Chapter 5

Health

Health is wealth. The nations of the world therefore agreed is thinking that is entitled to the best health care problem unfortunately tribals in India are in most cases deprived of this facility. The health and nutrition complications of the massive tribal population of India are as diverse as the tribal groups themselves. They face in general the problems of widespread poverty, illiteracy and malnutrition. They suffer from the absence of healthy drinking water and have to put up with poor living conditions. Maternal and child health services are readily available since national health care has not reached all parts of the country. Tribal are the utmost subjugated and neglected section of the population. Some preventable diseases like tuberculosis, filariasis, malaria, gastroenteritis, measles, tetanus, whooping cough and skin diseases etc. are common among them. They are also proved to some diseases of genetic origin like- sickle cell anaemia, alpha and beta thalassemia, glucose-6, phosphate dehydrogenise deficiency etc. Many among them are also affected by night blindness.²

The rate of infant mortality as well as maternal mortality among them is high. This is reasonable because the average level of calories and protein consumption are found below the recommended level for the pregnant and lactating women.

Although steps for preventive and curative measures for better health have been undertaken both by the government (the central and state level) voluntary organisation, since the first Five Year Plan period, we have to admit that they have been only partly successful. This is more particularly the case among the Scheduled Tribes. Generally, the people of this category live in distant and inaccessible areas. In West Bengal, the tribal folk are interspersed among other communities, but in certain areas their concentration is

quite high. The Scheduled Tribes of West Bengal are mostly engaged in agriculture, either as cultivators or as agricultural labourers. A large sum of tribal persons, both male and female, are engaged in mining and quarrying as unskilled workers in tea plantation of North Bengal, forests and industries as well as in other areas alike. These peoples are quite backward, both socially and economically, compared to the remaining population.³

We would be completely mistaken if we think that tribals have no sense of medicine. Indeed, they have their personal perception of nature and the world. Their perception about treatment of disease is based on their own culture system which places a strong emphasis on astrological influences, which craft and evil spirits. They are less aware of recent health care and health services provide by the state and depends more on their aetiology. The health status of any community is determined by the interaction between health-related awareness of the people, socio-cultural, demographic, economic, educational and political factors. The common views, traditional customs, myth, practices associated to health and disease further stimulates the health-seeking behaviour of autochthonous people.⁴

To uplift the socio-economic life of the tribal people, number of plans and programmes were formulated and implemented. Apart from other development sectors, health sectors play a vital role in the overall development of a community or a society. Tribal communities have their traditional health beliefs and practices. They have their particular medicine-men. Thus, with the initiation of health facilities, it is crucial to know the rampant diseases among the tribal dominated areas and their attitude towards modern medicine so that proper facilities may be extended for better health.⁵

The World Health Organisation (WHO) at its inception in 1946 defined health as "a state of complete physical, mental and social well-being and normally the absence of

disease or infirmity." It is a fundamental human right and being healthy is a social goal. It is well recognised that health is not the only domain of medical science as every culture, regardless of its easiness and complication, possess beliefs and practices regarding diseases.⁶

The role of health is not only limited to medical care but also in the overall cohesive advancement of society-cultural, economic, education, social and political. Each of these facets has a reflective impact on health which in turn induces all these features. Hence, it is impossible to uplift the health status and quality of life of people lest such exertions are unified with the extensive effort to bring about the overall renovation of a society. Good health and good society go together.⁷ This is conceivable only when assistance like nutrition, environment and education grasps a sophisticated level.

Dealing with disease is very much associated with the common beliefs, customs and practices associated to health and disease. It is obligatory to have an inclusive view of all the cultural extents of the health of a community. In almost all the tribal groups, there is an affluence of folklore associated to health. Credentials of this folklore accessible in different socio-cultural systems may be very gratifying and could deliver a model for suitable health and sanitary practices in a given eco-system. Maternal and child care is an imperative facet of health seeking behaviour which is basically ignored among the tribal groups.⁸

O.P.Jaggi, an authority on folk medicine, has classified popular notions about the cause and cure of diseases in two parts, supernatural and natural. The super naturals include what believed to be the wrath of gods and goddesses and the influence cast by evil spirits. The natural causes are climate, infection, food poisoning, wanton habits and accident. The practitioners of medicine among them are known as Ojha, preceptor, gypsy,

barber, priest, fakirs and witches. Older members of the community also recommended medicine based on experience. The medicines are all procured from local plants, animal and mineral products and are administered by all kinds of improvised physiotherapies. Many of the methods are known for their effectiveness and all medicines are locally taken from nature. They are inexpensive. Their physiotherapy and incantations are very close to modern psychiatric treatment. Tribal people naturally place more stress on those of their community who administer medicine because of their own belief.

Health and treatment are almost interconnected with the environment, mainly the forest ecology. Many tribal groups use various parts of a plant not only for treating the diseases, but for population control as well. Forests and nutrition maintains a firm relation. Many people have pointed out that tribals living in inaccessible areas maintains a healthier overall status and eat a more balanced diet than tribals living in less inaccessible areas i.e. forest free areas. The means of utilising available natural resources often oversees the long-term influence on health.

5.1. Various Issues of Tribal Health in India

The various issues which are of interest to the sociologist and social anthropologists related to the tribal health are as follows:

Health and Culture

The belief in the interference of supernatural agency is particularly strong mainly in their economic pursuits as well as in context of health and disease. The different economic activities are associated with rituals. Similarly, specific deities and spirits are associated with many sorts of disease. Most of their socio-cultural activities revolve around gods and spirits. Thus, they have specific gods for their health and disease, for

calamities, for the cattle and so on. It is imperative to understand and identify the cause of illness as the nature of treatment is intimately connected with it. Religious performances occupy a prominent place in the treatment of disease, like smallpox and plague which are associated with supernatural causes. Lewis (1958) noted that, the advantage in learning about the indigenous beliefs and practice of the community is the insight that gives into the world view of the people as concepts of disease causation are part of a society's total world view, which is also reflected in other spheres such as agriculture, politics and interpersonal relations. The health status of tribal population is worse and even worst for the primitive tribes due to seclusion, detachment and being mostly unaffected by the advancement progression carried out in India. Tribal communities in general and primitive trial groups in particular are tremendously disease prone. Also, they do not have essential access to basic health facilities. They are utmost subjugated, ignored and highly susceptible to diseases with high degree of malnutrition, morbidity and mortality. Their wretchedness results in poverty, illiteracy, unfamiliarity of the causes of diseases, hostile environment, poor sanitation, lack of safe drinking water and blind belief etc. 13

Health, Medicine and Community

Health and treatment reflect the social solidarity of a community. In a tribal community, for example, illness and the subsequent treatment is not always an individual or familial affair, but the decision about the nature of treatment is taken at the community level. In the rural areas, in case of some specific disease, not only the disease the person or his/her family suffers, but the total village community is affected. All the other families in the village are expected to observe certain taboos or norms and food habits. The non-observance of such practices often calls for action by the village council. One cannot refute the impact of this psychological support in the milieu of treatment and cure.¹⁴

Food, Nutrition and Tribal Health

Health and nutrition, particularly in the tribal societies, is intimately connected with forest. It has been reported in various studies that the tribals who are living in inaccessible areas have a recovering health status and take balanced food than those living in less remote and depleted forest areas.¹⁵ Roy Burman Committee's Report (1982) on forest and tribals, pointed out that, "it has been possible for the tribal community to subsist for generations with a reasonable standard of health because forest provided their food like fruits, tubers, leafy vegetables, shoots, honey, flowers, juices, grass, game, fish, etc."16 Medicinal herbs and plants which they have been using for treatment of disease and maintaining health are today the source of modern medicine. It has been renowned that various roots and tubers existing in the forest or small animals they can hunt, supply a more balanced nutritional status of the tribals, but due to deforestation as most of the roots and tubers are not available in many areas, the health and nutrition have been affected. Again, in many cases, it has been observed that certain diseases may be common in certain areas but remained controlled due to certain food habits based on vegetation available locally. Forest helps to maintain a balanced ecosystem in nature and supplies sufficient food to the people who rely on it. So, any type of degradation in the forest environment is probable to affect the balance and thereby adversely affecting the concerned population. ¹⁷

The nutritional status differs from tribe to tribe depending on the socio-economic, socio-cultural and ecological background. Yet no organized and comprehensive research investigations is approved, but it seems that malnutrition among the tribals, specifically tribal children and women, is fairly common. In West Bengal, some tribals people's diets are regularly lacking in calcium, Vitamin-A, Vitamin-C, riboflavin etc. Incidence of malnutrition is at its peak in case of primitive tribes in West Bengal. ¹⁸

Medicine Men in Tribal Communities

Amongst the tribals, there are a group of specialists - the magicians or medicine men whose services are sought after, depending on the cause of the illness. The dependence on and confidence in traditional medicine men or magicians are again often responsible for the non-acceptance of modern medicine. The traditional approach establishes faith and assurance in the patients, while modern medicine lacks this because they share own cultural beliefs and practices of the patients. Tribal people naturally have more faith in them.¹⁹

Health and Forestry

The relation of forest with nutrition may be mentioned. Tribals subsiding in remote areas and detected to be in a better state of health and to have a more balances diet than those subsiding in less remote areas. The various roots and tubers existing in the forest or small animals they can hunt supply added nutrition. There is no hesitation that deforestation is likely to affect the nutritional status of the tribals as the roots and tubers are not available. Any disturbance in the ecosystem is likely to affect this balance ²⁰

We can see difficulty that this causes to those among the tribals who recommended medical herbs to those who report of their experience in the three eastern states of Jharkhand, Orrisa and West Bengal. While discussing the problems they face in practising their profession, all of them point out the difficulties they face in gathering medicinal plants.²¹ The botanical name, common name and the uses of some medical herbs found are given below in Table 5.1.

Table 5.1 Showing Plant Species, there Common Names and Medicinal Potentialities

Sl.No	Botanical Name	Common Name	Use as Medicines		
1	Holarrhena	Kurehi (tree)	Amobaeic Dysentry		
2	Zingiber Officinalis	Zinger,Ada (tuber)	Tonic, indigestion, respiratory		
			trouble, heart trouble		
3	Swertia Chirata	Chirata (tree)	Liver and Spleen troubles.		
4	Saraca Indica	Ashoka (tree)	Uterine troubles, internal bleeding,		
			dysentery, metrorrhagia.		
5	Martynia Annua	Baghnakh	Scabies.		
6	Andrographis	Kalamegh	Liver and Spleen trouble (tonic)		
	Panniculate				
7	Beladona	Belladona (Plant)	Annoydyne, Asthama.		
8	Andhatoda vasica	Vassak (Plant)	Respiratory troubles, worms.		
9	Salanum xanthocarpum	Kantikari (herb)	Respiratory troubles and weakness.		
10	Withania Sominifera	Aswagandha	Seminal weakness, Ricket.		
		(Plant)			
11	Terminalia Chebulay	Haritaki, Bahera,	Trifala mixture for bowel trouble,		
	tbadirica, emblica	Amla (tree)	ulcer, high blood pressure etc.		
	officinalis				
12	Vangueria Spinosa	Moyna	Mumps.		
	Roxb				
13	Reuwolfiaserpentina	Sarpgandha (Plant)	Madness, high blood pressure,		
	and		tension.		
	Rauwolfiacanicecenss				
14	Centela Asiatica	Thankuni (herb)	Brain tonic, dysentery, leprosy etc.		
15	Tinospora cordifolia	Gulancha (creeper)	Diabetes, urinary troubles and		
			leprosy.		
16	Nux Vomica	Kuchila (tree)	Cardiac stimulant.		
17	Berbenis Plant	Daruharidara (tree)	Gastrointestinal troubles.		
18	Terminalia arjuna	Arjun (tree)	Heart disease		
19	Lochnera Rosea	Nayantara (Plant)	Leukaemia, Hypertension, etc.		
20	Bulca monesperura	Palash seed (tree)	Worms		
21	Saussurea Lappa	Kuth (Plant)	Asthama, carminative, hair tonic.		
22	Piper nigrum	Golmarich fruit	Oedema.		
23	Cassia fistula	Sondal	Constipation.		
24	Mucuna prurita	Alkusi	Dog bite.		

Source: 1. S. Narayn, Health, Forestry and Development, pp. 329-330.

^{2.} S.R. Das, Awareness of Tribal Medicinal Plants through Museums. pp. 28-29.

Traditional Medicine and Modern Medicine

The term Traditional Medicine is a recent coinage though field of Traditional medicine not so new, so, often this term confuses many minds from laymen to professional. It is much desirable at the outset to explain and clarify the meaning of the term and the logic behind the term to be called what is today.

The Traditional Medicine, in turn, centre on two traditional systems of medicine, i.e. Little Traditional Medicine- Folk systems of medicine and Great Traditional Medicine-Ayurveda, Unani, Sidha, Nature Cure and Yoga medical system and even Homeopathy, too. Though, it may be a just ideal concept but not reality, but it is a debatable question. Instead of going into this controversy debate, let us presume that there is a Traditional Medicine and with that end, an effort is made to spell out some important features of those sub-systems of medicine which are together called as Traditional Medicine specially in Indian context.²²

Since a decade or so, there has been serious thought by many health and non-health personal and professional organizations like WHO to boost the notion of amalgamation to synthesise the merits of both the traditional and modern medicine through the application of modern scientific knowledge and techniques to entail that of a Chinese experience in the field of health and to prove as an example in the present era. Accordingly, many countries have shown substantial interest in the concept of integration especially by India, Sri Lanka, Ghana, Egypt, Sudan and other developing countries and to adopt the traditional medicines in curative aspects of health, since modern medicine drugs have been more harmful to ill person and lot offside effects, costly and beyond the reach of lay man, recognising the traditional medicine is less toxic, effective and within the reach of lay man and less expensive.²³

However, it is true that no system of medicine is in the position to cure the diseases and further, it tells us that there is need for integration of all existing medicines, which can take care of solving the present crisis. At this juncture, it is very much necessary to examine the existing medical manpower in India, with specific reference to Modern Medicine and its immediate related auxiliary staff like, nurse and midwives and their distribution, etc, to strengthen the argument for the cause of integration of both the systems of medicines in the Nation Health Care Services. ²⁴

Traditional Medicine and Modern Medicine are the system of medicine which is of vital importance for tribes. We have to develop a synthesised type of medicine which can help the tribals to get out of many health problems and in fact, the tribal people have been trapped between of the two different cultural medicines, i.e., one is indigenous and other one is western, as a result even after limited available facilities, people are not so interested to make use of them. Therefore, emphasis on integration of traditional and Modern Medicine is a must, for providing maximum health care facilities, with minimum cost to the needy people.

5.2 Governmental Schemes among the tribes of West Bengal

Total Sanitation Campaign (TSC)

The perception of sanitation was previously confined to dumping of human excreta by cesspools, open ditches, pit latrines, bucket system etc. Today it presages an inclusive concept, which comprises liquid and solid waste disposal, food hygiene, and personal, domestic as well as environmental hygiene. Appropriate sanitation is not only important rather it has a dynamic role to play in our individual and social life too. Sanitation is one of the elementary basics of eminence of tribal life and human development index. Good sanitary practices avert adulteration of water and soil and thus avert diseases. ²⁵

Water supply and sanitation were incorporated in the national agenda during the country's first five-year plan (1951-56). Individual Health and hygiene are basically reliant on adequate accessibility of drinking water and appropriate sanitation. Consequently, a direct affiliation amongst water, sanitation and health is found. Consumption of insecure drinking water, inappropriate disposal of human excreta, inappropriate environmental sanitation and nonappearance of personal and food hygiene are some of the major reasons of many diseases in developing countries. India is not at all different. Poor sanitation also stood as one of the reasons of High Infant Mortality Rate of tribals. Concern for Rural sanitation was realised by the Indian Government in the World Water Decade of 1980s. In this background the Central Rural Sanitation Programme (CRSP) was familiarized in 1986 principally with the aim of enlightening the quality of life of the rural people together with providing privacy and dignity to women. The programme gave large subsidy for the erection of sanitary latrines for BPL households. It was supply driven, highly subsidized, and provided prominence on a single construction model. Based on endorsements of the National Seminar on Rural Sanitation in September 1992, the programme was once more reviewed to make it a cohesive approach for rural sanitation.²⁶

CRSP was reorganized in the year 1999 exhibiting a paradigm shift in the approach and Total Sanitation Campaign (TSC) was familiarized. Currently, TSC is the solitary rural sanitation programme instigated by Ministry of Rural Development. It also stretches strong prominence on Information, Education and Communication (IEC) and social marketing for demand generation for sanitation facilities, to establish a distribution system by Rural Sanitary Marts (RSMs) and Production Centres (PC) and a thrust on school sanitation.²⁷

The foremost objectives of TSC are:

- i. Bring about an upgradation in the general quality of life in rural areas.
- ii. Accelerate sanitation exposure in the rural areas.
- iii. Generate demand for sanitary facilities through cognizance and health education.
- iv. Cover all schools and Anganwadis in rural areas with sanitation facilities and endorse hygiene behaviour among students and teachers.
- v. Encourage cost effective and appropriate technology development and application.
- vi. Endeavour to reduce water and sanitation related diseases.
- vii. Eliminate the exercise of manual scavenging and convert all dry latrines into sanitary pour flush latrines.²⁸

Lack of sanitation is a public health disaster. Improved sanitation services indicate a fundamental step in the direction of improved living standards for tribal people with special emphasis on tribal women. Moreover, access to sanitation is a vital human right that defenses health and human self-possession. Lack of sanitation is a social and tribal health problem and tribal women suffer an additional dimension of cruel handicaps that do not apply to the men - that of attending to natures call and bodily functions. Women in rural India, as like major parts of the world, often agonize with lack of privacy, sexual harassment and need to walk larger distances to get an appropriate area for defecation in the malingering of household/community toilet facilities.²⁹ Target and achievement of habitation of Scheduled Tribes in West Bengal is shown in the following Table 5.2.

Table 5.2 Target and Achievement of Habitation of Scheduled Tribes in West Bengal

Year	Total No. of Habitations	Targeted	Achievement	Actual Covered	Left to be Covered	% of Actual Covered	
2009-10	10286	123	334	334	63	100.00	
2010-11	10413	265	244	244	21	92.08	

Source: Ministry of Drinking Water & Sanitation, 2009-2011.

The National Rural Drinking Water Programme (NRDWP)

The initial government-introduced rural water supply schemes were instigated in 1950s as part of the Government policy to offer elementary drinking water supply amenities to the rural population. Historically, drinking water supply in the rural tribal areas in India has been outside the government's cup of tea. Community-managed open wells, private wells, ponds and small-scale irrigation reservoirs are among the foremost traditional sources of rural drinking water. The Government of India's operative part in the rural drinking water supply initiated in 1972-73 with the inauguration of Accelerated Rural Water Supply Programme (ARWSP). During the year 1972-1986, the chief concern of the ARWSP stood to guarantee facility of satisfactory drinking water supply to the rural community through the Public Health Engineering System. The second-generation programme originated with the initiation of Technology Mission in 1986-87, retitled in 1991-92 as Rajiv Gandhi National Drinking Water Mission. Stress on water quality, proper technology involvement, human resource development support and further related activities were familiarized in the Rural Water Supply sector. The third-generation programme was initiated in 1999-2000 when Sector Reform Projects progressed to encompass community in planning, implementation and management of drinking water related schemes, further mounted up as Swajaldhara in 2002. The programme was revised from 01.04.2009 and named as National Rural Drinking Water Programme (NRDWP).³⁰ Department of Drinking Water Supply renamed as Department of Drinking Water and Sanitation in 2010. Department of Drinking Water and Sanitation upgraded as separate Ministry of Drinking Water and Sanitation in 2011.

The National Rural Drinking Water Programme (NRDWP) a Centrally funded scheme aimed at facilitating suitable and safe drinking water to the rural population, as well as tribal people of the country. The NRDWP is a constituent of Bharat Nirman which

emphasises on the formation of rural infrastructure. This has prompted in the establishment of substantial additional resources to the sector and for forming an environment for the expansion of infrastructure and potentials for the efficacious process of drinking water supply schemes in rural tribal areas. The National Rural Drinking Water Programme (NRDWP) ensures supply of suitable water for drinking, cooking and other domestic desires on a sustainable basis in rural areas.³¹

The objectives of National Rural Drinking Water Programme³² are – (i) Empower all households to have access to and consume safe & satisfactory drinking water and within a sensible distance. (ii) Enable communities to monitor and keep investigation on their drinking water sources. (iii) Ensure portability, reliability, sustainability, convenience, equality and consumers preference regarding drinking water supply. These principles are supposed to be kept in mind at the time of planning for a community-based water supply system. (iv) Making available drinking water facility, specifically piped water supply, to Gram Panchayats that have accomplished open-defectation-free status on urgency basis. (v) Ensure all government schools and Anganwardis to acquire safe drinking water. (vi) Give support and environment for Panchayat Raj Institutions and local communities to accomplish their personal drinking water sources and systems in their villages. (vii) Cover each BPL households and identified APL households including SC/ST, physically handicapped, small and marginal farmers and women headed households with sanitation amenities in each Gram Panchayat.

Janani Suraksha Yojana (JSY)

Janani Suraksha Yojana (JSY) is a benevolent motherhood intrusion within the National Rural Health Mission (NRHM). It was implemented with the intension of dropping maternal and neonatal mortality by encouraging institutional delivery amid poor pregnant

tribal women. The scheme is under operation in all States and Union Territories (UTs). Janani Suraksha Yojana was initiated in April 2005 by altering the National Maternity Benefit Scheme (NMBS). NMBS was initiated in August 1995 as a part of the National Social Assistance Programme (NSAP). This scheme was relocated from the Ministry of Rural Development to the Department of Health & Family Welfare in the year 2001-02. As Financial assistance, NMBS delivers Rs. 500/- per birth up to two live births to the pregnant women and also tribal women who have reached 19 years of age and fits in the below poverty line (BPL) households. When JSY was introduced, the financial assistance of Rs. 500/- was obtainable unvaryingly in the whole country to BPL pregnant women under NMBS which was substituted by classified scale of aid grounded on the categorization of States together with whether beneficiary was from rural/urban area.³³

Rastriya Swasthya Bima Yojna (RSBY)

Social Security and health care assurance for everyone has stood the catchphrase of Government of India, and it has undertaken innumerable steps in this field. One of the most imperative policy marks is the Unorganized Workers Social Security Act (2008) endorsed by the Central Government to offer social security and welfare to the unorganized workers. This act endorses that the Central Government facilitates social security schemes to alleviate uncertainty arising from disability, health shocks, maternity and old age which entire unorganized workers get exposed to and are likely to agonize from. In India more than two thirds of expenses on health is through Out of Pocket (OOP) which is the most incompetent and least liable means of spending on health. Supply side funding solely on health failed to diminish OOP expenditure on health significantly and therefore, to examine the demand side financing approach, Government of India, finalized to announce Rashtriya Swasthya Bima Yojana (RSBY), a Health Insurance Scheme for the

Below Poverty Line families with the purposes to condense OOP expenditure on health and upsurge access to health care.³⁴

RSBY was launched in initial phase of 2008 and was initially intended to focus on only the Below Poverty Line (BPL) households, but has extended to include remaining classes of unorganised workers. Any Below Poverty Line (BPL) family, whose evidence is incorporated in the district BPL list organized by the State government is a beneficiary of this scheme.

The purpose of RSBY is to safeguard BPL families from financial obligations rising out of health shocks that encompasses hospitalization. Beneficiaries of RSBY are enabled for hospitalization coverage up to Rs. 30,000/- for all those diseases that necessitate hospitalization. Government has even conformed the amount for the hospitals for a huge number of intrusions. Pre-existing circumstances are enclosed from the beginning and there is no age-bound. The coverage covers up to five members of the family, which consist of the head of household, spouse and up to three dependents. Beneficiaries are prerequisite to spend only Rs. 30/- as registration fee whereas Central and State Government gives the premium@ 75% and 25% respectively to the insurer, selected by the State Government on the basis of a viable bidding.³⁵

Features of the Rastriya Swasthya Bima Yojna³⁶ are that provides the participating BPL household with freedom of choice amid public and private hospitals and makes him a potential client worth appealing on interpretation of the substantial revenues that hospitals stand to receive through the scheme. The scheme has been projected as a business model for a social sector scheme with inducements kept for every investor. This business model design is favourable both regarding extension of the scheme together with for its long-term sustainability. The insurer is remunerated premium for every single household registered

for RSBY. Therefore, the insurer has the impetus to incorporate as many households as probable from the BPL list. This will result in improved exposure of targeted beneficiaries. A hospital too has the inducement to deliver treatment to massive tribal beneficiaries as it is also paid per beneficiary treated. Even public hospitals have the enticement to treat tribal beneficiaries under RSBY as the money from the insurer will flow right to the public hospital which they can utilise for their own tenacities. By disbursing to the extent of Rs. 750/- per family per year, the Government succeeded to provide doorway to quality health care to the below poverty line households. This also led to a strong competition between public and private providers which further advances the workings of the public health care providers.

Indira Gandhi Matritya Sahyog Yojana (IGMSY)

The rights of mothers to maternity benefits stayed documented beforehand in India with the introduction of the Maternity Benefit Act in 1961. The Act legalizes employment of women in some institutions for a certain period before and after childbirth and offers for maternity and other assistances. Such benefits are intended to defend the self-esteem of motherhood by giving assistance for full and healthy upkeep of women and her child when she is not working.

Indira Gandhi Matritya Sahyog Yojana (IGMSY) scheme a conditional maternity benefit scheme. It is a 100% centrally funded scheme, conditional cash transference scheme familiarized in 2010. The objectives of IGMSY are

- (i) To enhance the health and nutrition status of Pregnant and Lactating women and their young infants.
- (ii) Encouraging proper performs, care and service utilization during pregnancy, safe delivery and lactation.

- (iii) Encouraging women to continue (optimal) Infant and Young Child Feeding (IYCF) practices involving early and only breastfeeding for the first six months.
- (iv) Contributing to healthier environment by giving financial support for betterquality health and nutrition to pregnant and lactating women.³⁷

This scheme provides benefits in terms of cash assistance to tribal pregnant and lactating women under certain circumstances:

The benefit is confined to pregnant women up to the initial two live births provided they are of 19 years of age and above. The woman of her husband is not an employee of Government/ Public Sector Undertaking (Central and State). A total cash incentive of Rs. 4000/ paid is placed in their bank or post office accounts in three instalments.³⁸

5.3 Health Status of STs in West Bengal

Estimates of Mortality Indicators

The principal causes of high maternal mortality rate are detected to be meagre nutritional status, low haemoglobin (anaemia), unhygienic and primitive performs for parturition. Average calorie as well as protein intake is found below the endorsed level for the pregnant as well as lactating women.

Table 5.3 Maternal Mortality Ratio (MMR), Maternal Mortality Rate (MMR), Lifetime Risk, of Scheduled Tribes in West Bengal, 2007-2009

Female Population	Life Birth	Maternal Death	Maternal Mortality Ratio	Maternal Mortality Rate	Lifetime Risk (%)	
4,76,579	30,291	44	145	9.2	0.3	

Source: Special Bulletin on MMR, June, 2001, Registrar General of India.

State of infant and child mortality of tribals would be perhaps the best valuation of the condition of basic health care, quality and range of health delivery, healthy environment, crucial health determining factor such as nutrition, sanitation, safe drinking water, etc. It also remains a key determinant of the achievements of the developmental initiatives that emphasises on poverty, backwardness, gender equality and even empowerment. Infants and children (up to the age of five) decease prematurely due to low birth weight phenomena and certain vaccine prevent diseases, etc. Infant Mortality Rate (IMR) is well-thought-out as an utmost sensitive indicators of tribal health status. The infant mortality rate (number of infant mortalities per 1000 child birth) of Scheduled Tribes in West Bengal declined from 107 in 1992-93 to 85 in 1998-99 and further to 57 in 2005-06.

The infant mortality rate (number of infant mortalities per 1000 child birth) of Scheduled Tribes in West Bengal declined from 107 in 1992-93 to 85 in 1998-99 and further to 57 in 2005-06 (Table 5.4).

Table 5.4 Trends of Infant Mortality of Scheduled Tribes in West Bengal

Year	ST	All Castes
1992-93	107	75
1998-99	85	51
2005-06	57	37

Source: International Institute for Population Science (IIPS), National Family Health Survey (NFHS-1) - 1992-93, (NFHS-2) – 1998-99, (NFHS-3) – 2005-06.

The under-five mortality rate (per 1000) of Scheduled Tribes in West Bengal declined from 133 in 1992-93 to 100 in 1998-99 and further to 63 in 2005-06 (Table 5.5).

Table 5.5 Trends of under 5 Mortality of Scheduled Tribes in West Bengal

Year	ST	All Castes
1992-93	133	99
1998-99	100	71
2005-06	63	70.4

Source: International Institute for Population Science (IIPS), National Family Health Survey (NFHS-1) - 1992-93, (NFHS- 2) – 1998-99, (NFHS- 3) – 2005-06.

A person is nutritionally insecure if his/her diet does not contain certain enough nutrients. The specific calorie norm is used to measure the nutritional security or insecurity. These calorie norms (per capita per day) are 2400 Calorie for rural area and

2100 Calorie for urban area. If the persons daily food consumption does not contain this amount of calorie then he / she is treated as nutritionally insecure.

The change of the pattern of food consumption is also the cause of malnutrition. This reflects from the trend of nutritionally insured people during last two decades. Irrespective of the case, the percentage shares of nutritionally insecure people increased during last two decades. Among the social castes the percentage share of nutritionally increase people was highest in STs and it also increased over time. The percentage share of nutritionally increased people increases from 70.8 percent in 1993-94 to 78.6 percent in 2004-2005 and from this to 85.2 percent in 2011-12. The percentage of nutritionally increase people was increased area wise in both rural and urban area. For STs, the percentage share of nutritionally increase people in the rural area outnumbered the urban area. In 1993-94, 71.4 percent of rural STs were nutritionally increase compare to 62 percent in the urban STs. The rural-urban gap of nutritionally increase ST people increased in 2011-12 compare to 1993-94. In 2011-12, 70 percent of urban STs were nutritionally insecure; the corresponding share in rural area was 87.5 per cent. ST people spend more on food consumption which reflects from the increase of their level of monthly per capita food expenditure. But the change of their consumption pattern from traditional food consumption to modern consumption leads STs more nutritionally insecure (Table 5.6).

Table 5.6 Nutrition Insecurity (West Bengal)

	1993-94			2004-05			2011-12		
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
ST	71.4	62	70.8	78.8	75.2	786	87.5	70	85.2
SC	71.3	58.1	69.5	82.2	71.7	80.2	82.5	72.8	80.9
Others	67.9	51.9	63.2	64.5	71.1	65.7	85.9	67.2	81.2
Total	69.2	53.1	65.5	79.6	68.3	76.2	80.3	66.4	75.8

Source: Authors estimation from NSSO Unit Level Data of 50th, 61st and 68th Round Survey of Consumer Expenditure.

5.4 Problems of Tribal Health in West Bengal

The health status of tribal people of West Bengal is very unfortunate and is worst of the primitive tribes due to seclusion, inaccessibility and being mostly unaffected by the evolving process going on in India. Some of the factors which are responsible for the West Bengal state of affairs are:

a. *Alcoholism*: Alcoholism and other psychic and socio-cultural complications of alcoholism establish the chief problem among the tribal peoples. Fermenting of alcohol from rice, millets, 'mohua' flower and fruits had been proficient customarily. However, in current years inroads have been made by businessmen by making low-priced molasses and ammonium chloride accessible for making alcoholic drinks for home breweries. Subsequently, massive amounts of inexpensive liquor are brewed. The traditional tribal society was exceptionally crime free. Nevertheless, the amplified accessibility of low-priced intoxicating drinks, assault made by the automated media into the villages, migration of the tribal people to non-tribal areas for earning and the conduct they receive from the non-tribal people is certain to upsurge the crime rate. Blood borne diseases like Hepatitis B virus infection is likely to be at a high pace in the tribal population due to the common societal exercise of tattooing. This together with alcoholism consequences in amplified number of chronic active hepatitis and cirrhosis of liver cases.³⁹

b. *Problems of Drinking Water and Water- Borne Diseases*: Generally, the tribals live in the hilly areas suffers from this. Thus, during the rainy season the water streams down recklessly whereas in the dry season, the scarceness of water is very serious in most places. Thus, Water borne disease like helminthiasis, amoebiasis, giardiasis and diarrhoea diseases are widespread in the tribal population.

- c. *Malaria and Vector- borne Diseases*: A number of tribal areas still continued to harbour malaria, primarily because of their inaccessibility and lack of community participation.⁴⁰
- d. *Genetic Disorders:* Sickle cell anaemia, glucose-6 phosphate dehydrogenises deficiency are common in the tribal populations.
- e. *Malnutrition*: Not only is protein-calorie malnutrition common, deficiency of micronutrients like iron is also very common.⁴¹
- f. *Dietary Habit*: Dietary habit of most of the tribes in India is not satisfactory. Tribal diets generally lack calcium, Vitamin A, Vitamin C, riboflavin and animal proteins. Studies carried out at National Institute of Nutrition (1971) and Planning Commission of India (Sixth five-year plan, Government of India) reported high protein calories malnutrition along the rice eating belts.⁴²
- g. *Health Care Practices*: Proper and preventive health practices like immunization and vaccination of expectant mothers as well as new born was largely absent. From inception to termination of pregnancy, no precise nutritious diet is ingested by women. The intake of iron, calcium and vitamins during pregnancy is scanty. More than 90% of deliveries are steered at home by the mature ladies of the household. In addition, a lot of females suffer from ill health due to pregnancy and childbirth in the absenteeism of well-defined concept of health consciousness. So far as the child care is taken into consideration, both rural and tribal illiterate mothers are detected to breastfeed their offspring. But maximum among them implement harmful practices of disposal of colostrum, delaying the instigation of breast feeding and delaying in providing supplementary foods. Vaccination and immunization of infants and children is usually insufficient amid the tribal groups.⁴³

h. *Life Style Disease*: It is true that the major emphasis of various studies related to health issues in tribal areas is on malnutrition. However, in the present context, it has become absolutely essential to conceptualize such studies which lay emphasis on assessment of the health status of various tribal groups with respect to obesity, metabolic measures, dietary profile and physical activity. Like all other developing countries, large scale urbanization/modernization is also taking place in India with effective changes in lifestyles including food habits and reduced physical activity attributable to evolving circumstances of chronic conditions, for example diabetes etc. Even the tribal groups are subjected to such changes.

The benefits of development in education, health and income generation has resulted in a momentous amount of their mainstreaming. A number of tribal groups are capitalizing on opportunities that are available to them, with a desire to acquire a better life style with modern life comforts. In this process of acculturation their food habits are likely to undergo substantial changes and so does the level of their physical activity. Thus, in the present circumstances many of the tribal populations are becoming susceptible to various metabolic risk factors that may be associated to their dietary profile and physical activity, and therefore, it is worth investigating the incidence of obesity and metabolic measure and their association with dietary fatty acids among the adult males and females of the tribal groups of different geographic regions. The investigation of this nature, therefore, will help to understand the magnitude and the intensity of problems related with obesity and metabolic measures and their relationship with dietary profile in culturally heterogeneous groups of different geographical regions of India.⁴⁴

A number of factors typically associated with income poverty are also determinants of ill health, malnutrition, and high fertility. These include high level of tribal female illiteracy, lack of access to clean water, insanitary conditions, food

insecurity, poor household caring practices, heavy work demand and lack of fertility control, as well as low access to preventive and basic curative care.

To sum up, a health care system providing basic preventive and curative services can significantly improve health outcomes within tribal communities. The impact of such an intervention is felt particularly in the most vulnerable segments of society, infants and under-5 children. Integrating health education and nursing programs can greatly reduce escapable deaths and support individuals make better-informed health associated decisions. Similar interventions in other tribal communities can help rectify disparities in health between indigenous and non-indigenous populations.

It is obligatory to endure with primary health care educational activities, national health and tribal health programmes and other measures of providing appropriate nutrition and counselling. Moreover, with the help of experts from multi-disciplinary fields, the health status of tribal population can be upgraded. The health status of tribal society is confidentially associated to its value system, philosophical and cultural traditions, and social, economic and political organisation. Henceforth, it is inconceivable to advance the health status and quality of tribal life of people lest such efforts are cohesive with the broader effort to bring about complete renovation of a society. Health development can be combined with the bigger programme of inclusive development in such a way that the two become jointly self-supporting. Good health and good society go together. This is probable only when concerned services such as nutrition and enrichments in environment and education reaches a higher level.