poor. In general, 34.11 per cent of the tribals of the target villages have reported to have knowledge of six killer diseases, while 39.66 per cent of the literate families and 35.46 per cent of the illiterate tribals have reported to know about these six killer diseases. Tribe wise analysis shows that in general, 35.50 per cent of the Santal families know about these diseases, while 41.67 per cent of the literate Santals and 39.47 per cent of the illiterate Santals are acquainted with these diseases. In case of the Oraons, in general, 29.78 per cent are familiar with these six killer diseases, while 36.36 per cent of the literate families and 30.37 per cent of the illiterate families respectively are well known with these diseases.

The analysis of the table 38 gives the picture of non-target villages, which is entirely different from the picture of the target villages. In general, 21.75 per cent of the tribals of the non-target villages have immunised their children against six killer diseases. The comparison between the literate and illiterate tribals shows that 35.52 per cent literate family and 15.46 per cent illiterate families have immunised their children against six killer diseases. Tribe wise analysis shows that 22.64 per cent of the Santals have immunised their children, while 35.48 per cent of the literate Santals and only 16.46 per cent of the illiterate Santals have immunised their children against these six killer diseases. In case of the Oraon families, in general 18 percent immunises their children against six killer diseases, whereas 37.71 per cent of the literate families and only 11 per cent families belonging to the illiterate Oraons have immunised their children against these diseases.

The knowledge of the tribals of the non-target villages on the age limit of child immunisation is very poor as compared to the families of the target villages. In general, 11.11 per cent of the respondents know the age limit of the child immunisation. Literate respondents are more aware (23.68 per cent) than their illiterate counterparts (6.19 per cent). The same trends have been seen among the Santals and the Oraons. In general, 11.36 per cent of the Santals have the

knowledge of age limit of the child immunization, while 24.19 per cent of the literate Santal families and 6.33 per cent of the illiterate Santals respectively know the age limit of the child immunisation. In case of the Oraons, 10 per cent have the knowledge of age limit of the child immunisation, while 21.43 per cent of the literate families and 5.56 per cent of the illiterate families respectively are aware of the age limit of the child immunisation (Table-37).

The knowledge of six killer diseases of the tribals of the non-target villages is poor (Table -37). In general, 10.74 per cent of the tribals have reported to know about these diseases, while 22.37 per cent of the literate families and 6.19 per cent of the illiterate tribals have reported to have the knowledge of the same disease. Tribe wise analysis shows that in general, 11.36 per cent of the Santal families have this knowledge, while 22.58 per cent of the literate Santals and only 6.96 per cent of the illiterate Santals have the same knowledge. In case of the Oraons, in general only 8 per cent of the families are acquainted with the knowledge of six killer diseases, while 21.43 per cent of the literate families and 2.78 per cent of the illiterate families respectively know those diseases.

Vaccination of the children is not very popular to the tribals of the non-target villages. This is largely due to the lack of awareness among them. Most of the tribals do not know anything about usefulness of vaccination as well as the need for vaccination. However, some tribals are aware of it but due to lack of facilities they could not vaccinate their children in time. The Tagore Society for Rural Development arranges vaccination camp in every fortnight with the help of the Block Medical Officer of Health of Tapan Primary Health Center at their target villages. On the other hand, the vaccination programmes of the non-target villages merely depend on the will of the health staff of Government Primary Health Centres.

Table 37

Knowledge of child immunization against six killer diseases of the target villages

Tribal Groups	Immunization against six killer disease	Age limit of child immunization	Knowledge of the six killer disease	Total
Santal	63 (56.25)	54 (45.00)	45 (37.50)	112 (100)
Literate	23 (63.89)	20 (55.56)	15 (41.67)	36 (32.14)
Illiterate	40 (52.63)	34 (44.74)	30 (39.47)	76 (67.86)
Oraon	40 (45.97)	38 (40.42)	28 (29.78)	87 (100)
Literate	14 (63.63)	14 (63.63)	08 (36.36)	22 (25.29)
Illiterate	26 (40)	24 (36.92)	20 (30.77)	65 (74.71)
Total	103 (51.78)	92 (42.99)	73 (34.11)	199 (100)
Literate	37 (63.79)	34 (58.62)	23 (39.66)	58 (29.15)
Illiterate	66 (46.81)	58 (41.13)	50 (35.46)	141 (70.85)

N= 112 & 87

Table 38

Knowledge of child immunization against six killer diseases of the non-target villages

Tribal Groups	Immunization against six killer disease	Age limit of child immunization	Knowledge of the six killer disease	Total
Santal	48 (22.64)	25 (11.36)	25 (11.36)	212 (100)
Literate	22 (35.48)	15 (24.19)	14 (22.58)	62 (28.18)
Illiterate	26 (16.46)	10 (6.33)	11 (6.96)	158 (71.82)
Oraon	09 (18)	05 (10)	04 (8)	50 (100)
Literate	05 (35.71)	03 (21.43)	03 (21.43)	14 (28)
Illiterate	04 (11.11)	02 (5.56)	01 (2.78)	36 (72)
Total	57 (21.75)	30 (11.11)	29 (10.74)	270 (100)
Literate	27 (35.53)	18 (23.68)	17 (22.37)	76 (28.15)
Illiterate	30 (15.46)	12 (6.19)	12 (6.19)	194 (71.85)

N= 212 and 50

Traditional Child Rearing Practices

Some traditional practices regarding child health care are also observed in some of the families of both the target and non-target villages. We will discuss here some of the traditional measures and intervention of the Tagore Society for Rural Development to get rid off the traditional practices, if they were wrong. It has been observed that normally for examining the normal eyesight, finger is placed in front of the eyes. If they blink it is believed that their eyesight is normal. Making sound on vessels is testing the normal listening power of the child and his response to giggle is observed. Besides this, smearing of oil for normal development is performed. Among the tribals in most cases of sickness of the child, family treatment is tried first. If it fails, they pay visit to the folk healers or *ojha*. Though now-a-days, it is observed that most of the tribals visit health centre for seeking modern treatment. It also reveals that if children are seriously ill and do not respond to the domestic medicine or medicine given by the *ojha*, then only they take the child to the modern doctors.

A tribal prefer and has belief in the folk healers, *ojha*, as additional charm with him increases their faith. Decision regarding whom to consult is based on the form of illness, belief, course, type of sickness, and past family experiences. Some examples collected during the fieldwork, may be cited here with the view to understanding the situation. One of the common beliefs of the tribals of both the target and non-target villages connected with the health and diseases of the children is the effect of the evil eye, is still prevalent. Whenever anyone remarks that a child is very beautiful, strong and intelligent, the child immediately develops signal of some disease; gets weaker and weaker and becomes pale. Certain preventive measures are taken against the influences of the evil eye. A black spot is marked on the forehead of the child with the carbon deposited in the *chula*. The idea is that due to the black spot the spectator will not be able to judge the beauty correctly and for this, the spectator will not be able to comment on the

beauty of the child. If a child is being affected by the evil eye, an *ojha* instead of a modern doctor is consulted for getting the child cured.

Two years old daughter of Nirmal Hembram and Chumki Mardi of Dakshin Keshrail village was suffering from stomachache. Family treatment with the massage of water and oil on the stomach and also application of hot massages were offered. No change of the symptoms was noticed. They took the child to the *ojha*, Bharat, who treated the child with rituals and local herbs. There was no change in symptoms but the family felt that the child showed improvement. At last they brought the child to the homeopathic clinic of the Tagore Society for Rural Development and with the homeopathic treatment the patient got cured.

Here are two examples of refusal of modern medicine; causes of refusal and the reasons for faith on the *ojha* from the case studies where researcher personally involved having a better understanding of tribal beliefs and practices through participatory observation. Suryamoni and Dulali are two young girls of around 12 years old and reading in class IV in a Mission School. They live in Mallickpur village, one of the target villages of the Tagore Society for Rural Development. They have been suffering from some diseases for the last one-month. They have undergone the treatment of Sunil Ekka, a local *ojha*. When we arrived at Mallickpur, Dulali and Suryamoni along with their parents and other village people had assembled at Sunil's house. We also sat at the terrace of Sunil's house and tried to understand the situation. Within a moment we came to know that they were suffering from some sort of severe brain ache and both the girls were almost sense-less. Villagers believed that witchery effected their trouble. We also had a discussion regarding this with Krishnapada, a tribal youth who worked as a Non-formal school teacher and a health worker of the Tagore Society for Rural Development. He received training in the primary health care from the Tagore Society for Rural Development. He was also under the impression that the two girls were under the influence of witchcraft. Few months' back there was a death of a person. The local *ojha* treated the person before his death. The *ojha*

identified the wife of Biswanath as *Daiin* and as a result Biswanath and his wife were forced to leave the village. They had been rehabilitated in the village after the intervention of the Tagore Society for Rural Development. Now again villagers along with local *ojha* have identified her as a witch and charged on her the responsibility for the diseases of the two girls.

We have decided to bring these children away from the *ojha's* house. Very next day we along with the Medical Officer of Malancha Primary Health Center managed to motivate the parents of Suryamoni to admit her at the Block Primary Health Centre. The condition of the health centre is not better than a stable. All the indoor beds are without mattress. After initial clinical checkup the doctor suspected the case as brain tumor. The treatment is expensive. Patient has to be shifted either to Malda or to Siliguri Medical College. He prescribed lots of medicine including injections most of these were not available at the Primary Health Centre and were very much costly. We purchased medicines with the help of the Tagore Society for Rural Development. We had spent the whole day at the hospital and next day morning I found that all the villagers assembled near the hospital and complained the negligence of the doctor and the health staff. There was no improvement of the patient also. We assessed the situation and found out that after our departure the doctor or other staff had not taken any attention and even the medicines were not given. Villagers were forced to release the patient. Lastly, in the evening, they had taken back the patient to their village again and started her treatment under an *ojha*. She underwent prolong treatment and villagers felt that girls had been showing gradual improvement.

Another case of refusal of modern medicine has been noted at Sondapukur. Bijan, a one-year-old son of Gopal and Sumi Murmu suffered from diarrhea. They took the child to the Primary Health Centre at Malancha at midnight. No one attended the child at night at the health centre and they had no other way but to take the child to a local *ojha*. *Ojha* identified that the evil spirit caused the disease. He prescribed medicines along with a *tabeej*. Gopal felt that after the treatment

the child showed improvement. Traditionally, a number of ceremonial rituals are observed to some extent among the tribals of both the target and non-target villages. The changes of practices are also being observed particularly for preventive measures. The tribals are now coming forward for child immunisation, for diarrhoea management. The inhabitants' tribals of the target villages have come to know the scientific home management procedure to tackle diarrhoea.

CHAPTER 5

FAMILY PLANNING PRACTICES AND THE TRIBAL PEOPLE

FAMILY PLANNING PROGRAMMES

Introduction

India is the first country in the world to have started an official family planning programme in 1952. The Indian family planning programme has undergone an evolution trying out different approaches. In the beginning 'clinic' approach was adopted. Later on 'cafeteria' approach has been adopted with the intention of providing services in respect of as many family planning methods as possible so that couples can choose any method of their liking. Sterilisation was introduced into the family planning programme in 1956. But the demand for sterilisation on large scale has started about a decade later. Now the demand is almost exclusively for sterilisation, particularly for women sterilisation. Much is being made of the demand for tubectomy. It is often alleged by some women activists and many Indian as well as foreign observers of the Indian family planning programme that Indian women are unjustly subjected to sterilisation, while men are allowed to go free. Government agencies are interested in tying up women's reproductive tubes. Beyond family planning services government programmes do not want to address the much more gender specific health care need of the women. It is time when someone should put the situation in proper perspective. The allegation implies that tubectomy or sterilisation is something undesirable. There is also a growing consensus among the policy planners in India that the overriding emphasis on female sterilisation of the present programme is not likely to achieve the desired demographic goal of replacement fertility. A greater emphasis should be placed on increasing method choice by introducing methods to space births.

Government's Initiatives to Popularise the Family Planning Programmes

The Government of India has taken up several policy initiatives in recent year. A high-level population committee was set up in December 1991 as a subcommittee of the National Development Council, which includes all chief

ministers of the states. The committee made recommendations to the Council for formulating a national policy and establishing mechanisms to implement it. The policy context today is radically different from the one faced by the Government of India when the national family planning programme was launched. Although India has been a leader in developing health and population policies, major implementation problems, namely, many who need the services are not reached, most of those reached do not have access to the range of services they need and the quality of services is often unsatisfactory, have plagued the programme for more than two decades. In 1992, the Ministry of Health and Family Welfare developed a far-sighted action plan to strengthen the programme, including several recommendations that are congruent with the reproductive health approach. Five key issues receiving substantial attention in the present policy may be stated as: (i) moving away from numerical and method specific contraceptive targets and incentives to a client-centered system of performance goals and measures, (ii) expanding the use of male and reversible contraceptive methods and broadening the choice of contraceptives, (iii) improving the breadth, availability, and quality of services and involving communities in managing the public sector programme, (iv) strengthening the role of private sector in the programme and (v) adequate funding for the current programme. In 1994 the Cairo International Conference on Population and Development international consensus was arrived at improving reproductive health, including family planning, as they were essential to human welfare and development. The Government of India strongly supported the Cairo programme of action and the reproductive health approach.

Since the inception of the Family Planning Programme, the Government of India has been trying to popularise the programme. Efforts have been made to apprise the rural and urban masses through the mass media and interpersonal communication. India's Family Welfare Programme is the evidence of experimental approaches. A major draw back of Indian Family Planning Programme has been observed in communication gap between awareness

creation and actual adoption. Studies conducted by Chandrasekharan (1963, p.5-14) and Saha (1977, p.70-75) have shown that the interpersonal channel of communication is more effective in the decision-making stages of adoption of innovation. The information, education and communication programmes of the Health and Family Welfare department have never considered the customs, beliefs and attitudes of the tribals while preparing information, education and communication strategy, commonly known as IEC. As a result the family planning programmes among the tribals of the study area are not at all popular.

THE TRIBAL PEOPLE AND FAMILY PLANNING PROGRAMME

Tribal people are naturally shy and have an inherent belief in superstitions. Indigenous method is still being practised by some of the tribal women as a method of abortion, where a lot of risk is involved. No one is aware of the Medical Termination of Pregnancy Act and also knows that abortion may take place in hospital free of cost. But unwed women resort to some clandestine practices to eliminate the unwanted pregnancy. For this they use some indigenous methods of abortion. The tribals are using some indigenous plants as a method of contraception. A large number of medicinal plants growing in different parts of the world have been used by native people for anti fertility efficacy (Casey, 1960, p.590-600; Arenas and Azorero, 1977; p.302-306).

Awareness of the Tribal People regarding Family Planning Programmes

In this section we will discuss how far the tribals know the government's family planning programmes. Government's family planning programmes emphasise on two child norms. Family planning programmes since the inception are also emphasising on the needs of spacing of birth, at least on three years of gaps between the births of two children. There are two types of methods available for family planning; (i) permanent methods; vasectomy, tubectomy etc., (ii) temporary methods; oral pills, nirodh etc. The tribal people hesitate to use

modern contraceptives available in the government hospitals. Tribals are said to be tradition bound, often superstitious and believe in fate. Many of them think that child is the gift of god and if anybody tries to prevent from having children, he will be a victim of God's Wrath. But it is also found that some of the tribals are also using government's family planning services. Tubectomy and vasectomy are well known to most of the tribals. Mala-D, nirodh etc are also known to some of the tribals.

The analysis of the table 39 shows that in general, 44.86 per cent of the tribals belonging to the target villages, are aware of the government's family planning programmes, whilst as many as 62.90 per cent of the literate tribals and 37.50 per cent of the illiterate tribals of the target villages are aware of the government's family planning programmes. Tribe wise analysis of the target villages has revealed that in general, 46.67 per cent of the Santals are aware of the family planning programme, while 63.89 per cent of the literate Santals and 39.29 per cent of the illiterate Santals are aware of the family planning programme. However, 42.53 per cent of the Oraons are aware of the family planning programme. Whereas 61.54 per cent of the literate Oraons and 41.38 per cent of the illiterate Oraons are aware of the programme. In general literate tribals are more aware than their illiterate counterparts, and Santals are also more aware than their Oraon counterparts.

The same table (Table 39) also shows the awareness of the tribals of the target villages on two child norms, need for spacing between two child and the available spacing methods of the government's family planning programme. In general, 40.19 per cent of the tribal respondents know the two child norms of the government's programme, whereas 50 per cent of the literate respondents are aware of the two child norms and 36.18 per cent of the illiterate respondents know the two child norms of the government's family planning programme. However in general, 37.85 per cent of the tribal respondents have reported the

need of spacing between the two children, while 48.39 percent of the literate and 33.55 per cent of the illiterate respondents respectively have reported to be aware of the spacing between two children. In regard to the methods available for spacing, only 24.77 per cent of the tribals have reported to know about the methods for spacing, while 41.94 per cent of the literate respondents and 17.76 per cent of the illiterate respondents have reported positively.

The tribe wise analysis of the target villages gives us an interesting result. In general, 42.50 per cent of the Santals have reported to know the two child norms of the government's programme, whereas 41.67 per cent of them are aware of the need for spacing and 30 per cent of them are acquainted with the methods of spacing. In case of the literate respondents belonging to the Santal community, as many as 52.78 per cent are aware of the two child norms and the need for spacing as important components of the government's family planning programme. However, 47.22 per cent of them know the methods of spacing mentioned in the government's programme. If we consider the Oraon respondents of the target villages, it has been observed that 37.23 per cent of them have reported to know the two child norms, while 32.98 per cent of them are aware of the need for spacing and 28.72 per cent of the respondents are acquainted with different spacing methods. Among the literate Oraons, 46.15 per cent know the two child norms of the government's programme, while 42.31 per cent of them have reported to know the need of spacing and 34.62 per cent of them are informed of the different spacing methods. However, 39.66 per cent of the illiterate Oraons have reported to know the two child norms, while 34.48 per cent and 31.03 per cent of the illiterate Oraons are aware of the need for spacing and the methods available for spacing respectively (see table 39).

Table 39

Awareness of family planning programmes of the target villages

Tribal groups	Government family planning programs (%)	Two child norms (%)	Spacing needs (%)	Spacing methods (%)	Total (%)
Santal	56 (46.67)	51 (42.50)	50 (41.67)	36 (30.00)	120 (100)
Literate	23 (63.89)	19 (52.78)	19 (52.78)	17 (47.22)	36 (30)
Illiterate	33 (39.29)	32 (38.10)	31 (36.90)	19 (22.62)	84 (70)
Oraon	40 (42.53)	35 (37.23)	31 (32.98)	27 (28.72)	94 (100)
Literate	16 (61.54)	12 (46.15)	11 (42.31)	09 (34.62)	26 (27.68)
Illiterate	24 (41.38)	23 (39.66)	20 (34.48)	18 (31.03)	58 (72.32)
Total	96 (44.86)	86 (40.19)	81 (37.85)	53 (24.77)	214 (100)
Literate	39 (62.90)	31 (50)	30 (48.39)	26 (41.94)	62 (28.97)
Illiterate	57 (37.50)	55 (36.18)	51 (33.55)	27 (17.76)	152 (71.03)

In case of the non-target village's, awareness of the tribals of the government's family planning programme is very poor. The analysis of the table 40 shows that in general, 10.74 per cent of the tribals have reported to be aware of the government's family planning programme, while 10.91 per cent of the Santals and 10 per cent of the Oraons have knowledge of government's family planning programme respectively. It has been revealed that, 34.21 per cent of the literate tribals are aware of the family planning programme, while 33.87 per cent of the literate Santals and 35.71 per cent of the literate Oraons are informed of the family planning programme. In case of the illiterate respondents, awareness of the government's family planning programme is almost not worth considering. It has been observed that only 2.06 per cent of the illiterate tribals are aware of the family planning programme, although 1.9 per cent of the illiterate Santals and 2.78 per cent of the illiterate Oraons respectively have the knowledge of the programme.

The same table (Table 40) shows the awareness of the tribals of the non-target villages about two child norms, need for spacing between two child and the available spacing methods of the government's family planning programme is very poor. In general, only 6.30 per cent of the tribal respondents know the two child norms of the government's programme, whereas 6.36 per cent of the Santals and only 6 per cent of the Oraons have reported to know the two child norms of the government's family planning programme. However, out of 19.74 per cent of the literate tribal having knowledge of the two child norms, 20.97 per cent belong to the Santal community and 14.29 percent belong to the Oraon community. The awareness of the two child norms of the government's family planning programme of the illiterate respondents is almost negligible.

Most of the tribals of the non-target villages are not aware of the need for spacing between two children (Table 40). In general, only 7.04 per cent of the tribals have reported to know the need for spacing between two children, though 7.27 per cent of the Santals and 6 per cent of the Oraons have reported to know the need

for spacing. It has been noted from the comparison between literate and illiterate respondents that 19.74 per cent of the literate tribals are aware of the spacing need, while 2.06 per cent of the illiterate respondents are informed of the need for spacing between the births of the two children. In regard to the methods available for spacing, only 5.56 per cent of the tribals are acquainted with the method for spacing, while 15.79 per cent of the literate respondents and 1.55 per cent of the illiterate respondents are apprised of the spacing methods. The tribe wise analysis shows little difference in awareness of the spacing methods. In general, 5.45 per cent of the Santals and 6 per cent of the Oraons are aware of the spacing methods. However, 16.13 per cent of the literate Santals and 14.29 per cent of the literate Oraons have reported to know the methods for spacing. On the other hand only 1.27 per cent of the illiterate Santals and 2.78 per cent of the illiterate Oraons are aware of the methods available for spacing of birth.

Attitude and Practices of the Tribals in Family Planning

The tables 41 and 42 show the attitude and practices of the tribals of both the target and non-target villages. The analysis of these tables gives us interesting results regarding the attitude and practices of the tribals in family planning. In general, 60.28 per cent of the tribals of the target villages want to prevent childbirth and believe that child bearing depends fully on the desires of the couples, but 62.90 per cent of the literate and 59.21 per cent of the illiterate tribals have reported to possess the same faith. Tribe wise analysis shows almost same trend. In general, 60.83 per cent of the Santals have reported to believe that childbirth is not the gift of the god, it entirely depends on the desires of the couples and they also intend to prevent childbirth. However, 63.89 per cent of the literate Santals and 59.52 per cent of the illiterate Santals have same faith. In case of the Oraons, we have found that in general, 59.57 per cent of them have reported to possess the same belief regarding childbirth, although, 61.54 per cent of the literate Oraons and 58.82 per cent of the illiterate Oraons have faith on the same idea (see Table 41).

Table 40

Awareness of family planning programmes of the non-target villages

Tribal groups	Government family planning programs (%)	Two child norms (%)	Spacing needs (%)	Spacing methods (%)	Total (%)
Santal	24 (10.91)	14 (6.36)	16 (7.27)	12 (5.45)	220 (100)
Literate	21 (33.87)	13 (20.97)	13 (20.97)	10 (16.13)	62 (28.18)
Illiterate	03 (1.90)	02 (1.27)	03 (1.90)	02 (1.27)	158 (71.82)
Oraon	05 (10)	03 (06)	03 (06)	03 (06)	50 (100)
Literate	05 (35.71)	02 (14.29)	02 (14.29)	02 (14.29)	14 (28)
Illiterate	01 (2.78)	01 (2.78)	01 (2.78)	01 (2.78)	36 (72)
Total	29 (10.74)	17 (6.30)	19 (7.04)	15 (5.56)	270 (100)
Literate	26 (34.21)	15 (19.74)	15 (19.74)	12 (15.79)	76 (28.15)
Illiterate	04 (2.06)	02 (1.03)	04 (2.06)	03 (1.55)	194 (71.85)

It is reported that none of the respondents of the target villages have any faith on male sterilisation. They have a belief that after sterilisation male persons cannot do any hard work. As a birth control measure, most of the tribals prefer to ask their spouses to take preventive measures. In general only 16.36 per cent of the tribals prefer to have sterilisation for their spouses, while 13.33 per cent of the Santals and 20.21 per cent of the Oraons respectively adhere to the same view as a birth control measure. If we compare the preferences of respondents regarding the sterilisation of spouses between the literate and illiterate tribals, we have found that 22.58 per cent of the literate tribals are interested to ask their spouses for sterilisation as a measure of birth control, while 13.82 per cent of the illiterate tribals have the same attitude. However, 22.22 per cent of the literate Santals prefer to ask their spouses for sterilisation and 9.52 per cent of the illiterate Santals prefer the sterilisation of their spouses. In case of the Oraons, 23.08 per cent literate and 19.12 per cent of the illiterate desire more for their spouses' sterilisation (Table 41).

However, in general 28.04 per cent of the tribals of the target villages prefer to ask their spouses to take any kind of birth control measures. Whereas 28.33 per cent Santals and 27.66 per cent of the Oraons have the same liking. The comparison between literate and illiterate shows that, in general, as many as 58.06 per cent of the literate tribals and 15.79 per cent of the illiterate tribals want that their spouses should take any kind of birth control measures. However, in particular, 58.33 per cent of the literate Santals and 15.48 per cent of the illiterate Santals have expressed the same view. But 57.69 per cent of the literate Oraons and 18.18 per cent of the illiterate Oraons opine the same (Table 41). It is interesting to note that literate tribals are much more interested to put the burden of birth control on their female counterpart. This might be due to the influences of the Hindu community, though in the tribal societies male and female partners are supposed to be treated as equal partner. A wide gap between the level of awareness and acceptance of family planning has been observed (see Table 41) in case of the tribal couples of the target villages. In general, 18.22 per cent of

the tribals use family planning measures, but 19.17 per cent of the Santals and 17.02 per cent of the Oraon couples have recourse to birth control measures. It has also been observed that family planning measures are more practised by literate tribals than those of illiterate ones. In general, 27.42 per cent of the literate tribals and 14.47 per cent of their illiterate counterparts resort to family planning measures. In case of the Santals, it has been observed that 27.78 percent of the literate couples and 15.48 per cent of their illiterate counterparts use family planning measures. However among the Oraons, 26.92 per cent of the literate and 13.24 per cent of the illiterate couples apply birth control measures.

Since the inception of the Health Sector of the Tagore Society for Rural Development, they have been trying to popularise the family planning at their target villages. It has been noticed during the fieldwork that most of the respondents have heard about the government's family planning programme through group meetings, mass media and interpersonal communication with workers of the Tagore Society for Rural Development. The actual adoption of the family planning is poor. Mandelbaum (1974), and Siddh (1974) have reported the social religious and economic barriers in the adoption of the family planning programme, though a positive attitude towards family planning programme has been observed among the tribals of the target villages. Those who are practising family planning measures have a lot of genuine complaints against the negative effect of the use of such methods but there is no one in the Tagore Society for Rural Development who can assist them in this regard. The Tagore Society for Rural Development mostly depends on the Government Health Department for family planning programme. It has also been noted that a considerable number of illegal abortion takes place among the tribals of the target villages. However, none of the tribal respondents have gone to the Government hospitals for medical termination of pregnancies, which is legal as per the medical termination of pregnancy act of 1971 although the medical termination of pregnancy is supposed to take place in all the government

hospitals starting from Block Primary Health Centers. It has also been observed that medical termination of pregnancy is not done at the Block Primary Health Centers.

Table 42 reflects the attitude and practices of family planning of the tribals of the non-target villages. In general, 20.74 percent of the tribals and 39.47 per cent of the literate tribals have reported that they want to prevent child birth and believe that child bearing depends on the desires of the couples, whereas, 13.40 per cent of the illiterate tribals hold to the same view. Tribe wise analysis shows that in general, 21.36 per cent of the Santals and 40.32 per cent of the literate and 13.92 per cent of the illiterate respondents hold up the same propositions. In case of the Oraons, we have observed that 18 per cent in general, and 35.71 per cent of the literate and 11.11 per cent of the illiterate respondents adhere to this opinion.

A wide gap has been observed between the level of awareness of the family planning and the acceptance of family planning of non-target villages (Table 42). Very few respondents of the non-target villages have reported to prefer birth control measures. The preference of male sterilisation is very poor. Only 2.22 per cent of the tribals have reported to prefer male sterilisation and all of them belong to the Santal community. It has been reported that 2.73 per cent of the Santals like male sterilisation. The comparison between literate and illiterate reflects that only 3.23 per cent of the literate tribals have reported to prefer male sterilisation and only 2.53 per cent of their illiterate counterparts have reported to hold the same view. In general, 3.70 per cent of the tribals have reported to have preference of female sterilisation, while only 3.18 per cent of the respondents belonging to the Santal community prefer to have sterilisation for their spouses, whereas 6 percent of the respondents belonging to the Oraon community prefer the same. However, if we compare between literate and illiterate respondents, we notice that in general, 7.89 per cent of the literate tribals have reported to prefer female sterilisation, while only 2.06 per cent of the illiterate tribals have the

same preference. However, 8.06 per cent of the literate and only 1.27 per cent of the illiterate Santals respectively have reported to ask their spouses for sterilisation as a birth control measure, whereas 7.14 per cent of the literate Oraons and 5.56 per cent of their illiterate counterparts like female sterilisation.

It has also been reported that 8.52 per cent tribals of the non-target villages, in general, have reported to prefer to ask their spouses to take any kind of birth control measures, whereas 9.09 per cent of the Santals and 6 per cent of the Oraons have reported to have the same view respectively. The comparison between literate and illiterate respondents shows that in general, 14.47 per cent of the literate tribals and only 6.19 per cent of the illiterate tribals have liking for the same measures. In case of the respondents belonging to the Santal community, 14.52 per cent of the literate respondents and 6.96 per cent of the illiterate respondents respectively have reported to have the same view. In case of the respondents belonging to the Oraon community, 14.29 per cent of the literate respondents have reported to have preference to ask their spouses to take any kind of measures for controlling birth, while only 2.78 per cent of the illiterate respondents have reported to have same preference (see Table 42).

In regard to the actual users of the family planning measures of the non-target villages, it has been reported that only 6.30 percent of the tribals in general, have reported to take recourse to family planning measures. Tribe wise comparison shows that, 6.36 per cent of the respondents belonging to the Santal community and 6 per cent of the respondents belonging to the Oraon community respectively use family planning measures. We have found that, in general, 9.21 per cent of the literate tribals and only 5.15 per cent of their illiterate counterparts apply family planning measures. It has been observed that 8.06 per cent of the literate Santals and 14.29 per cent of the literate Oraons respectively resort to family planning measures. However, only 5.70 per cent of the illiterate Santals and only 2.78 per cent of the illiterate Oraons respectively have reported to use the family planning measures (Table 42).

Table 41
Attitude and practices of family planning of the target villages

Tribal groups			Birth control measures					Total
	Want to prevent child birth	Leave to chance	Male sterilization	Female sterilization	Abstain from sexual relation	Ask spouse to take preventive measures	Actually using birth control methods	
Santal	73 (60.83)	47 (39.17)	0 (0)	16 (13.33)	0 (0)	34 (28.33)	23 (19.17)	120 (100)
Literate	23 (63.89)	13 (36.11)	0 (0)	08 (22.22)	0 (0)	21 (58.33)	10 (27.78)	36 (30)
Illiterate	50 (59.52)	34 (40.48)	0 (0)	08 (9.52)	0 (0)	13 (15.48)	13 (15.48)	84 (70)
Oraon	56 (59.57)	38 (40.43)	0 (0)	19 (20.21)	0 (0)	26 (27.66)	16 (17.02)	94 (100)
Literate	16 (61.54)	10 (38.46)	0 (0)	06 (23.08)	0 (0)	15 (57.69)	07 (26.92)	26 (27.68)
Illiterate	40 (58.82)	28 (41.18)	0 (0)	13 (19.12)	0 (0)	11 (16.18)	09 (13.24)	68 (72.32)
Total	129 (60.28)	85 (39.72)	0 (0)	35 (16.36)	0 (0)	60 (28.04)	39 (18.22)	214 (100)
Literate	39 (62.90)	23 (37.10)	0 (0)	14 (22.58)	0 (0)	36 (58.06)	17 (27.42)	62 (28.97)
Illiterate	90 (59.21)	62 (40.79)	0 (0)	21 (13.82)	0 (0)	24 (15.79)	22 (14.47)	152 (71.03)

Table 42
Attitude and practices of family planning of the non-target villages

Tribal groups			Birth control measures					Total
	Want to prevent child birth	Leave to chance	Male sterilization	Female sterilization	Abstain from sexual relation	Ask spouse to take preventive measures	Actually using birth control methods	
Santal	47 (21.36)	173 (78.64)	06 (2.73)	07 (3.18)	0 (0)	20 (9.09)	14 (6.36)	220 (100)
Literate	25 (40.32)	37 (59.68)	02 (3.23)	05 (8.06)	0 (0)	09 (14.52)	05 (8.06)	62 (28.18)
Illiterate	22 (13.92)	136 (86.08)	04 (2.53)	02 (1.27)	0 (0)	11 (6.96)	09 (5.70)	158 (71.82)
Oraon	09 (18)	41 (82)	0 (0)	03 (06)	0 (0)	03 (06)	03 (06)	50 (100)
Literate	05 (35.71)	09 (64.29)	0 (0)	01 (7.14)	0 (0)	02 (14.29)	02 (14.29)	14 (28)
Illiterate	04 (11.11)	32 (88.89)	0 (0)	02 (5.56)	0 (0)	01 (2.78)	01 (2.78)	36 (72)
Total	56 (20.74)	214 (79.26)	06 (2.22)	10 (3.70)	0 (0)	23 (8.52)	17 (6.30)	270 (100)
Literate	30 (39.47)	46 (60.53)	02 (2.63)	06 (7.89)	0 (0)	11 (14.47)	07 (9.21)	76 (28.15)
Illiterate	26 (13.40)	168 (86.60)	04 (2.06)	04 (2.06)	0 (0)	12 (6.19)	10 (5.15)	194 (71.85)

Knowledge, Attitude and Practices of Family Planning; few Case Studies

Regarding knowledge, attitude and practices of the family planning by the tribals, a few case studies may be cited here to have a better insight of the impact of the programme of the Tagore Society for Rural Development.

Kalipada Lakra, an Oraon of the Chhiraikuri village, a target village of the Tagore Society for Rural Development has studied upto class VI. He is 30 years old and the owner of 10 *bighas* of agricultural land. He is blessed with a 4 years old son and a daughter of 2 years. He is an active member of the village self help group run by the Tagore Society for Rural Development. He is well informed about the family planning programmes. He has known this from the meeting of their self-help group where health workers of the Tagore Society for Rural Development discuss this issue. He has son preference and has never used any family planning measure. Though by chance, there is a gap of two years between the births of his two children (one male child and one female child). He desires for another male child, as he believes that one son is not safe. He is of the opinion that sterilisation for male is disadvantageous as it results into physical inactiveness.

Pradip Oraon of Chamtakuri village, a target village of the Tagore Society for Rural Development, has studied upto class X. He is 35 years of old. He is a cultivator and possesses 8 *bighas* of agricultural land. He is blessed with two children, one male and one female. The age of the younger child is 1 year. He is an active member of the self-help group of the Tagore Society for Rural Development. He is well informed of the family planning programmes. He himself has been using contraceptives for family planning. Whereas Jugal Hasda, a Santal of Dudhiakuri village, a target village of the Tagore Society for Rural Development has never used contraceptives. Mr. Hasda is 40 years old. He is illiterate and has one *bigha* of agricultural land. He has two children. Mr. Hasda is well informed of the family planning programmes as he claimed. He has a

particular mindset regarding sterilisation, abortion etc. As per Mr. Hasda sterilisation is not only disadvantageous but a grave sin on one's part. He has reported that abortion may lead to death or physical inactiveness. In his case the adoption of family planning measures is confined to acquire the knowledge of family planning. Jatin Tudu, a Santal, lives in Dudhiakuri, a target village of the Tagore Society for Rural Development. He is 40 years old and illiterate. He is also a member of the self-help group run by the Tagore Society for Rural Development. He is not well informed of family planning services. He believes that childbirth is the gift of god and child bearing does not depend on the desires of the couples. He is well aware of abortions carried out by the indigenous practitioners.

Lakshmi Hasda belongs to the Santal community and lives at Balapur, a non-target village. She is illiterate and has two *bighas* of agricultural land. Lakshmi is 30 years old. Her husband works as a sweeper in nearby town Balurghat. She is blessed with six children. She is only aware of the abortion practices by indigenous practitioners. Similarly, Biren Hasda of Sondapukur village, a non-target village, is 34 years old and is not aware of the family planning services and different modern methods for controlling birth. He is also illiterate. He has two *bighas* of agricultural land. He is an agricultural labourer. He is blessed with two children. He takes childbirth as a gift of god. Khara Hasdsa of the same village is well informed of family planning services but never use any methods of family planning. He is 55 years old and owns 10 *bighas* of agricultural land. Mr. Hasda has studied upto class IV. He is blessed with 5 children. He has faith in the indigenous practices of family planning and is totally against sterilisation. Bulai Murmu of Sotipukur, a non-target village is another case of having awareness about the family planning services. He is 25 years old. He has 10 *bighas* of agricultural land. Mr. Murmu has studied upto class VII. He has married recently and yet to have any issue. He is yet to start using any contraceptive.

The tribals of the target villages are much more aware of the family planning services than the tribals of the non-target villages. The awareness of the tribals of the target villages regarding different programmes of the family planning, spacing need, methods available for spacing etc are also higher than their counterparts of the non-target villages. In general Santals are also advanced in regard to scientific causes of childbirth, preferences for birth control measures and actual users of family planning services. We have found variation in response, though in general, tribals of the target villages are prompter than their counterpart of the non-target villages. Interesting finding of the literate tribals is that they want to put the burden of birth control on their female counterparts; otherwise literate tribals are more advanced than their illiterate counterparts. Some of the tribals still believe in offering gift to god if they wish to have a child and desire to get it fulfilled. Some of the tribals still have a belief that sterilisation is a sin. Adoption of family planning for some of the tribals is not possible due to the tradition amidst which they are born and to the limitation to their acquiring of the materials of family planning.

CHAPTER 6 CONCLUSIONS AND SUGGESTIONS

Summary and Findings

In order to utilise the knowledge gathered through the study, an attempt has been made to present the conclusion in a summarised form that has been arrived at in the course of present endeavor. Based on the understanding gained through the present study of various problems, constraints, difficulties and other issues regarding social environment and tribal health care practices in a few target villages under the Tagore Society for Rural Development and a few non-target villages of the Tapan block of Dakshin Dinajpur district of West Bengal. Effort is being made to extend some suggestions by adopting that we can enrich the tribal health care practices.

It is commonly understood that income, education, religion, intervention of other agencies like, Government Health Department, Non Government Organisations, Missionaries etc have significant role on the health care practices of any community. Tribals of the study area are living side by side with the Hindu community for more than hundred years. They migrated from the Chotanagpur range of Bihar and Madhyapradesh in search of work during British rule. The Tapan block is a tribal dominated block and the block is situated near the Bangladesh border. In the study area, the Santals and Oraons are the main tribals. Socio-economic condition of the block is very poor in comparison to the other blocks of Dakshin Dinajpur district. Tribals of this region are basically of animistic religion claimed to be Hindu. Their livelihood basically depends on agriculture and allied activities. Economic and educational status of the tribal is very poor. Most of the tribals of the target and non-target villages are illiterate.

The Tagore Society for Rural Development has been working with the tribals for a considerable number of years not only with tribal health but also on other aspect of well-being of their life. In the present study, a few target villages of the Tagore Society for Rural Development and a few non-target villages of Tapan block of Dakshin Dinajpur district of West Bengal have been taken for fieldwork for having a

comparative perspective of health care practices of tribals. Social environment plays an important role in determining the health care practices of any community. An attempt has been made to see how the social environment affects health care practices by investigating the impact of literacy, government health facilities and a non-government organisation on tribal health care practices. The differences of health care practices among the tribal communities have also been documented. The economic condition, literacy level etc of the tribals of the study area is almost same. Instead of these, health care practices of the tribals of the target and non-target villages have varied considerably. Santals are little bit advance in regard to the adoption of modern health care practices than other tribals.

The Tagore Society for Rural Development, a reputed voluntary organisation has been trying to improve the health care practices of the tribals of the target villages by improving the access to the government health facilities and providing modern health services at the doorsteps of the tribal. The Tagore Society for Rural Development has been working with the limited resources for over all development of the tribal of its target villages for number of years. In addition to organising health education and awareness camp in the villages, the Society run health clinics for treatment of minor ailments, mother check up camp, nutritional demonstration camp, de-worming programmes etc with the funding support from the ACTIONAID India, a funding agencies for the Non Government Organisations with headquarters at London. The society has been trying to bridge the gap between government health providers and the villagers by inviting government health workers in different awareness camps organised by the Society. The Tagore Society for Rural Development has been working in collaboration with the government health providers. The organisation sometimes provides incentives in terms of money to the government health staff if they attend any health camp organised by the Society.

There is a common belief that the tribals are very much inclined to traditional medicine. This inclination is also being observed in the presence of the modern medicine. The social condition of the tribals of the study area has been undergone changes

irrespective of the low economic condition of the tribals. Hindu influences, the intervention of the Tagore Society for Rural Development with different health and non-health programmes, government plans and programmes etc plays an important role to bring changes of the social condition of the tribals. In this context, we have investigated, how far the traditional health care practices of the tribals exist, the concept of health and disease, treatment and causes of diseases etc. How far the tribals accept or reject modern medicine, the causes of acceptance and rejection of the modern medicine, to what extent educational factors motivate tribals in adopting modern medicine, the impact of the Tagore Society for Rural Development and modern medical services etc from a comparative view point between the tribals of the target and non-target villages.

The traditional belief in regard to health, disease and treatment still continue to exist among the tribals of the Tapan block with degrees of differences between the tribals of the target and non-target villages and between the literate and illiterate tribals. The change in the concept and treatment of disease of the tribals of both the target and non-target villages has been noticed. The tribal beliefs regarding the causes of illness are categorised as; (i) due to ill health; physical work, climatic changes and the intake of wrong or excessive food etc, (ii) dissatisfaction of the ancestral spirit, wrath of supernatural being, sorcery, spirit intrusion, evil eye and breach of some taboo or norms and (iii) mixed beliefs regarding illness, belief in both the traditional and scientific causes of diseases.

In regard to the treatment to cure a disease, tribals of the study area generally avail any one or more varieties of treatment: (i) home treatment; few tribals are found to treat their patients at home by medicinal plants, (ii) treatment by *ojha*; *ojha* plays a major role to cure a disease in both the target and non-target villages. He diagnoses diseases with three types of methods; (a) a cock is sacrificed with ritual performed and then he mediates to find out the causes of illness, (b) treatment by reading of pulse and observation, (c) treatment by intuition. The treatment is of three types: (a) magical treatment, (b) supernatural worship, (c) herbal application, (iii) quack; quack plays a

significant role for the treatment of diseases. They are unqualified doctors and follow modern method of treatment, and (iv) modern doctors; mostly available at the Block Primary Health Centre or Primary Health Centre in the study area.

The tribals of the target villages are much more inclined to the modern medicine than the tribals of the non-target villages. The tribals believing scientific causes of disease are more in number in the target villages than that of the non-target villages. There are considerable number of tribals in the target villages who still have a belief that illness is caused due to the dissatisfaction of the ancestral spirits, wrath of supernatural being, sorcery, spirit intrusion, evil eye and breach of norm or some taboo. The majority of the tribals of the non-target villages are still inclined to the traditional causes of diseases than the tribals of the target villages. Some of the tribals of both the target and non-target villages believe in mixed concept. According to them, some of the disease are caused due to the dissatisfaction of the ancestral spirits, wrath of supernatural being, evil eye etc whether some of the disease is caused due to physical work, seasonal variation etc. More of the tribals of the target villages have reported to have this view than their counterparts of the non-target villages. The literate tribals of the target villages are much more inclined to the modern concept of illness than their counterpart of the non-target villages other wise no significant difference has been observed between the literate and illiterate tribals. Though the illiterate tribals are slightly more inclined to the traditional concept of illness than their literate counterpart.

Tribe wise comparison shows that Santals irrespective of the target and the non-target villages are much more inclined to the modern beliefs regarding illness, though the Santals of the target villages is in better position than Santals of the non-target villages. The traditional belief regarding illness of the Santals has also been observed with variation. The Santals of the target villages are much more inclined to traditional concept of illness than their counterpart of the target villages. The illiterate Santals are slightly more inclined to the traditional concept of disease than their literate counterpart of both the target and non-target villages. In case of the Oraons, in general, Oraons of the target villages are much more inclined to the modern concept of disease than their

counterpart of the non-target villages. The concept of disease of the literate Oraons of both the target and non-target villages is almost same. Though significant difference of belief of the illiterate Oraons of the target and non-target villages has been observed. The number of the illiterate Oraons of the target villages who believe in the scientific causes of disease is more than their counterpart of the non-target villages.

Regarding treatment of diseases, it has observed that many tribals of both the target and non-target villages who still depend on *ojha*. Though mixed practices has been observed among the majority of the tribals of the target villages. They try all possible means for the treatment of diseases. They prefer to go to the quack first; as quacks are easily accessible to them, side by side they also try with *ojha* for the cure of the illness and if all these fail they go to the modern doctors. The tribals of the non-target villages also try with all possible means for the cure of illness. The number of tribals of the target villages is more than their counterpart of the non-target villages who try to avail all possible means to cure a disease. In most of the cases, tribal of the target villages, a modern doctor or a quack whichever is easily available, is consult first for the cure of a disease. But there are cases also wherein a traditional medicine men have consulted. When modern medicine fails to cure a disease, the tribal has been found to taken recourse to traditional man. Some of the tribals also do treatment on their own. In few cases, treatment of two systems of medicine simultaneously is also being practiced. However, illiterate tribals of both the target and non-target villages are slightly more interested to avail all possible means for cure of diseases.

It has been observed that the number of tribals who prefer modern medicine is more in the target villages than non-target villages; literate tribals are more interested to avail the services of the modern doctor or quack for treatment. Majority of the tribals of the non-target villages have reported to avail the services of the quack and *ojha* for the treatment of diseases. We have found that many tribals of the target villages also depend on *ojha* or quack for the treatment of diseases but the percentage is not so high as of the non-target villages. The percentage of the illiterate tribals is more than their literate counterpart of both the target and non-target villages who avail the

services of both the quack and *ojha*. There are few tribals of both the target and non-target villages, who entirely depend on the modern doctor for cure of diseases; similarly few tribals of both the target and non-target villages depend merely on *ojha* or home treatment for the cure of diseases. The number of tribals of the non-target villages is more than their counterparts of the target villages who avail only the traditional services. The literate tribals of both the target and non-target villages are more inclined to the modern doctors than their illiterate counterparts. It is interesting to note that none of the literate tribals of both the target and non-target villages entirely depend on traditional medicine.

Majority of the Santals and Oraons of the target villages avail any means to cure illness. However, majority of the Santals and Oraons of the non-target villages consult *ojha* or quack for treatment of illness. Some of the Santals are fond to avail more than one treatment at a time. A few Santals are also fond to depend on *ojha* for treatment of diseases. The literate Santals of both the target and non-target villages are more interested to avail the treatment of modern doctors. They mostly go to quack due to the non-availability of modern doctors. The few literate Santals still practice their traditional treatment. However, none of the literate Santals entirely depend on *ojha*. Majority of the illiterate Santals of the non-target villages avail the treatment of quack and traditional medicine man for cure of disease. Whereas majority of the illiterate Santals of the target villages avail any possible means like quack, modern doctor or *ojha* for cure of disease.

Similarly, majority of the illiterate Oraons of the non-target villages consult *ojha* or quack for cure of disease. Majority of the illiterate Oraons of the target villages consult available treatment for cure of disease. Majority of the Santals and Oraons of the target villages are more inclined to the modern medicine for treatment of illness than their counterpart of the non-target villages. The Santals are slightly more inclined to the modern medicine of both the target and non-target villages. There is no significant difference of observances between the Santals and Oraons of both the target and non-target villages. The tribals who prefer modern medicine, consult quack, as according to

them, the treatment of a quack is more rational than modern doctors. They charge less and the cost of medicine prescribed by them is also less compare to the cost of the medicine prescribed by the modern doctor. Further more the services of a quack may be taken on rent, payment can be made after harvesting or when the money will be available with the patient.

Majority of the tribals of both the target and non-target villages are aware of the free services available at the government health centre. The awareness of free health services of the tribals of the target villages is much more than their counterpart of the non-target villages. Similarly, the Santals of the target villages are more aware than the Oraons. However, there is no difference of awareness of government free health services between the Santals and Oraons of the non-target villages. Literate tribals are more aware than their illiterate counterparts of both the target and non-target villages. Though majority of the tribals are aware of the free health services of the government health centre, many of them are not interested to visit centres. It has been observed that the Santals are much more interested to visit government health facilities than Oraons and the difference is more significant among the Santals of the target villages. Those who have visited the government health centre are not satisfied with the services of the government health centre.

The reasons for not being ~~being~~ satisfied with the government health facilities are identified as; (i) the attitude and irrational behaviour of the doctors is not favourable to the tribals, most of the time doctor is not available at the out patient department, (ii) the attitude and the irrational behaviour of the health staff is not favourable to the tribals, most of the time they blame the tribal for disease, (iii) medicine is not available at the health centre, (iv) in most of the cases doctor refer the patient to the district hospital at Balurghat, (v) cost involve to avail the modern treatment is beyond the economic limit of most of the tribals and (vi) in most of the cases, health centre fail to cure a patient. Those who are not interested to visit the hospital, majority of them belong to the non-target villages and a considerable number of tribals belong to the target villages have reported few reasons. These may be listed as; (i) belief in the folk medicine; some of

the tribals have strong belief in folk medicine, (ii) inadequate medical facilities of the hospital, (iii) overall services of the hospital are not satisfactory, (iv) negligence of the health staff, (v) lack of communication and (vi) costly; services of the government hospitals are free of cost. But tribal have to pay some hidden cost, like most of the medicine they are bound to purchase from the open market due to non-availability at the hospital, traveling cost to reach the hospital to avail the services and some times they are bound to consult doctor at the residence of the doctor for which they have to pay fees. Bhuddhadeb Choudhary (1996) has emphasised that the mere presence of a health centre does not necessarily mean people would depend on it, if proper and adequate facilities are not available or if the people are not convinced about its efficacy (Statesman, May 25, 1996). The resistance of the tribals to accept modern medicine has not been observed. The tribals may accept modern medicine as long as they are efficacious, available and accessible to them.

Tuberculosis, leprosy, malaria, diarrhoea, small pox etc are prevalent diseases of the study area. Skin diseases, diseases related to pregnancy like prolapsed of the pregnant women, miscarriage, white discharge of the women are also very common of the tribals in both the target and non-target villages. The knowledge and awareness of the tribals of these diseases are varied. Most of the tribals of the non-target villages do not even know the sign of dehydration. However, a considerable number of respondents of the target villages are aware about the sign of dehydration and they are aware of the modern home management of diarrhea. Literate tribals are in better position than their illiterate counterparts. The knowledge and awareness of the Santals and Oraons of both the target and non-target villages regarding prevalent diseases, home management of diarrhoea etc is almost same. Few tribals of both the target and non-target villages also have a belief that most of the prevalent diseases are caused due to supernatural beings, evil eye etc. Though these kind of belief among the literate respondents of both the target and non-target villages is almost non-existence.

Housing, sanitation and personal hygiene, food habit etc form an integral part of health behaviour and cultural dimensions of the tribals. Almost all the houses of the tribals of

the study area are *kachcha* with one or two rooms and straw roof. Most of the *kachcha* houses have no windows and without any boundary wall. Some of the houses of the target villages are found to have tiled roofs. The houses of the Santals are clean and well decorated than the Oraon houses. Most of the tribals keep cattle in their living room for fear of the cattle being stolen. Few tribals use a separate shade for domestic animals. The level of sanitation of the tribals in both the target and non-target villages is low. Though the sanitation level of the tribals of the target villages is slightly better than the tribals of the non-target villages. The drainage system of both the target and non-target villages is poor. The drains are not properly dug and water gets accumulated creating a breeding ground for mosquitoes and germs. Almost all the tribals of the target and non-target villages defecate in the open field and bushes. Most of them do not have any latrine facilities. Few tribals of the target villages have latrines constructed by the Tagore Society for Rural Development and they are also not using these latrines.

Majority of the tribals of the target villages are aware of the dangerous effect of the open-air defecation. The Santals have more knowledge than their Oraon counterparts. Almost all the literate respondents irrespective of the Santals and Oraons are aware of the danger of the open-air defecation. There is no such difference of awareness of the literate tribals. Almost all the tribals of the target villages are aware of the danger of warm infection, majority of them prefer to use modern medicine for de-worming. The tribals avail the medicine free of cost from the Tagore Society for Rural Development. Though some of the tribals of the target villages also use traditional medicine for de-worming. The use of modern de-worming medicine among the literate tribals is negligible. The awareness, knowledge and practices regarding open-air defecation and its effect, warm infection, use of medicine etc of the tribals of the non-target villages is poor in comparison to the tribals of the target villages. Very few tribals of the non-target villages are aware of the consequences of open-air defecation and those who are aware majority of them are literates. The use of modern medicine is less among the tribals of the non-target villages in comparison to the tribals of the target villages.

There is no such difference between the Santals and Oraons, though literate tribals are much more inclined to the modern concept than their illiterate counterparts.

Most of the tribals of the target villages draw drinking water from tube well. Most of the tribals of the non-target villages still depend on ring well for drinking water. The number of tube well in the target villages is more than that of non-target villages. The tribals do not boil water before drinking. It is interesting to note that most of the tribals of both the target and non-target villages have very little or no knowledge about the safe drinking water. Some more aspects of personal hygiene like boiling milk every time before feeding baby, washing of hand before feeding baby, washing of hand before and after taking food, bath of baby, use of soap while taking bath, use of detergents for washing cloths, cleaning of teeth and face, washing of hand after defecation etc have assessed. Majority of the tribals of both the target and non-target villages do not follow most of these practices of personal hygiene. No one of the tribals boils drinking water before feeding baby. The use of soap to wash hand before feeding baby or before and after taking food, or after defecation is very rare. In regard to the bathing baby daily, use of soap while taking bath and washing babies clothes with detergent, differences have been observed between the tribals of the target and non-target villages. The tribals of the target villages are ahead in this respect than their counterparts of the non-target villages. Similarly literate tribals of both the target and non-target villages are ahead than their illiterate counterparts.

The Hindu community influences the food habit of the tribals of the study area. The average diet of the majority of the tribals of the study area consists of rice, wheat, and vegetable. The use of pulse, fish and meat is very rare. Majority of the tribals of both the target and non-target villages prefer to take morning food prepared on the previous day. They locally call this food as *panta*. None of the tribals of both the target and non-target villages select food item according to their nutritive values. Consumption of milk among the tribals is very rare. The diet of some of the tribals is inadequate. It has been observed that there are deficiencies in diet in both the quality and quantity. Basic calories are not met. The intake of protein is very marginal and the intake of vitamins

and minerals fall far short of the desired level. Much difference is not noticed between the tribals of the target and non-target villages. The variation regarding consumption of vegetable between the tribals of the target and non-target villages is noticed. Some of the tribals of the target villages consume more vegetable than their counterparts of the non-target villages those who have kitchen garden supported by the Tagore Society for Rural Development.

Consumption of *haria* or liquor is very common among the tribals. The tribal people of both the target and non-target villages' most of the time take drinks to quench their thirst. Much of difference is not noticed between the Santals and Oraons or between the tribals of the target and the non-target villages. They cannot think any social or religious activities without drinks. It is believed that drinks provide considerable nutrition in the form of food energy, minerals and vitamins. The *haria* is enriching the nutritional value of their diets and to some extent correct the deficiencies of some of the food items. The country made liquor is harmful and it is consumed for intoxication. The effects of excessive drinking of any liquor are loss of wealth, insanity, absence of consciousness, loss of knowledge and life. Excessive drinking causes numbers of diseases among the tribals, some of the very common diseases are tuberculosis, anemia, jaundice, turgidity of limbs etc. Drinking of excess liquor is harmful, it makes intoxication and hence loss of control is the pathognomic symptom. The tribal people views drinks as a reducer of anxiety and toil after hard work. Drinking is also associated with aggressive behaviour and sexual impulses. The tribals believe that drinking of liquor is an instrument to achieve the submission of and control over others. Majority of the tribals of the target and non-target villages have smoking habit. The harmful effect of the consumption of liquor and *bidi* is well known to some of the tribals of both the target and non-target villages. It has also been observed that the number of tribals of the target villages have reported to be aware of the harmful effects is slightly more than that of the non-target villages. The Santals of both the target and non-target villages are more aware than their Oraon counterparts. Likewise literate tribals are more aware than their illiterate counterparts of both the target and non-target villages.

In maternal and child health practices, differences have been observed between the tribals of the target and non-target villages. The concept of pre-natal check-up is not popular among the tribals. Very recently few tribals have felt that pre-natal check-up is essential for good health of their mothers and children. They consult the health staff of the Primary Health Centre and the Tagore Society for Rural Development. They sometimes also consult private doctors, quacks etc for pre-natal check-up during pregnancy. Pre-natal check-up at the Primary Health Centre includes immunisation against tetanus, iron supplementation, treatment of pre-existing conditions etc. Few tribals of the study area are also practicing consultation of *ojha* during pre-natal period for the treatment of pre-existing diseases like tuberculosis, anemia etc. Majority of the pregnant women of the target villages have reported to have no check-up during pregnancy. However, majority of the pregnant women belonging to the literate households have reported to have pre-natal check-up during pregnancy. Whereas a very few pregnant women belonging to the illiterate households prefer to have pre-natal check-up. It has been reported that more pregnant Santal women have pre-natal check-up during pregnancy than those of the Oraons. Majority of the pregnant women of the target villages consult either the Tagore Society for Rural Development or quacks for pre-natal check-up. They receive iron tablets from the Tagore Society for Rural Development but for immunisation they have to depend on the Primary Health Centre. A few women of the target villages prefer to consult *ojha* for the treatment of the pre-existing diseases. Very few tribal respondents of the target villages have reported to consult health centre for pre-natal check-up during pregnancy.

Majority of the pregnant mothers of the non-target villages have reported to have no pre-natal check-up. Mother care programmes of the government health department have failed to reach the tribals of the non-target villages. Health-workers are supposed to visit at least three times during a pregnancy, which is not properly done. They only organise immunisation camp at the health centre twice in a month. Very few tribals have received the pre-natal check-up of the pregnant women at the primary health centre either at Balapur or at Tapan and most of them are literate. Some of them also prefer to visit private doctors or quacks for pre-natal check-up. Majority of the tribals of

both the target and non-target villages who visit primary health centre do not have favourable image about its services. The reasons are: (i) non-availability of the health staff, government health clinic usually opens once in every fortnight on Wednesday. Sometimes the tribals go to the clinics but have found that health workers do not turn up, (ii) irrational attitude and behaviour of the health staff. Health staff does not treat the pregnant women carefully. They do not bother even to listen to them. Some times tribals come first for the treatment but they have to go last as most of the non-tribal patients are treated before the tribal patients, (iii) time and distance, tribal women have lot of work to do even during pregnancy. If they come to the health centre for pre-natal check-up they have to spend one full day; lots of time on traveling and waiting at the health centres. The concept of post-natal check-up is not yet popularised among the tribals of both the target and non-target villages. Only few tribals of the target villages have reported to have post-natal check-up at the Tagore Society for Rural Development. All belong to the Santal communities and majority of them are literate. Traditional midwives deliver all the babies of the tribals of both the target and non-target villages. The Society trains most of the midwives of the target villages. Most of the midwives of the non-target villages are untrained. Some of the pregnant women have reported to deliver their children at the government hospital mostly in case of the emergency.

Consulting a doctor during pregnancy is not at all popular among the tribals of both the target and non-target villages. Only in case of emergency they consult a doctor. In case of emergency majority of the tribals belong to the literate households of the target villages prefer to consult modern treatment. In case of emergency few tribals of the target villages have reported to consult traditional practitioners, like *ojha*, midwives etc. However, in case of emergency during pregnancy most of the tribals of the non-target villages prefer to consult traditional practitioners. Some of them, mostly literate also prefer modern doctor during emergency. No difference is being observed between the Santals and Oraons of the non-target villages. It is interesting to note that majority of the respondents are not satisfied with the treatment of modern doctor at the government health centre. It has been observed that the facility at the primary health

centre is not adequate to conduct delivery. The pregnant women of both the target and non-target villages are rarely take any special attention by taking special diet before and after delivery. Mostly the tribal pregnant woman takes rice, *shak*, green vegetables etc. Potatoes are commonly used as vegetables rarely other vegetables are used. *Dal*, meat, fish, egg etc are considered to be a luxury food, rarely consumed. Though the meat of *googly* and diluted *dal* is taken commonly. The use of fruits, milk is not very common. Among the beverages, tea with or without milk and salt is taken commonly. The use of rice beer (*haria*) is common. They usually take food item thrice a day. The morning food is *panta* (ice gruel, rice prepared in the previous day). They take mid day meal and a meal in the late evening.

Most of the pregnant women of the target villages have received tetanus immunisation, iron tablets etc during pregnancy, which shows interest of the tribals in modern medicine. The recipient of tetanus toxoid immunisation and iron folic acid supplementation belonging to the literate households is more than those of illiterate households. It is interesting to note that the number of pregnant women belonging to the Oraon community is more than their Santal counterparts in receiving immunisation and iron folic supplementation during pregnancy. Most of the pregnant women of the target villages have reported to receive immunisation and iron folic supplementation from the camp organised by the Tagore Society for Rural Development. The number of pregnant women in the non-target villages who have received immunisation and iron tablets is less than that of the target villages. In the non-target villages Santals are much more interested in immunisation and iron tablets supplementation for the pregnant women than their Oraon counterpart. Literate respondents have also shown more interest than illiterate respondents. The pregnant women of the target villages, who have reported to take immunisation, have also received iron tablets at the same time but this is not the case of the pregnant women in the non-target villages. The pregnant women come to the Primary Health Centres for immunisation and iron tablet supplementation on the same day i.e., 2nd and 4th Wednesday in a month. These two days are meant for the immunisation day of the Tapan Block Primary Health Centre. If in a particular immunisation day, iron tablet may not be available, the health workers

ask the patient to come again on some other immunisation day for the same. Tribals basically ignore to come again to collect iron tablet. In case if it is not available in the Health Centre some pregnant women of the target villages have reported to receive iron tablets from the Tagore Society for Rural Development. Though iron tablets are available in the open market at Balapur and Tapan, the tribals of the non-target villages are economically not in a position to purchase iron tablets from the open market. The awareness of the need for iron supplementation of the respondents of the non-target villages is also poor.

The coverage of the tetanus immunisation and iron folic supplementation of the pregnant women of the target and non-target villages shows that tribals are now gradually acquainted with the modern practices of maternal care, but the awareness of the need for immunisation is very poor even among the mothers of the target villages. They also lack the knowledge of the use of tetanus immunisation. Most of the mothers are not aware about the worst possible outcomes if mothers are not immunised. The difference of knowledge on these aspects between the Santals and Oraons and also between literate and illiterate tribals is negligible. The mothers of the target villages know the merits and demerits of partial immunisation. However, almost all the mothers of the non-target villages are not aware of the merits and demerits of the partial immunisation. The health care of most of the tribal women still depends mostly on the traditional *dais*, *ojha* etc. The benefit of the modern medicine is not yet fully utilised by the tribal women. The problem remains not only with the tribal women, but also with the faulty health programme of the government.

Tribals do not usually possess modern knowledge of child health care practices. Irrespective of the Santals and Oraons of the target and non-target villages, the midwives or any other near relatives who act at the time of delivery take primary care of the newborn baby. The process includes after detaching the umbilical cord, washing of the baby's mouth with honey by a piece of cloth. Most of the tribal families are found to massage their children with turmeric mixed oil for about twenty days to one month and cleaning of the newborn is done with tepid water. Some families have been

found to take more care by giving their children regular bath, massaging with the warm mustard oil and cleaning their dresses daily. It has been observed that normally for examining the normal eyesight, finger is placed in front of the eyes. If they blink it is believed that eyesight is normal. Making sound on vessels tests the normal eye power of the child and his responses to giggle observes. Most of the tribals depends on the family treatments for most of the sickness of their children, if fails, they visit to folk healers or *ojhas*. It has been observed that if a child is seriously ill and not responds to the domestic medicine or the medicine given by the *ojha* then only they take the child to the modern doctor. It has also been observed that some of the families have become interested to modern care while some others are found to protect their children from witchcraft with the help of *ojha*. The differences of the modern child health care practices of the tribals of the target and non-target villages have noticed.

Breast-feeding, weaning and age of baby when solid foods are given have been studied to get a better insight of the mother child health care practices of the tribals and no significant difference has been observed. Mother's breast milk is the main form of food for the babies. In most of the cases no other stable diet has been introduced to the baby until she/he is five or six months of old. There are certain beliefs among the tribals regarding breast-feeding. They believe that the breast milk of the sick mother is harmful for the health of the baby. In such cases cows milk is preferred as replacement of the mother's breast milk. Another very important belief of the tribals is that the baby is to be deprived for at least one to three days from mother's milk after birth. During this period, honey, water, cow's milk etc is to be preferred. The importance of colostrums is not yet recognized by most of the tribals. Tribals do not know the positive aspects of breast-feeding but it is provided with scientific approaches and most of the tribal mother breast-fed their baby for a longer period. The concept of weaning is almost absent among most of the tribals of both the target and non-target villages. Majority of the mothers have reported to give semi solid food to their children of the age of six months and adult type of food at the age of 7-9 months. The average diet of the child is rice, *dal* and vegetables. Fish and meat are taken occasionally but cows milk is used frequently.

Vaccinating children is not very popular among the tribals of the non-target villages. This is largely due to the lack of awareness among them. Most of the tribals do not know anything about vaccination and the need for vaccination. However,, some tribals are aware of it but most of the time they can not vaccinate their children due to the lack of facilities. On the other hand, vaccination is quite popular among the tribals of the target villages. The child immunisation coverage of the target villages is satisfactory. Santals are more interested for immunisation than their Oraon counterparts. A considerable number of tribals have reported to be aware of the age limit of child immunisation and also they named the name of six killer diseases. Santals of the target villages have reported to be more aware than their Oraon counterparts. It is also observed that literate respondents irrespective of the Santals and Oraons are much more aware than their illiterate counterparts. Most of the child of the non-target villages has not received immunisation. Tribals of the non-target villages also possess very poor knowledge of immunisation. The Santals of the non-target villages have reported to show more interest for child immunisation than Oraons. Literate respondents of both the community have reported to show more interest for child immunisation and there awareness level is also more than illiterate respondents.

Generally tribals of both the target and non-target villages are not satisfied with the quality of treatment and medicines of the Primary Health Centre. Non-availability of good quality medicines does not cure the disease well. This affects their faith on the services provided by the health department of the State government. Treatment available at the Primary Health Centres is charitable but the hidden cost of the treatment here is high for the tribals. Their economic condition does not permit them to buy medicines even when it is urgently necessary. Due to this reason magical and ritual practices are found to be practiced even today by the tribals of both the target and non-target villages. Changes in their beliefs and practices are observed in regard to the adoption of preventive measures. Now-a-days they do not hesitate to vaccinate their children. Though the change of practices are also being observed particularly for the preventive measures. Tribals are no more hesitate for child immunisation. Most

of tribals of the target villages know the scientific home management procedure to truckle diarrhoea.

The concept of fertility, family planning and the use of family planning measures among the tribals of the target and non-target villages have been studied. The uses of traditional birth control measures are still common among the tribals of the study area. It has been observed that indigenous practices of abortion by some of the tribal women are not uncommon. The tribals of the target villages are more aware of the government's family planning programmes than their counterparts of the non-target villages. It is noted that the tribals of the target villages are more advance than the tribals of the non-target villages. In general, the Santals are advance than their Oraon counterparts. The literate tribals irrespective of their communities are more advance than their illiterate counterparts. In regard to the scientific causes of childbirth, preferences for birth control measures, and the actual users of family planning etc, we have found variation in responses. The tribals of the target villages are much ahead than their counterparts of the non-target villages. Majority of the tribals of the target villages know that child bearing depend fully on the desires of the couples. However, most of the tribals of the non-target villages believe that childbirth is the gift of the god. It is interesting to note that literate tribals are interested to put the burden of birth control to their spouses. Otherwise literate tribals are more advance than their illiterate counterparts. Tribals of the non-target villages are almost unaware of the most of the government's plans and programmes. Majority of the tribals are against male sterilisation. Some of them strongly believe that after sterilisation male cannot do any hard work. Some of them have belief that sterilisation of male is a sin. Some of them still believe in offering to god if they wish to have a child and if their wishes are fulfilled. Adoption of family planning for some of the tribals is not possible due to their tradition.

Medical practitioners and public health workers in India have been reporting that very often the tribals do not utilise the medical services, which is not true. There cannot be any doubt that both the Central and State Governments are doing their best for the welfare of the tribals. They are trying to improve the quality and access of the health

services in a number of ways. The study reveals the failure of the government's health programme to motivate the tribals for modern medicine. Most of the health services are not reaching to the tribals. Tribals are not getting the modern health services when it is sought. The Primary Health Centre remains open in the daytime only. In the night, the tribals face a lot of problems with serious patients. It has also been reported that most of the health service providers talk about cultural factors as impediment for not utilising the medical facilities but none of them have realised the root causes behind this. In addition to the social and cultural factors, there is a need to give emphasis on some issues like: (i) Primary Health Centres function only for a few hours in a day and doctors and health staffs are available only for a few hours at the Primary Health Centre, (ii) medicines are not reaching to the hospitals in time, (iii) labour room of the Primary Health Centre is not utilised for this purpose, (iv) most of the health staffs are not staying at their operational areas. However, the programmes of the Tagore Society for Rural Development have influenced the tribals in a positive way towards modern medicine.

Most of the tribals of both the target and non-target villages are not satisfied with the service quality of the Primary Health Centre. They are not interested to visit government hospitals because of the indifferent behaviour of the health staff. The behaviour of the health staff of the Tagore Society for Rural Development are appreciated by the tribals of the target villages. The Tagore Society for Rural Development is not yet able to bring changes to a satisfactory level. Attribution of scientific causes is gaining ground among the tribals of both the target and non-target villages. The change among the tribals of the non-target villages is slow in comparison to the target villages. The variation is not only due the inclination of the tribals towards traditional methods of medical treatment. The problem is essentially a problem of availability. If proper and adequate medical facilities are provided to the tribals, they will gradually accept modern medicine. Traditional cultural roots are not only responsible factor for rejection of modern treatment. The accessibility and the cost to receive modern treatment make the tribals hesitate to accept modern treatment.

Some Suggestions

The welfare approach of both the government and the Tagore Society for Rural Development in regard to the health services becomes a process which treats people only as recipients, as passive beneficiaries, resulting in failures and problems which add up to alienation and no sustainability. There is a need to have a right approach with basic minimum modern health services where people will be the key actors of the entire process. The ownership of the programmes will be on the people's hand. It is essential to involve community in the process of assessing, analysing, and reassessing the problem of health. There is a need to launch a massive awareness programmes involving non-government organisations and communities own organisation, if it is there to make the health programmes as peoples programmes.

Poor economy, physical distance, lack of awareness of the tribals poses major problem to accept modern concept ^{of} medicine as well to continue the same. Social environment plays a significant role in health care practices. Any attempt to improve the health status calls improvement in the fields of education, accessibility including facilities of modern medical treatment, income and employment to meet the cost of modern treatment, collaboration or partnership with the non government organisations. In addition, suitable intelligently visualised intervention needs to be made in the existing health culture. It appears from the study that there are many constraints on health culture of the tribals, which can easily be removed by improving the machinery's of health services, by providing health education and by providing essential health facilities. Tribals need better health facilities, honest and dedicated doctors and health workers for dispelling their beliefs in witchcraft and sorcery. The promotion of purposive intervention with a view that tribals will accept pre-determined health programmes will not be helpful to improve on the constraints on the tribal health culture, rather there is a need to provide culturally and socially oriented health services. It is therefore, important to initiate an area specific comprehensive scheme which includes income generation, education etc simultaneously awareness about the health and hygiene and of diseases amongst the tribals. It is important to make them conscious about the modern medicines through different innovative methods of

communication involving folks, art, etc. The Tagore Society for Rural Development is trying to remove the constraints on health culture of the tribals through integrated approaches of rural development.

There is a need to develop a socially and culturally oriented health scheme for the tribals. It is important to involve local healers and quacks practicing modern treatment. Quacks, local healers, modern doctors and non-government organisations should be asked to work together. The medical pluralism can be channeled into a system of co-operation rather than conflict. All the available system of treatment may be involved to cooperate in developing a practical system of health improvement project through a spirit of mutual respect. Training and education programmes for the tribals should be developed in such a way, which will help to strengthen the positive aspect of tribal health and also help tribals to come out from the ignorance. In this regard local healers may play a vital role. Usually the health professionals and health workers ignore these healers. The tribal leaders, community members may also be involved in the planning process. The role of social scientists that are in a position to honour the traditional system of health and understand the modern medical technologies in such a scheme would be useful. There is a need to integrate the work of social scientists and the work of medical practitioners to overcome the problem of availability and reach. It is expected to be beneficial for the society as a whole and for the tribals in particular if such intimate and genuine knowledge of social scientists are properly harnessed for drawing up and implementation of such type of scheme.

Comprehensive health care services are not available in the health care packages of the Tagore Society for Rural Development. There is a need to improve the range of services at the Tagore Society for Rural Development to meet the modern health need of the tribals. The Tagore Society for Rural Development merely depends on the government health providers for the services of mother and child immunisation, family planning etc. it may be suggested here that the government health planners may develop a strategy to give the ownership of the management of the few health centres in the target villages to the Tagore Society for Rural Development with financial

support and technical supervision. This will go a long way to improve the quality of the village health services. Likewise a public and private partnership for the management of village health services may be developed which will ultimately help the beneficiaries, poor tribal people. The Tagore Society for Rural Development will run health centres with more human approach, which is lacking in most of the government health centers. If this kind of tie up succeeds, they may think of more collaboration in providing modern health care services.

Health care practices of the tribals are understood in relation to their environment, economy, social and cultural beliefs and practices. It is important to provide training to the health staff in social aspects of the tribal health. This would help them to understand tribal beliefs regarding health and illness, which will help them to provide counseling and treatment to the tribals. There is a need to develop good interpersonal relation between the tribals and the health workers. Health providers should treat the tribals with respect. They should respect to the tribal culture and belief which will help them to gain the confidence of the tribals. Most of the tribals depend on the quack for modern treatment. The modern qualified doctors is very few in the tribal areas. These services are costly which they cannot bear. The quality of the services of the quack needs to be developed. A separate training module may be developed for the quacks. There is a need to identify the potential quacks in the villages and a compulsory training programme may be undertaken for them. The programme may cover the modern scientific methods of treatment, drugs-its positive and negative aspects, rational use of drugs, identification of the high risk cases and proper referral for these patients. We have to make a plan in such a way that rational modern treatment can be provided by the quacks and there should be some qualified doctors who will supervise the work of the quacks. Another important aspect of the tribal health culture is the drinking habit of the tribals. This not only causes illness, but also ruin their economic condition. The consumption of liquor should be discouraged by the non-government organisation. The ill effect of liquor should be shown through various innovative means of communication, audio visual means etc. It is interesting to note that the Tagore

Society for Rural Development is not giving any emphasis on this aspect in their activities.

Health of the tribal women and children merely depends on the knowledge of midwives. Considering the situation, it may be suggested here that comprehensive *dai* training by covering not only the aspect of scientific methods of delivery, cleanliness, but also there is a need to give information on the aspects like early breast feeding, colostrums feeding, weaning food, introduction of semisolid food at the right^{at} of a child, use of oral re-hydration solution, spacing needs, family planning measures etc. The *dai's* knowledge and practices should be reinforced through organising refresher training at least ones in every month. The responsibility of *dai* training should be shared with the voluntary or non-government organisations. The services of midwives may also be utilised by adopting them as depot holder for oral rehydration solution, family planning etc. Indigenous abortions mostly conducted by the indigenous *dai's* are prevalent in the study area. There is a need to discourage the practices by popularising medical termination of pregnancy and other available measures of family planning. A separate information, education and communication strategy may need to developed by involving tribal folk art to popularise the methods available for family planning, its merits and demerits. The availability of family planning methods should also be ensured in the doorsteps of the tribals. In addition to these, there is a need to develop quality contraceptives with less negative effects. In regard to the improvement of the sanitation and personal hygiene of the tribals, there is a need to have provision of safe drinking water, latrine, safe refuse disposal etc for all the tribals. It is also a necessary to introduce awareness programmes, which will help the tribals to understand the importance of cleanliness and its relevance to improve their health.

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