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## **Health Status of Tribal Women and Children in Jharkhand and West Bengal**

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# Health Status of Tribal Women and Children in Jharkhand and West Bengal

Arun Kumar Ghosh\*

## Introduction

A common misconception is that the tribal people enjoy perfect physical and mental health in the lap of nature, catering to their nutritional requirements with a variety of foods and fruits available in plenty in the forest. This has now been proved to be a myth. Today, the eco-system of tribal communities has suffered degradation due to rising population, encroachment of non-tribals, deforestation and displacement. In fact the Scheduled Tribes are one of the most disadvantaged and marginalised groups in India. The majority of them are afflicted with poverty, malnutrition and illiteracy. Many of them are deprived of the modern health system because of the difficulty in reaching health services to the tribal pockets which are generally located in remote areas.

The Constitution of India aims at creation of a new social order based on equality, freedom and justice and the dignity of the individual and to that end, to eliminate poverty and ignorance. Yet diseases arising from poverty, ignorance, malnutrition, bad sanitation are still rampant. True, India has made a considerable progress in health sector during the last fifty years. Famines no longer take the toll they used to, small pox has been eradicated; cholera and malaria have been curbed, and immunisation has protected thousand of children from childhood diseases like small pox, whooping cough, diptheria, tetanus and polio. As a result, infant and child mortality rates have come down and life expectancy has increased. The overall

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character of morbidity has not however changed much. It is now believed that development of health care service is a necessary but is not a sufficient condition for achieving a healthy society. Health is a function not only of medicare but also overall integrated development of society. This will entail a many pronged attack on poverty, inequality and ignorance, which have held many underprivileged groups like SCs and STs in a strong grip for a long time.

Tribal populations have distinctive health problems primarily because of their special location in difficult areas, and the difficult circumstances in which they live. Even though there has not been a formal policy statement for the protection of this group, in all the governmental Five Year Plans, special allocation of resources has been made for the health and developmental activities of the Scheduled Tribes. Not only that, special sub-plans have been formulated for the development of the tribal economy. Moreover, considering the far-flung areas, forest land, hills and remote villages where most of the tribal habitations are concentrated, the population coverage norms for the primary health care institutions have been relaxed for these areas. The population norm for setting up of a Primary Health Centre in tribal area has been fixed at 20,000 population instead of 30,000 in the case of general population. The norm for Sub-Centre has been fixed at 3000 population as against 5000 population for the general.

Keeping in view the provisions under the Directive principles, a broad strategy was evolved for the development of Scheduled Tribes. The concept of Tribal Sub-plan was adopted during the Fifth Five Year Plan and has been continued since. During the VI<sup>th</sup> Plan, the Modified Area Development Approach was also included in order to cover small areas of tribal concentration, having a population 10,000, of which 50% or more were tribals.

The National Health Policy of 1983 has clearly mentioned the need for priority attention to this group, in terms of provision of primary health care coverage. A Central Planning Committee has been set up to review the health activities in 12 States with pockets of extremely backward tribal population. Separate financial support is also envisaged for the tribal sub-project for Reproductive and Child Health.

One of the major issues in the assessment of health status is the health seeking behaviours. The health of the community is intimately related to its value system, its cultural traditions and its social economic and political organisation. It is argued that "the health seeking behaviour of a community cannot be studied in isolation from the social network of a community as it is deeply interwoven into every event of social, economic and biological aspects of a population". (Basu, Salil, et al. 1994:26) Hence the socio-cultural diversity among the various Scheduled Tribes need separate study. A number of anthropological studies have in fact been carried out to study the perception of health and pattern of health seeking behaviour among the tribals, (Basu, Salil, : 1993, 1994, Chaudhuri B : 1986. Khera P.D. : 1994).

### **Data Base**

The data for this study of tribal health has been obtained primarily from the National Family Health Survey I (1992-93) and II (1998-99). The data collected for NFHS I and II have covered various aspects of health and nutrition at the state level, treating scheduled tribes as a single category and bringing out the differences between ST tribes and the general population. The NFHS data are supplemented by survey data of the Council for Social Development on "Social Development Profile of SCs/STs". The health data from this survey, it may be noted, is limited in scope; the sample is drawn from two panchayats<sup>1</sup> and one industrial town of Jharkand<sup>2</sup> (comprising 540 ST households), and four panchayats<sup>3</sup> and one urban settlement<sup>4</sup> of West Bengal (comprising 536 ST sample households). While the Munda, Oraon, Santhal and Mahali are common in both the States, the Ho and Lohara of Jharkhand and the Bhumij and Lodha of West Bengal are area specific. Health data indicate differentiation among the scheduled tribes only on some aspects. Apart from quantitative data, qualitative analysis has also been made on the basis of various anthropological studies on health status of tribals.

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1. Ghasipur panchayat in Dumka block of Dumka district; Singh pokhariya panchayat in Chaibasa block of West Singhbhum district.
  2. Ranchi town.
  3. Maniramjote panchayat of Naxalbari block of Darjeeling district; Gopalpur panchayat of Kanksha block of Bardwan district; Gorabari panchayat of Khatra block I of Bankura district; Mahurapur panchayat of Murarai block of Birbhum district.
  4. Jhargram (urban settlement) of Midnapore district.

The paper is organised as follows: Section 1 discusses distribution of tribals in the study area. Section 2 deals with environment and culture in Tribal Health. Section 3 briefly highlights the health and nutritional status of tribals in Jharkand and West Bengal. The next section (section 4) deals with morbidity patterns. This is followed by health seeking behaviour of tribals (section 5). The concluding section (section 6) gives a short summary of the results and makes suggestions.

## **1. Distribution of Tribals in the Study Area**

The main cluster of tribal population in Jharkhand and West Bengal lie in the Chotanagpur plateau and its fringes. Ecologically, all these areas are hilly, forested and semi-arid. However they differ vastly in ecology, in terms of the nature of the terrain, slope of the land, soil fertility and degree of external integration. The areas are not conducive to sustainable agriculture that can support even a minimal livelihood. This region is inhabited by proto-Australoid tribes such as Santhal, Munda, Oraon, Bhumij and Ho. In Santhal Paraganas, a group of the Mal-Paharias practise shifting cultivation; the nomadic Birhors keep wandering over the Ranchi plateau; and the Kharias are still in the hunting and gathering stage.

Before November 1999, Jharkhand was a part of Bihar. As per the 1991 Census, 7.7 percent of the total population of the former Bihar State was tribal. The tribal population of Bihar was mainly concentrated in the Jharkhand region. After the separation of Jharkhand from undivided Bihar, the tribal population of Bihar became insignificant, while the tribal population of Jharkhand comprised about 30 percent. In Jharkhand, the districts of high concentration of tribal were Gumla (70.8%), Lohardanga (56.4%), West Singhbhum (54.7%), Ranchi (43.6%) and Dumka (41.6%). Nearly one-third of the tribal population in Jharkhand are Santhal. Other major tribes in Jharkhand are Oraon, Munda and Ho. The major concentration of Oraon is in Ranchi, Gumla and Lohardanga districts. While the Munda are largely concentrated in the southern part of Ranchi district, almost cent percent of the Ho population is concentrated in the Singhbhum plateau.

As per the 1991 Census, the tribal share of the West Bengal population was 5.59 percent. Parts of Burdwan, Birbhum, Bankura and Midnapore

districts in West Bengal fall within the fringe of the Chotanagpur plateau. About 7 to 10 percent of population living in each of these four districts are tribals. The highest percentage of tribal population was found in Jhalpaiguri district (21%) in the north, followed by Purulia district (19%) to the west. The districts which have higher tribal population than that of State average are Darjeeling, Bankura, Dinajpur, Midnapur, Birbhum, Burdwan and Maldah. As in Jharkhand, in West Bengal also the Santhals are numerically preponderant. Nearly two fifth of the tribals are Santhal. Besides Santhal, there are other major tribal groups like Munda, Bhumij and Oraon. Among the primitive tribes, the Lodhas are mainly concentrated in Midnapore district.

## **2. Environment and Culture in Tribal Health**

The health and nutritional status of community is closely associated with livelihood status, literacy level, housing and sanitary condition, knowledge and attitude. Poverty, widespread illiteracy, poor housing condition, poor sanitation, poor knowledge and attitude towards modern health delivery services are factors responsible for poor health and nutritional status of tribals.

**Poverty** : As many as 59.7 percent ST households in rural and 39.5% in urban area of Jharkhand were below the poverty line. Corresponding figures below poverty level among the STs for West Bengal were 50.0 percent in rural areas and 31.9 percent in urban areas. The level of poverty was quite high in rural areas, both in Jharkhand and West Bengal (Planning Commission, 1999-2000).

**Literacy** : As many as 34.4 percent ST population in rural areas and 69.7 percent ST population in the urban areas of Jharkhand were literate. Corresponding figures for ST population in West Bengal were 41.6 percent in rural and 63.2 percent in urban areas. The level of rural illiteracy was quite high both in Jharkhand and West Bengal (NSSO 1999-2000).

**Housing And Sanitation** : Since the data on health and sanitation at the state level was not available, we can observe the pattern in our survey data. The majority of ST houses were living in small huts. Nearly 70-80 percent of ST houses were kutchcha without proper ventilation and lighting. As many as 64.0 percent in Jharkhand and 44.0 percent in

West Bengal cooked inside the residence. Wood and kerosene was the most common mode of fuel. Since most of these houses did not have outlet for smoke, it caused health hazards. Most of them were living without cot, blanket/quilt and mosquito nets. There was no arrangement for waste water disposal. They bathed in the wells along with cattle and they wash clothes and wash hands after defecation in the same water source. The drinking water often get contaminated. Soiled water from bathing, washing clothes entered most of the wells, because they do not have parapet. Members of more than 90 percent ST households defecated in the open (CSD : 1999-2000).

***Knowledge, attitude and health practices*** : Health practices depend on knowledge about the basics of health. Certain superstitions and taboos regarding food habits are generally associated with tribal culture. This is partly due to ignorance regarding the value of immunisation and vaccination. Poor personal hygiene make them vulnerable to infections. The faith in witchcraft, magic, sorcery etc/has often created resistance to modern health care and treatment (Sahay M : 1996).

Tribals derive the means of subsistence from primary sectors like land and forest. In recent times, the pressure exerted by non-tribal sections of tribal habitats have been enormous, as a result of which the soil, water, forest, etc. resources have been considerably depleted. The tribal economy has suffered a great deal. As Singh says:

“A large number of tribal communities are eclectic in their approach to food which is derived from farm, i.e. agricultural products as well as forest, catering to both plant and animal nutrition. The unfortunate fact today is that there has been depletion of both tribal agricultural land and forest. Despite legal and administrative measures, a sizeable percentage of his land has slipped away from the tribal. Further, it is well known that deforestation after independence has taken place on a bigscale and for this reason and otherwise, there has been large-scale destruction of wild life. Shrinkage of these resources has had devastatingly deleterious effect on availability of food of the tribal” (Singh, Bhupinder, 1994 : 44-45).

There are certain tribal areas of the regions which are disease infested (diseases like malaria and filaria etc.) Diarrhoea, dysentery, hookworms, skin diseases are found in many tribal pockets in Jharkhand and West

Bengal. Very little is known about genetically related diseases in the tribal areas of these regions.

Health and treatment of diseases are very much connected with the environment particularly forest ecology. Many of the tribal groups not only use different parts of plants for treatment of various diseases but also, for population control. This led to a system of medicine known as tribal medicine. Tribal health has been viewed as a cultural complex – a complex of material objectives, tools, technique, knowledges, ideas and values and as a part of social system which has a organisation, roles and activities.

Disease in some form is one of the fundamental problems facing every society, and every society has developed methods of coping with disease. Religious rites occupy a prominent place among the tribals in the treatment of diseases, such as small pox and plague. These diseases have been almost eradicated now and these rites have lost their importance in the changing scenario. The Munda attribute disease to the supernatural, to Bongas (spirits), witches, sorcerors and to nature. The social function of religion with regard to the diseases and other calamities is to avert these events through magic, omen and taboos. In case of one epidemic in Munda village, all the village Munda women collected all the old cooking pots and worn out winnowing fans from their houses and go collectively to the village boundary and throw them in the belief but that all spirits causing diseases will be driven out of the village boundary. In addition, in certain cases, the ojha performs certain magical rites. In certain cases he also administers herbal medicine. As a matter of fact, the Munda have developed a good herbal medicine.

The Santhals believe that the most general of the natural causes of disease in some disorder in human body. Spraining, dislocation, twist of any part of the body leads to physical complaints. Iskin, a kind of massage is the best remedy for such trouble. Some diseases caused by Tejo i.e worms. Rabies, epilepsy, scabies, ringworms etc. are attributed to Tejo. Coughs are caused by mists and fogs, while ophthalmia is held to be result of bath in rain water.

The scheduled tribes ideas about food has much to do with diseases, causation and treatment. The most popular categories are pure and impure food, hot and cold food, dry and wet food. Some diseases are caused by eating impure food or hot food or dry food.

### 3. Health and Nutritional Status of Tribals

#### *i Health and Nutritional Status of Tribal Women*

Nutritional problems are particularly serious for scheduled caste and scheduled tribe women belonging to poor and illiterate households. Illiterate women and women belonging to households below the poverty line are likely to have much lower Body Mass Index (BMI)\* than women who have at least completed high school and women from households with a high standard of living

The mean BMI for women in Jharkhand was 19.3. As many as 41.0 percent of ST women had a BMI below 18.5, indicating a high prevalence of nutritional deficiency among ST women in Jharkhand.<sup>1</sup> In West Bengal, the mean BMI was 19.2. As many as 64.2 percent of ST women had a BMI below 18.5, indicating an even higher prevalence of deficiency among ST women (NFHS-II, 1998-99).

TABLE 1  
Nutritional status of ever-married tribal women (1998)

State	Height		Weight-for-height	
	Mean height (cms)	Percentage below 145 cms	Mean body mass index (BMI)	Percentage with BMI below 18.5 kb/m <sup>2</sup>
<b>Jharkhand</b>				
General ever married women population of the state	149.9	19.2	19.3	41.1
ST ever married women	149.7	19.3	19.2	41.0
<b>West Bengal</b>				
General ever married women population of the state	150.0	19.2	19.7	43.7
ST ever married women	148.4	27.2	18.2	64.2

Source : National Family Health Survey Bihar (including Jharkhand) and West Bengal (1998), International Institute for Population Sciences.

1 The BMI is defined as the weight in kilograms divided by the height in metres, squared (kg/m<sup>2</sup>). Chronic energy deficiency is usually indicated by a BMI of less than 18.5.

In Jharkhand, 82 percent of ST women suffered from anaemia as against the state average of 73 percent. In West Bengal 81 percent of ST women suffered from anemia as against state average of 63 percent (NFHS-II, 1998-99) (Table 2).

**TABLE 2**  
**Percentage of ever-married women classified as having iron-deficiency anaemia (1998)**

State/ST	Percentage of women with any anaemia	Percentage of women with		
		Mild anaemia	Moderate anaemia	Severe anaemia
<b>Jharkhand</b>				
General ever married women population of the state	72.9	44.3	26.8	1.8
ST ever married women	82.1	43.3	35.9	2.9
<b>West Bengal</b>				
General ever married women population of the state	62.7	45.3	15.9	1.5
ST ever married women	80.6	44.7	32.8	3.1

Source : National Family Health Survey Bihar (including Jharkhand) and West Bengal (1998), International Institute for Population Sciences.

Anaemia usually results from a nutritional deficiency of iron, folate, vitamin B12 or some other nutrients. This type of anemia is commonly referred as iron deficiency anaemia. In India, anaemia affect 50 percent of the population.

Anaemia has adverse effect on the health of women and children. It may cause maternal and pre-natal mortality. Anaemia results in an increased risk of pre-mature delivery and low birth weight (Seshadri : 1997)

Reproductive health problems, another health issue is common to a large number of married women in India, including married tribal women. As per NFHS-II, among the Scheduled Tribes, about 46 percent of the current women in Jharkhand and 47 percent in West Bengal suffer from

reproductive health problems. Among the ever married tribal women, 44 percent each in Jharkhand and West Bengal suffer from abnormal vaginal discharge or urinary tract infection. There is about 2 percent higher incidence of reproductive health problems of the ever or currently married tribal women than those of general population both in Jharkhand and West Bengal.

The majority of married women bear the reproductive health problems silently without seeking advice or treatment. Moreover, women who seek advice or treatment for reproductive health problems do not usually go to government health professionals. As many as 69 percent of married tribal women in Jharkhand and 73 percent in West Bengal did not seek any advice or treatment for reproductive health problems. In Jharkhand 26 percent of the married tribal women went to government doctors. Another about 5 percent went to private doctors for reproductive health problem. In West Bengal 21 percent of the married tribal women went to Government doctors and another 4 percent went to private doctors for reproduction health problems. As for the role of NGOs in reproductive health care, it is very limited. (NFHS-II)

#### ***ii Health and Nutritional Status of the Tribal Children***

Under weight of the tribal children is major factor affecting the nutritional status. Many children are born pre-mature and they are under weight (below 2500 grams). As many as 60 percent of the tribal children in Jharkhand and 57 percent tribal children below 3 years in West Bengal were under-weight. Corresponding figures for the state were 54 percent in Jharkhand and 49 percent in West Bengal. The proportion of ST children who were severely under-nourished was as high as 36 percent in Jharkhand according to both the weight-for-age and height-for-age. Corresponding figures for the state of Jharkhand were 27 percent and 29 percent respectively. In West Bengal, the proportion of ST children who were severely under-nourished was 22 percent according to both weight-for-age and height-for-age criteria. Corresponding figure for the state of West Bengal were 16 percent and 19 percent respectively.

TABLE 3  
Nutritional status of tribal children (below 3 years)  
in Jharkhand and West Bengal

State	Weight-for-age		Height-for-age		Weight-for-height	
	% below -3D	% below -2 SD	% below -3SD	% below -2SD	% below -3SD	% below -2SD
<b>Jharkhand</b>						
General children population	26.8	54.3	29.4	49.0	4.6	25.4
ST children	36.1	59.7	36.4	56.4	7.7	33.5
<b>West Bengal</b>						
General children population	16.3	48.7	19.2	41.5	1.6	13.6
ST children	22.4	57.4	22.4	46.6	1.7	17.7

Source : National Family Health Survey Bihar (including Jharkhand) and West Bengal (1998), International Institute for Population Sciences.

In Jharkhand 94 percent of the ST children below 3 years suffered anaemia as against the State average of 81 percent. In West Bengal, 95 percent of the ST children below 3 years suffered anaemia as against the State average of 78 percent (NFHS-II, 1998-99).

TABLE 4  
Percentage of children age 6-35 months classified as having  
iron-deficiency anaemia (1998)

State/ST	Percentage of children with any anaemia	Percentage of children with		
		Mild anaemia	Moderate anaemia	Severe anaemia
<b>Jharkhand</b>				
General children population	82.4	26.2	52.2	4.0
ST children	93.5	24.1	63.0	6.4
<b>West Bengal</b>				
General children population	78.3	26.9	46.3	5.2
ST children	94.7	18.1	66.7	9.9

Source : National Family Health Survey Bihar (including Jharkhand) and West Bengal (1998), International Institute for Population Sciences.

The comparative data on health and nutritional status of tribal women and children and that of women and children of general population in Jharkhand and West Bengal indicates that on all health and nutritional indices discussed above, the position of tribal women and children is lower than that of the State average. The high incidence of anaemia, low body mass index of tribal leads to under weight of their children at birth and consequently to under nourishment.

#### **4. Morbidity Pattern**

Acute respiratory infection and diarrhoea are the major causes of illness among infants. In the absence of early diagnosis and treatment, these diseases may lead to infant and child mortality. In fact a large number of deaths have occurred due to acute respiratory infection and diarrhoea. The percentage receiving advice or treatment is relatively low among the tribal children. Early diagnosis and treatment with antibiotics can prevent a large proportion of ART/pneumonia death. Diarrhoea is the second most important killer of children below five years of age. Deaths from acute diarrhoea are most often caused by dehydration due to loss of water and electrolytes. Nearly all dehydration related deaths can be prevented by prompt administration of rehydration solutions. The Government of India, to its credit, has launched Oral Rehydration Therapy Programme as one of its priority activities for child survival. Oral Rehydration Salt (ORS) packets are made widely available. The knowledge of ORS packets among tribal mothers has not however improved much in Jharkhand. As per NFHS – 1 (1992), only 18 percent tribal mothers (with births during the three year preceding the survey) had knowledge about ORS. The figure went up to 26 percent in 1998 (NFHS – II). In West Bengal 49 percent tribal mothers had knowledge about ORS in 1992 (NFHS – I), which increased to 70 percent in 1998 (NFHS - II). Thus we see that in West Bengal there is a greater awareness among the tribal women about ORS.

#### **5. Health seeking behaviour : Evidence from NFHS**

The survey findings (NFHS-I, 1992-93 and II, 1998-99) reveal that a high percentage of tribal women received ante-natal care by doctors at hospitals. In Jharkhand it was very low and the percentage of those not

receiving the ante-natal care was considerably high. In West Bengal, in 1992, the percentage of tribal women received ante-natal care either at home by health workers or by doctors or other professionals outside their residence was 68 which increased to 88 in 1998. In Jharkhand in 1992, the percentage of tribal women received ante natal care whether at home or outside was only 27 which increased marginally to 30 in 1998. Even the percentage of women from general population receiving anti natal care in Jharkhand was considerably low.

**TABLE 5**  
**Percentage distribution of births during the three years**  
**proceeding the survey by source of check up (1998)**

State/ST	Ante natal check up only at home from health worker	Doctor	Antenatal check up outside home from		
			Other health professional	Traditional birth attendent	No antenatal check up
<b>Jharkhand</b>					
State	3.0	32.7	6.0	0.4	56.9
ST	3.8	19.4	5.5	0.5	69.7
<b>West Bengal</b>					
State	2.6	75.8	11.1	0.5	9.5
ST	1.5	65.3	18.7	0.0	11.6

Source : National Family Health Survey Bihar (including Jharkhand) and West Bengal (1998), International Institute for Population Sciences.

In 1992, 18 percent pregnant tribal women in Jharkhand received tetanus injections and 12 percent received iron folic tablets. The corresponding figures for STs in West Bengal are 66 percent and 57 percent respectively. For general population in Jharkhand, 37 percent received tetanus toxoid injections and 21 percent received iron and folic tablets. For general population in West Bengal, 78 percent received tetanus toxoid injections and 56 percent received iron and folic tablets. Though the general population is ahead of the tribals, however, there had been considerable improvement in ante-natal care since 1992 both for STs in Jharkhand and

West Bengal. Overall, we see also that West Bengal tribals are ahead of Jharkhand tribals on those parameters and have been progressing faster as well. In 1998, 47 percent of pregnant tribal women in Jharkhand, and 88 percent of pregnant tribal women in West Bengal received tetanus injections. The corresponding figures for Jharkhand and West Bengal were 58 percent and 91 percent respectively. In the same year in Jharkhand, 21 percent of the tribal pregnant women received iron and folic tablets as against 33 percent of the State average. In West Bengal 74 percent received iron and folic tablets as against 72 percent of the state average.

TABLE 6

**Tetanus toxoid vaccination and iron and folic acid tablets (1998)**

State/ST	Number of tetanus toxoid injection			Percentage given iron and folic acid tablets or syrup
	None	One	Two or more	
<b>Jharkhand</b>				
State	41.2	7.0	50.6	32.7
ST	52.3	10.2	36.4	21.3
<b>West Bengal</b>				
State	8.2	9.0	82.4	71.6
ST	8.7	14.5	73.9	73.9

Source : National Family Health Survey Bihar (including Jharkhand) and West Bengal (1998), International Institute for Population Sciences.

Infant mortality, another vital health parameter, is closely associated with maternal and child care. The National Family Health Survey I (1992) reveals that the infant mortality rate among STs was 97 per 1000 live births in Jharkhand and 107 in West Bengal. There has however been some reduction in infant mortality rate. As per the National Family Health Survey (1998), infant mortality rate was 82 per 1000 live births in Jharkhand and 85 in West Bengal.

In 1998, as many as 69 percent deliveries (STs) in Jharkhand were attended by traditional birth attendants, 24 percent were attended by friends and

relatives and only 7 percent were attended by doctors/ANM etc. In West Bengal, 33 percent deliveries (STs) were attended by traditional birth attendants, 39 percent by friends and relatives, 22 percent by doctors and 3 percent by other professionals. The significant feature is that while one fourth of the deliveries were done by doctors in West Bengal and other professionals, the number of the deliveries in Jharkhand by doctors and other professionals were considerably low (one fourteenth).

TABLE 7

**Percent distribution of births during the three years preceding the survey by attendant assisting during delivery (1998)**

State/ST	Attendant assisting during delivery				
	Doctor	ANM/nurse midwife LHV	Other health professionals	Dai (TBA)	Others
<b>Jharkhand</b>					
State	11.7	5.3	0.5	64.2	17.1
ST	4.3	2.2	0.0	68.9	23.6
<b>West Bengal</b>					
State	35.3	8.7	0.1	29.6	25.8
ST	21.6	2.9	0.0	33.2	39.3

Source : National Family Health Survey Bihar (including Jharkhand) and West Bengal (1998), International Institute for Population Sciences.

As for medical attention at delivery, only 2.5 percent tribal children in Jharkhand were delivered in public hospitals and 2.5 percent in private hospitals in 1992. The percentage born in public hospitals was reduced from 2.5 in 1992 to 0.5 in 1998. In West Bengal, the percentage of tribal children born in public hospital increased from 16 in 1992 to 20 in 1998. In West Bengal no delivery took place in private hospital or NGO.

**TABLE 8**  
**Percent distribution of births during the three years preceding the survey by place of delivery (1998)**

State/STs	Place of delivery				
	Health facility/Institution			Home	
	Public	NGO/Trust	Private	Own home	Parents home
<b>Jharkhand</b>					
State	4.5	0.6	8.9	77.8	6.8
ST	0.5	1.1	3.7	87.8	4.7
<b>West Bengal</b>					
State	31.6	0.5	8.0	46.0	12.8
ST	20.2	0.0	0.0	66.8	10.1

Source : National Family Health Survey Bihar (including Jharkhand) and West Bengal (1998) , International Institute for Population Sciences.

The observations made on nature of antenatal care of tribal mothers, place of deliveries of tribal babies, and the persons attending the deliveries indicate that in West Bengal there has been a gradual shift towards public hospitals and professional doctors for reproductive health care of tribal mothers. In Jharkhand, the tribals are more traditional in this respect. The question is whether health delivery system is better in West Bengal or whether there is greater awareness of health care among the people including tribal people in West Bengal than that of Jharkhand.

Short birth intervals (below 24 months) may adversely affect a mother's health. Her children are also prone to greater risk of survival. Let us see the percentage of birth occurring within 18 months and 24 months among the currently married ST women in Jharkhand and West Bengal. The survey findings (NFHS - 1998-99) show that 10 percent birth occurred among the currently married ST women in Jharkhand within 18 months and 25 percent occurred within 24 months. The corresponding figures in West Bengal for ST women were 14 percent and 23 percent. Both in Jharkhand and West Bengal there was hardly any difference with respect to percentage of birth intervals of women belonging to the tribal population as compared to general population.

The medium birth interval in Jharkhand was 32 months for women belonging to general population and 33 months for ST women. In West Bengal it was 34 months for women belonging to general population and 33 months for women belonging to Scheduled Tribe population.

With respect to adoption of family planning methods, in Jharkhand, only 14 percent of currently married ST women adopted family planning methods as against 28 percent of currently married women belonging to general population. In West Bengal, as many as 53 percent of currently married ST women adopted family planning method as against 67 percent of currently married belonging to general population.

The use of modern family planning method (contraceptive) was also much higher in West Bengal than that in Jharkhand. In Jharkhand, the use of modern family planning measures (contraceptives) was 10 percent for ST women as against 25 percent for women belonging to the general population. In West Bengal as many as 41 percent of currently married ST women used modern contraceptive methods as against 47 percent of women belonging to general population. This indicates that there was a far greater awareness of modern family planning methods among the tribal women in West Bengal.

The public medical sector, consisting of government or municipal hospitals, government dispensaries, primary health center and other government health infrastructure accounts for more than 70 percent of contraception for current users of modern method of family planning both in Jharkhand and West Bengal. The private medical sector, mainly private hospitals or clinics is the second source of contraception for current users of modern method of family planning. While some current users obtain contraception from private doctors, private para-medic, *vaidyas*, *hakims* and traditional healers and pharmacies, others obtain from other sources such as shops, friends and relatives. NGO's as a source of dispensing contraception, play an insignificant role.

Government or municipal hospitals were the main source of female sterilisation accounting for 70 percent in Jharkhand. Private hospitals are the second source of female sterilisation, followed by sterilisation

camps. Female sterilisation in health center/PHC/rural hospitals in Jharkhand was less than 5 percent. In West Bengal, government hospitals or municipal hospitals were the major source of female sterilisation accounting for 43 percent. The role of community health center/PHC/Rural hospitals is quite significant. As many as 36 percent cases of female sterilisation were from PHC/rural hospitals/community health center. The female sterilisation in private hospital constitute only 6 percent (NFHS-II : (1998-99).

The percentage of ST children (12-23 months) received some vaccinations in 1998 in Jharkhand under the immunisation programme was 62 as against 73 for the children of the general population. In West Bengal no separate data were available for ST children for the year 1998. National Family Health Survey I (1992) indicate, 71 percent tribal children received some vaccinations. Thus the percentage of ST children covered under the immunisation programme was much higher than that of Jharkhand.

There were also significant variations in the percentage of children vaccinated by types of immunisation. Only 4 percent tribal children in Jharkhand received all types of immunisation in 1998 as against 9 percent for the children of the general population. Since the data for ST children in West Bengal for 1998 were not available, the data for 1992 indicates that 21 percent ST children had received all types of vaccination as against 31 percent children of general population. It was likely that percentage of ST children who had received all types of immunisation increased in 1998 because the percentage of children of general population covered all types of vaccination increased from 31 in 1992 to 44 in 1998.

TABLE 9  
Percentage of children aged 12-23 months who received  
specific vaccinations before interviewed 1998-99

State/ Tribe	BCG	Polio	DPT			Polio			Measles	All	None
			1	2	3	1	2	3			
<b>Jharkhand</b>											
<b>State</b>	44.4	3.6	44.2	34.9	21.7	69.8	60.1	36.5	18.2	8.8	27.3
Scheduled Tribe	36.8	2.2	30.6	26.5	12.3	61.9	58.8	32.4	8.0	4.0	38.1
<b>West Bengal</b>											
<b>State</b>	76.5	2.1	77.9	70.1	58.3	83.9	76.5	61.7	52.4	43.8	13.6
Scheduled Tribe	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>(1992)</b>	(52.4)	-	(58.3)	(53.2)	(33.2)	(62.4)	(53.2)	(33.2)	(36.6)	(20.7)	(29.3)

Source : National Family Health Survey Bihar (including Jharkhand) and West Bengal (1998), International Institute for Population Sciences.  
Figures in bracket are taken from NFHS - I, 1992

The public medical sector is the primary provider of childhood vaccination. In Jharkhand, 77.7 percent of the children immunised below 3 years of age received vaccinations from the public medical sector, and 19.8 percent from private medical sector. NGOs covered only about one percent of the children. Among the STs in Jharkhand, as many as 85 percent of the children immunised below 3 years of age received vaccinations from public medical sector, 13.9 percent from private medical sector and 1.1 percent from NGO.

In West Bengal, 87.9 percent of the children immunised below 3 years of age received vaccinations from public medical sector, 7.0 percent from private medical sector, 2.1 percent from NGOs and 3.0 percent from others. Among the STs in West Bengal, 89.7 percent of the children immunised below 3 years of age received vaccination from public medical sector, 8.5 percent from private medical sector, 1.8 percent from other sources. In West Bengal NGOs did not cover any tribal children under immunisation programme (NFHS - II : 1998-99).

In Jharkhand a large majority of all households (about 90%) including tribal households normally use the services of the private medical sector when a

household member gets sick. Only about 9 percent use public sector health services. In the private health sector, private doctors are the most popular source of health care for households whereas in the public medical sector, households normally go to the hospital. The pattern of service utilisation is similar for rural and urban households. Contrary to expectation, the use of the private medical sector is higher in rural areas than in urban areas, 90 percent of rural households use services of private medical sector as against 8 percent of urban households. Less than 2 percent of households in Jharkhand normally use a vaidya/hakim/homeopath or a traditional healer and less than one percent use the services of a CHC/rural hospital/PHC. High dependency on private medical sector indicates the health delivery services in the public medical sector, particularly CHS/PHC in the rural areas are poor in terms of availability of staff and medicine in Jharkhand.

In West Bengal, the public medical sector is more extensively used than in Jharkhand. About 60 percent of all households including tribal households normally use the services of the private medical sector when a household member gets sick, 24% use the services of the public medical sector (as against the 9% for Jharkhand). Another 15 percent of households normally rely on shops, home treatment or other sources of care when household members get sick. The pattern of service utilisation is very different for rural and urban households. 27 percent of rural households use public sector medical services compared with 15 percent of urban households. Within the public medical sector urban households go primarily to government and municipal hospital, whereas rural households go to community health centers, rural hospitals and primary health centers. A high proportion of urban households (81%) seek treatment from private medical sector than rural households (53%), whereas a higher proportion of rural households (19%) than urban households (2%) generally use "other" sources of care (NFHS-II).

### ***Health seeking behaviour in the sample areas***

From the sample area of our study, we had collected some descriptive data on (a) morbidity, (b) post-natal child care immunisation.

### **(a) Morbidity**

It is necessary to mention that the base period for which data were obtained was one year (1998-1999). Secondly, the illness/diseases reported were as per the perception of the interviewee. Thirdly, the data presented was only about what kind of illness/disease was experienced in the household. It did not relate to how many persons suffered how many times during this period. What we are sharing is at best a crude disease profile, not in terms of incidence, but in terms of prevalence.

In Jharkhand, among the Scheduled Tribes, gastro-enteritis figured as the major concern. However, among the urban-based Scheduled Tribes (Oraon, Munda, Lohara), we found in addition, prevalence of respiratory problems, tuberculosis, cardiac troubles and chicken pox. Amongst the Santhal, Ho, and Mahali who were rural-based, respiratory and gastro-enteritic problems seemed to be more prominent, whilst tuberculosis and infectious diseases like chicken-pox also figured.

In West Bengal, amongst Scheduled Tribes, respiratory and gastro-enteritic problems seemed to be the major afflictions, whilst tuberculosis and cardiac conditions also troubled the population. At the level of individual castes and tribes of West Bengal, it was difficult to make any firm pronouncements, but it was reported by some doctors that tuberculosis was associated more with the Santhal.

In Jharkhand, 45 cases of illness were reported among the Ho. As many as 29 persons (65%) were treated by allopathic doctors in the private clinics, 2 persons (4%) were treated by traditional healers, one person (2%) was treated by a vaid (Ayurvedic doctor), and 13 (29%) did not receive any treatment. Among the Lohara, 27 cases of illness were reported, 23 persons (85%) were treated by allopathic doctors in the private clinics. One person received ayurvedic treatment, 3 persons did not receive any treatment. All the 8 cases of illness among the Munda and 11 cases of illness among the Oraon were treated by allopathic doctors in private clinics. As many as 54 cases of illness were reported by the Santhals, of which 28 (52%) received allopathic treatment in the private clinics, 2 persons (4%) were treated at home, 24 persons (44%) did not receive any treatment.

TABLE 10

**Mode of treatment of diseases among the STs in Jharkhand during last one year**

Sl No	Tribes	Private Allopathic Clinic	Private Ayurvedic Clinic	Traditional Treatment	Home Treatment	No Treatment	Total
1	HO	29	1	2	-	13	45
2	Lohara	23	1	-	-	3	27
3	Mahali	9	-	-	-	1	10
4	Munda	8	-	-	-	-	8
5	Oraon	11	-	-	-	-	11
6	Santhal	28	-	-	2	24	54
		108	2	2	2	41	155

Source : Social Development Profile of SCs and STs in Bihar, Jharkhand and West Bengal (1999-2000).

In West Bengal, among the Bhumij there were 8 cases of illness, of which 5 received allopathic treatment in the private clinics, 2 received treatment at home and one did not receive any treatment. Among the Lodha there were two cases of illness – one received allopathic treatment and other received ayurvedic treatment. There was one case of illness each among the Mahali and Munda respectively. Both received allopathic treatment in the private allopathic clinics. Among the Oraon there were 10 cases of illness, 8 were treated by allopathic doctors in the private clinics. Two persons did not receive any treatment. Among the Santhals there were 75 cases of illness. As many as 45 persons (60%) received allopathic treatment in the private clinics, 9 persons (12%) received allopathic treatment in the government hospitals, 4 (6%) received homeopathic/ayurvedic treatment, 2 persons (3%) received treatment at home. As many as 13 persons (17%) did not receive any treatment.

TABLE 11

**Mode of treatment of diseases among the STs in West Bengal during last one year**

Sl No	Tribes	District Hospital (Govt.)	Private Allopathic Clinic	Private Homeopathic Clinic	Private Ayurvedic Clinic	Traditional healer	Home treatment	No treatment	Total
1	Bhumij	-	5	-	-	-	2	1	8
2	Lodha	-	1	-	1	-	-	-	2
3	Mahali	-	1	-	-	-	-	-	1
4	Munda	-	1	-	-	-	-	-	1
5	Oraon	-	8	-	-	-	2	-	10
6	Santhal	9	45	2	2	2	2	13	75
		9	61	2	3	2	6	14	97

Source : Social Development Profile of SCs and STs in Bihar, Jharkhand and West Bengal (1999-2000).

***(b) Post-natal Child Care and Immunisation  
Jharkhand***

Our sample data covered children upto 5 years of age. The standard practice is to take up the sample children from the age group of between 12-23 months. Therefore any comparison with the data from National Family Health Survey has not been made. However this will indicate general pattern of immunisation status of children of various tribes.

Among the ST children in Jharkhand, 125 children out of 256 (48.8 percent), were immunized with some vaccine. This too cannot be considered satisfactory. The percentage of male children immunised was 48.4 percent while that of female was 49.7. There was no gender disparity in the immunisation of the children. In another respect the programme of immunisation was limited. As many as 32.4 percent received only polio vaccines, and only 16.4 percent received primary doses of polio, BCG, and DPT.

In the urban area of Ranchi, the facilities of government (including Multi-Purpose Health Worker) non-government and private clinics were availed for immunisation. In the rural areas, it was the Auxiliary Nurse and Midwife whose assistance was sought.

- With respect to individual tribes, 77.8 percent children among the Lohara, 64.3 percent among the Munda, 56.5 percent among the Ho, 45.2 percent among the Santhal, 45.0 percent among the Oraon and only 7.4 percent among the Mahali were immunised.
- For post-natal childcare among the children of Lohara, Munda and Oraon, they benefited from the facilities available through Government/ non-Government health organisations in Ranchi town. They have easy access to the District Hospital and to private clinics.
- Among the Munda, out of 9 children immunised, 5 got immunised by private doctor in private clinic and four got immunised at the District Hospital.
- Among the Oraon, out of 9 children 8 were immunised at the Government Hospital, one got immunised by Multi-Purpose Health Workers (MPHW).
- Among the Lohara out of 21 children 14 got immunised at the District Hospital, six by MPHW and one by the private doctor.
- Among the Ho, out of 39, 24 children were immunised by Auxiliary Nurse Midwives (ANM) at the subcentre, 15 at the village camp.
- Among the Mahali, 2 children were immunised by ANM. Among the Santhal, out of 42, 32 children were immunised by ANM.

TABLE 12

### Immunization among the Scheduled Tribes in Jharkhand

Sl Tribes No	No of children Below 6Year			No of children Immunized			Types of Immunisation					
	M	F	T	M	F	T	M	F	T	M	F	T
1. Ho	30	39	69	17 (56.7)	22 (56.4)	39 (56.5)	10 (33.3)	16 (41.1)	26 (37.7)	7 (23.3)	6 (15.4)	13 (18.8)
2. Lahar	14	13	27	12 (85.7)	9 (69.2)	21 (77.8)	4 (28.6)	1 (7.7)	5 (18.5)	8 (57.1)	8 (61.5)	16 (59.3)
3. Mahali	11	16	27	1 (9.1)	1 (6.3)	2 (7.4)	1 (9.1)	1 (6.3)	2 (7.4)	-	-	-
4. Munda	8	6	14	3 (37.5)	6 (100.0)	9 (64.3)	-	4 (66.7)	4 (28.6)	3 (37.5)	2 (33.3)	5 (35.7)
5. Oraon	7	13	20	5 (71.4)	4 (30.8)	9 (45.0)	2 (28.6)	2 (15.4)	4 (20.0)	3 (42.9)	2 (15.4)	5 (25.0)
6. Santhal	55	38	93	24 (43.6)	18 (47.4)	42 (45.2)	24 (43.6)	18 (47.4)	42 (45.2)	-	-	-
All 8 tribes	128	128	256	62 (48.4)	63 (49.2)	125 (48.8)	41 (32.0)	42 (32.8)	83 (32.4)	21 (16.4)	21 (16.4)	42 (16.4)

Note: Figures in brackets indicate percentage of children immunised to total children

Source : Social Development Profile of SCs and STs in Bihar, Jharkhand and West Bengal (1999-2000).

### West Bengal

Among the Scheduled Tribes in West Bengal, 122 children (40.7 percent) out of 300 children were immunised. The percentage of male children immunised was equal to that of female children. As among the Scheduled Tribes of Jharkhand, there was a parity between male and female in the immunisation of children in West Bengal. However, there was a difference in the type of immunisation. In Jharkhand two third received only polio, whereas in West Bengal, majority of the children received primary doses of Polio, BCG and DPT.

- The children immunised among the Santhal is highest with 53.7 percent, followed by Munda with 44.4 percent, Mahali with 38.5 percent.

- The children immunised among the Lodha is the lowest with 10.0 percent, followed by the Bhumij with 17.5 percent and Oraon with 27.4 percent. Among the Scheduled Tribes in West Bengal, the majority of children are immunised by the ANM at the subcentres.

**TABLE 13**  
**Immunisation among the Scheduled Tribe children in West Bengal**

Sl. Tribes No	No of children Below 6 yrs			No. of children Immunized below 6 yrs.			Types of immunization					
	M	F	T	M	F	T	Polio			BCG		
							M	F	T	M	F	T
1 Bhumij	22	18	40	5 (22.7)	2 (11.1)	7 (17.5)	-	-	-	5 (22.7)	2 (11.1)	7 (17.5)
2. Lodha	14	8	20	-	2 (25.0)	2 (10.0)	-	-	-	-	2 (25.0)	2 (10.0)
3. Mahali	7	6	13	3 (42.9)	2 (33.3)	5 (38.5)	1 (14.3)	-	1 (7.7)	2 (28.6)	2 (33.3)	4 (30.8)
4. Munda	6	3	9	1 (16.7)	3 (100.0)	4 (44.4)	1 (16.7)	-	1 (11.1)	-	3 (100.0)	3 (33.3)
5 Oraon	33	29	62	7 (21.2)	10 (34.5)	17 (27.4)	-	-	-	7 (21.2)	10 (34.5)	17 (27.4)
6 Santhal	80	69	149	50 (62.5)	30 (43.5)	80 (53.7)	9 (11.3)	6 (8.7)	15 (10.1)	41 (51.3)	24 (34.8)	65 (43.6)
All 12 Tribes	167	133	300	68 (40.7)	54 (40.6)	122 (40.7)	11 (6.6)	6 (4.5)	17 (5.6)	57 (34.1)	48 (36.1)	105 (35.0)

Note: Figures in brackets indicate percentage of children immunised to total children  
Source : Social Development Profile of SCs and STs in Bihar, Jharkhand and West Bengal (1999-2000).

There was distinct trend towards getting children immunised. However, for achieving the target of universal immunisation, more concerted efforts and awareness generating programmes need to be vigorously pursued at this stage. However, there has been a conspicuous shift in attitude taking place among the Scheduled Tribes in their health seeking behaviour. They were earlier inclined to approach hospitals, private clinics and get treated through allopathic 'quacks' for relief from disease and ailments, as well as for preventive immunisation.

## 6. Conclusions

On almost all indices of health, the status of tribal women and children is low. High mortality rate, low nutritional status and high prevalence of under nutrition among the women and children are the main features. Infant mortality is closely associated with maternal and child care and maternal and child health care practices are found to be largely neglected in various tribal groups. Expectant mothers to a large extent are not inoculated against tetanus. From the inception of pregnancy to its termination no specific nutritious diet is consumed by women. The consumption of iron and vitamins during the pregnancy is poor. The habit of taking alcohol during pregnancy is found to be common among the tribal women and almost all of them continued their regular activities including hard labour even during pregnancy. Most of the deliveries are conducted at home attended by elderly ladies which resulted in an increased susceptibility to various infections. Nutritional deficiency is particularly serious for tribal women. More than 80 percent of ST women have some degree of anaemia both in Jharkhand and West Bengal. More than half of the ST children under three years are under weight and stunted. Fever, acute respiratory infection and diarrhoea are the most important diseases that causes infant and child mortality. More than 90 percent of children aged 6-35 months have iron deficiency.

Child immunization is an important component of child survival programmes in India, with efforts focusing on six serious but preventable diseases – tuberculosis, diphtheria, pertussis, tetanus, polio and measles. Immunisation coverage, of ST children is better in West Bengal than that in Jharkhand. More than 60 percent ST children in Jharkhand and more than 80 percent ST children in West Bengal have been vaccinated. Immunisation coverage although far from complete has improved since the Universal Immunisation Programme (UIP) came into effect. The public medical sector is the provider of childhood vaccination, covering 8.5 percent and 8.8 percent in Jharkhand and West Bengal respectively.

The nutritional problems of different tribal communities located at various stages of development are full of obscurities and very little scientific information on dietary habits and nutritional status is available due to lack of systematic and comprehensive research investigations. Malnutrition is common and greatly affects the general physique of the tribals. It lowers

the ability to resist infections and lead to chronic illness. "Diet of not a single tribe in the different states of India can be said to be fully satisfactory. Tribal diets are generally grossly deficient in Calcium, Vitamin C, Riboflavin and Animal Protein" (Basu, S.K. 1996 : 87).

Nutrition anaemia is a major problem for women in India particularly tribal women. The situation is particularly serious in view of the fact that both rural and tribal women have a heavy work load. Anaemia lowers resistance to fatigue, affects working capacity under conditions of stress and increases susceptibility to other diseases. "Poor nutritional status and its concomitant problems of poor body weight and height, poor weight gain during pregnancy, low hemoglobin levels, is one of the primary underlying causes of maternal mortality in India" (Basu, S.K. 1996 : 90).

The nutritional status of pregnant women directly influence their reproductive performance and the birth weight of their children, a factor that is crucial to infants chances of survival and to its subsequent growth and development.

Scheduled Tribes have specific health problems. In order to improve the health status of these Scheduled communities, the health care delivery system should be designed in such a way that it caters to the needs and problems of the area based on socio-cultural practices and their knowledge of herbal medicine.

In Jharkhand, 90% of the households use the services of the private medical sector when a household member gets sick. Only 9 percent households use the services of public medical sector. In West Bengal, about 60% households normally use the services of private medical sector when a household member gets sick, a much smaller proportion (24%) use the services of the public medical sector. High dependency on private medical sector in Jharkhand indicates the health delivery services in the public medical sector, particularly CHS/PHC in the rural areas are poor in terms of availability of staff and medicine.

It is recommended that further relaxation of norms may be made with respect to PHC and SHC in the tribal areas so that access to modern health facility is ensured. The State Government should ensure that the

staff in PHC/SAHC are in position. The State Government should also ensure the availability of essential medicines in these PHC/SHC.

The panchayats/tribal communities may be called upon to encourage medicinal plants in their village. Each tribal village should be earmarked for plantation of medicinal plants. This may take the shape of herbal garden.

Health awareness programmes may be initiated through organizing charity camps, mela, posters etc. Tribal youth/women should be trained for para medical force.

Health and nutritional education should be imparted to working, lactational and pregnant SC/ST women. The nutritional and health status of pregnant SC/ST women need to be improved by adequate intake of nutritious diet including iron and mineral and also by immunisation. The SC and ST women in their advanced stage of pregnancy should be advised to reduce their work load and take adequate rest. The immunisation programme should be accelerated so as to cover cent percent SC/ST women and children.

By and large, health policies are reasonably comprehensive. However, if tribal women and women in general are less inclined to modern health care and treatment there is a reason to look into sociological factors that affect them. The need for a certain level of privacy and attendant facilities specific to women should be given due attention. If women shy away from male doctors/para medical staff, provision has to be made for incorporation of female doctors/para medical staff.

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