CHAPTER – VI

Tribal Health Rights and Healthcare Facilities

In this chapter we will deal with the health status of the tribals in India and how far the developmental programmes helped in securing their health rights. Besides this, we will deal with the traditional and western health practices that are followed by the population under study in particular and the health infrastructure provided by the state to ensure their health rights. The present chapter has been divided into two sections, Section –A, dealing with the traditional health practices and Section – B dealing with the western health practices of the population under study. An attempt has also been made to show the extent of dependence on traditional and western health practices. In Section - B, a detailed description about western health facilities are given to have a better understanding as to what extent the health rights of the tribal communities are ensured or denied. Relevant case studies from the tribal community members have been cited to reflect their diseases pattern, perception on health and treatment, dependence on traditional and western health practices and health issues of women have been given special consideration. Accessibility and availability of healthcare institutions, their facilities and communication facilities have been given special stress from human rights perspective. Communitywise implementation of major health programmes such as family planning and pulse polio among the studied families have been also discussed to assess the response of the family welfare programmes among the studied families.

VI.1 Tribal health problems

It has been reported that much of the health problems and dismal health conditions among tribals are related to their habitat, poverty, ignorance, malnutrition, absence of safe drinking water, insanitary living conditions, lack of personal hygiene, health education and poor maternal and child health (Basu; 2000).

Significant lack in health and medicalcare services is a persistent problem of the tribal inhabited areas (Bhatt; 2008). Accessibility to western healthcare facilities and too much dependence on traditional medicine and health practices among some tribes makes matter even worse (Reddy; 2011).

Nutritional anaemia is a major problem for women in India and more so in the rural and tribal belt. This is particularly serious in view of the fact that both rural and tribal women have heavy workload and anaemia has profound effect on psychological and physical health. Anaemia lowers resistance to fatigue, affects working capacity under conditions of stress and increases susceptibility to other diseases. Diseases due to deficiency of vitamins like A include infectious diseases like measles, respiratory and diarroheal infections, night blindness, diminishes the ability to fight infections and poor outcomes in pregnancy and lactation leading to maternal mortality, deficiency of vitamin B causes anaemia and beriberi, deficiency of vitamin C causes scurvy, anaemia and blindness which are very common among the tribes in India (Basu; 2000).

Maternal malnutrition is quite common among the tribal women especially those who have many pregnancies too closely spaced. Among tribal women of child bearing age groups, there is high prevalence of goiter due to deficiency of iodine and their dietary habits. Tribal diets are generally grossly deficient in calcium, iron and vitamin A (Balgir; 2007). It is a common practice among the tribals to restrict the dietery quality and quantity of expectant mothers as there is a common fear that if the baby is too large, delivery would be difficult and might lead to the death of the mother. Therefore, nutritional deficiencies in children are high due to general lack of awareness of child care and infant feeding practices (Mutharayappa; 2000).

Due to high degree of inbreeding they have high prevalence of genetically inherited diseases. Sexually transmitted diseases, malaria, tuberculosis, influenza, gastrointestinal disorders particularly dysentery, parasitic infection, diarrohea, skin and respiratory diseases are common among tribals (Balgir; 2007).

VI.2 Impact of ecology on tribal women's health

In most parts of the world the forest based tribal economy is mainly women centric. The tribal women collect forest products to meet their basic necessities like food, fuel, medicine, housing material etc. Non-timber forest products like fruits and flowers are used as food and extracts from herbs, roots and animals are used for medicinal purposes. All these efforts incur an excessive workload on women. Because of extensive cutting of trees by vested interests, the distances between the villages and the forest areas has increased along with remoteness and lack of amenities, which force the tribal women to walk longer distance in search of minor forest produce, firewood and water. In this rapidly changing milieu, tribal women have to confront an extraordinary workload. Their working hours are more than the male members of the family as apart from their daily household chores they also have to contribute with men in the family income. They even have to put on this additional workload in advanced stages of pregnancy. The over strain on tribal women however is not adequately compensated due to the non-availability of non-timber forest products and decrease in food grain production. The destruction of traditional herbs through deforestation and the lack of access to western medicine have made matters worse. Chronic malnutrition and additional workload since childhood results in physical weakness, arthritis, tuberculosis, stomach disorders etc (Menon; 1995).

In the context of the study area, the tribals did not have such a forest based milieu as forest was very far. Therefore, they depend on purchase of fuel for which they had to minimize the expenditure on health particularly women who generally suppress their ailment. Since the use of energy sources for cooking purpose is virtually absent among the studied families, the fuel wood that they used had a negative impact on women's health. The smoke of burning wood was often responsible for cough, respiratory and eyesight problems among women. The work load of women further rose in the rainy months when there was shortage of dry twigs, branches and cow dung cakes used as fuel. Women had to spend long hours travelling long distances for collecting fuel wood during this time. They also had to do normal household chores and work in the fields besides this. This left the women with little or no time for rest which affects their health badly.

Section – A

VI.3 Perception of health and diseases among the studied families

During field work and interaction with the villagers some relevant questions were asked to identify their health issues and problems. Here some relevant case studies have been cited as under:

Case Study: 1

Shyamal Murmu (Male, Age 25 years, Community – Santal, Village – Nityanandapur, Block – Habibpur) was of the opinion that though there may be some problems in the area regarding accessibility to modern healthcare still they prefer the western mode of treatment to their traditional mode as they are effective and provide quicker reliefs during minor to critical diseases. Moreover, he also mentioned that most of the tribal youths do not have knowledge about traditional medicinal plants and their usage during diseases. Availability and near extinction of many herbal plants due to rapid loss of vegetation cover in the region is also another reason for the growing loss of popularity of the traditional treatment.

Case Study: 2

Suniram Soren (Male, Age 55 years, Community – Santal, Village – Kumarpur, Block - Bamongola) held the view that the traditional mode of treatment is better than the western treatment as it is cheaper and he is more free to express his health problems to the local medicinemen who is socially and culturally more conversant with him. He felt that the traditional medicines cure the diseases better without further complications and side effects.

Consequent upon the above the case studies an attempt has been made to assess the dependence on the preferred type of treatment by the tribal families in the present study. The table given below depicts a picture of this trend:

VI.1 Table showing the treatment preference of the studied communities

Type of Treatment	Number of Families											
	Santal		Malpahari		Kora		Munda		Oraon		Total	
	No	%	No	%	No	%	No	%	No	%	No	%
Traditional	6	1.0	0	0.0	1	2.9	0	0.0	0	0.0	7	0.9
Allopathy	324	54.9	42	87.5	28	80.0	31	62.0	39	60.9	464	59.0
Homoeopathy	2	0.3	0	0.0	0	0.0	0	0.0	0	0.0	2	0.3
Ayurvedic	2	0.3	0	0.0	0	0.0	0	0.0	0	0.0	2	0.3
Traditional & Allopathy	191	32.4	1	2.1	6	17.1	4	8.0	24	37.5	226	28.7
No Preference	65	11.0	5	10.4	0	0.0	15	30.0	1	1.6	86	10.9
Total	**590**	100	**48**	100	**35**	100	**50**	100	**64**	100	**787**	100

It is evident from the above table that among the tribal families of the Santal community 54.9% relied on allopathy treatment and 32.4% practiced both traditional and allopathy treatment. Only 1% fully depended on traditional treatment. Practice of homoeopathy and ayurvedic treatment was found to be negligible, both being 0.3% while 11% had no preference regarding treatment mode. 87.5% Malpaharis were dependent on allopathic treatment, only 2.1% practiced both traditional and allopathy treatment while 10.4% expressed no preference. Practice of only traditional, homoeopathy and ayurvedic treatment was virtually absent among them. Among the Kora families 80% depended on allopathy treatment while 17.1% practiced both traditional and allopathy treatment and 2.9% depended fully on traditional treatment. Homoeopathy and ayurvedic treatment was absent among the Koras. There were no families who had no preference regarding treatment. Among the Mundas 62% relied on allopathy treatment, 8% depended on both traditional and allopathy treatment. Practice of only traditional, homoeopathy and ayurvedic treatment was absent among the Mundas. 30% of the Munda families expressed no preference in treatment practices. Among the Oraons also 60.9% depended on allopathy treatment while 37.5% depended on both traditional and allopathy treatment. 1.6% had no preference in treatment. Practice of only traditional, homoeopathy and ayurvedic treatment was absent.

The table below shows the treatment preference of the elderly persons of the studied families:

VI.2 Table showing the treatment preference of elderly persons

Type of Treatment	Number of Elderly Individuals (50+)											
	Santal		**Malpahari**		**Kora**		**Munda**		**Oraon**		**Total**	
	No	%	No	%	No	%	No	%	No	%	No	%
Traditional	3	1.0	1	3.8	0	0.0	0	0.0	0	0.0	4	0.9
Allopathy	85	28.1	22	84.6	19	73.1	23	71.9	14	35.9	163	38.4
Ayurvedic	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2
Traditional & Allopathy	194	64.2	1	3.8	7	26.9	5	15.6	25	64.1	232	54.6
No Preference	19	6.3	2	7.7	0	0.0	4	12.5	0	0.0	25	5.9
Total	**302**	100	**26**	100	**26**	100	**32**	100	**39**	100	**425**	100

It is seen from the above table that among the studied Santal families 1% of the elderly persons completely depended on traditional treatment while 28.1% depended only on allopathy, 0.3% on ayurvedic treatment, 64.2% relied on both traditional and allopathy treatment while 6.3% had no preference.

Among the elderly Malpaharis only 3.8% depended on traditional treatment, 84.6% depended on allopathy treatment, ayurvedic treatment was absent among the elderly Malpaharis. Only 3.8% practiced both traditional and allopathy treatment while 7.7% had no preference in treatment.

Among the elderly Koras traditional and ayurvedic treatment was virtually absent. Only 73.1% depended on allopathy treatment while 26.9% depended on both traditional and allopathy treatment and there were none among the elderly Koras who had no preference in treatment.

Among the elderly Mundas dependence on traditional and ayurvedic treatment was absent. Only 71.9% depended on allopathy treatment, only 15.6% on both allopathy and traditional treatment while 12.5% had no treatment preference.

Among the elderly Oraons dependence on traditional and ayurvedic treatment was absent. Only 35.9% depended on allopathy treatment while 64.1% dependedon both traditional and allopathy form of treatment and there were none among the elderly Oraons who had no preference in treatment.

It is thus clear that the complete dependence on traditional treatment was fewer among the elderly persons of the studied communities rather most of the communities preferred to follow a mixture of both the allopathy and traditional treatment.

It was also observed that the tribal families had enough faith on the traditional health practices. During field work and interview sessions with the villagers it was found that in some exceptional and emergency situations they approached the help of a traditional healer. Only when the traditional healer's medicines did not work they approach the allopathic treatment at the Primary Health Centres or private doctors. They tend to avoid Primary Health Centre's treatment in the first hand because of the problem of accessibility, availability of doctors and also of the fact that the private allopathic treatment centres charge heavy fees for diagnosis, treatment and medicines.

Here we can present a few case studies from the field visits to show the efficacy of the traditional health practices among the tribals.

Case study: 3

Paltu Soren (Male, Age 12 years, Community – Santal, Village – Habinagar, Block - Gazole) was biten by a venomous snake at night. The child fell unconscious and the neighbours thought there was no hope. Also there was no communication available at night to shift the child to any health centre. The village medicineman was called who applied some traditional medicines and healing techniques and the child regained consciousness.

Case study: 4

Sajan Kisku (Male, Age 40 years, Community – Santal, Village – Dahil-Mahil, Block – Gazole) broke his leg while working in a construction site. After first aid and plaster in the fractured leg from the rural hospital at Gazole he returned to the village. After removing the plaster from the leg and taking allopathic pain killers, he was still having

pain and could not walk. He consulted the traditional village medicineman who applied herbal medicines, bandage and massage oil. He recovered gradually and is fit enough to join work now.

Case study: 5

Lilabati Tudu (Female, Age 45 years, Community – Santal, Village – Chakol, Block – Gazole) was suffering from gynaecological problems for quite a long time. Initially she was under the treatment of a quack but did not get well. So she consulted a private gynaecologist at Malda Town who prescribed expensive medical tests and medicines which was not possible for her to afford and continue treatment any further. She is now consulting a local traditional medicineman who has prescribed her some herbal medicines which are less expensive.

It was also observed as a matter of fact during the field study that there was variation in the treatment preference depending on the income level. The table below represents the treatment preference on the basis of income level:

VI.3 Table showing treatment preference among the studied communities according to their annual income

Income Group	Treatment preference of the families							
	Traditional		Traditional & Western		Western		No Preference	
	No.	%	No.	%	No.	%	No.	%
Below 5000	0	0.0	10	47.6	7	33.3	4	19.0
5001-10000	4	2.5	31	19.1	101	62.3	26	16.0
10001-20000	4	1.0	107	25.5	264	63.0	44	10.5
20001-30000	2	1.7	59	50.9	47	40.5	8	6.9
Above 30000	1	1.4	19	27.5	45	65.2	4	5.8
Total	**11**	1.4	**226**	28.7	**464**	59.0	**86**	10.9

The above table shows that among various income groups 1.4% depended on traditional mode of treatment, 28.7% depended on traditional and western treatment, 59% depended on the western treatment while 10.9% have no preference.

The tribal families whose annual income were below 5000 rupees mostly depended on both the traditional and western treatment (47.6%) followed by the western treatment 33.3%, 19% families had no preference regarding treatment and 0% depended on traditional treatment.

The tribal families in the annual income group of 5001-10000 rupees depended on western treatment (62.3%) followed by both the traditional and western treatment while 16% families expressed no preference in treatment and 2.5% depended on traditional treatment.

The tribal families in the income group of 10001-20000 rupees annually depended mostly on western treatment (63%) followed by both traditional and western treatment 25.5% while 10.5% had no preference and only 1% depended on traditional treatment.

The tribal families in the income group of 20001-30000 depended mostly on both the traditional and western treatment (50.9%) followed by western treatment 40.5%, 6.9% had no preference while 1.7% still depended on traditional treatment.

Those families whose income were above 30000 rupees annually preferred to depend on western medicines solely (65.2%) followed by both the traditional and western treatment, while 5.8% had no preference and 1.4% still depended on traditional treatment.

Thus it can be ascertained that the practice of western treatment prevailed mostly among the higher income groups and lesser dependence was seen among the lower income groups. Western treatment were most prevalent among families in the above 30000 rupees income group followed by the 10001-20000 rupees income group, 50001-10001 rupees income group, 20001-30000 rupees income group and below 5000 rupees income group.

After discussing the treatment preference and their impact among the tribal families under study we now shift the focus of our discussion to the type of diseases that affected the tribal families. Threat from diseases is an important indicator of health and the treatment phenomena adopted reflects the health practices of the tribal families.

The diseases affecting the studied population have been represented in the table below:

VI.4 Table showing the diseases affecting the studied population

Name of the Diseases	Number of Individual					
	Male	**%**	**Female**	**%**	**Total**	**%**
Arthritis	12	35.3	22	64.7	34	100.0
Asthma	5	71.4	2	28.6	7	100.0
Diabetes & Hypertension	3	75.0	1	25.0	4	100.0
Diarrhea & Dysentery	232	52.5	210	47.5	442	100.0
ENT Problems	28	59.6	19	40.4	47	100.0
Fever	9	52.9	8	47.1	17	100.0
Sex Specific Problems	3	2.9	100	97.1	103	100.0
Jaundice	69	97.2	2	2.8	71	100.0
Kala azar	10	71.4	4	28.6	14	100.0
Leprosy	3	33.3	6	66.7	9	100.0
Malaria & Filaria	0	0.0	4	100.0	4	100.0
Old Age Problems	39	31.0	87	69.0	126	100.0
Paralysis	8	80.0	2	20.0	10	100.0
Physical Weakness	42	49.4	43	50.6	85	100.0
Pox	1	100.0	0	0.0	1	100.0
Rickets	0	0.0	1	100.0	1	100.0
Skin Disease	41	75.9	13	24.1	54	100.0
Stomach Pain	94	87.0	14	13.0	108	100.0
TB	88	80.7	21	19.3	109	100.0
Others	20	47.6	22	52.4	42	100.0
Total	**707**	54.9	**581**	45.1	**1288**	100.0

(Sex specific problems contain gynaecological problems, problems of prostate, hernia etc.)

Among the tribal males the major diseases were jaundice, TB, paralysis, skin diseases, diabetes and hypertension, *kala azar*, asthma, ENT problems, diarrohea, dysentery etc. The most common diseases among the females were gynaecological problems, old age related problems, leprosy, arthritis etc. Physical weakness among the males and females were common and 49.4% and 50.6% respectively.

The above table shows the type of diseases found among the male members of whom 97.2% suffered from jaundice followed by stomach pain (87%), TB (80.7%), paralysis (80%), skin disease (75.9%), diabetes and hypertension (75%), *kala azar* (71.4%), asthma (71.4%), ENT related problems (59.6%), diarrohea and dysentry (52.5%), fever (52.9%), physical weakness (49.4%), arthritis (35.3%), leprosy (33.3%), old age related problems (31%). Incidence of pox, ricket, malaria and filaria are absent. Sex specific problems were fewer among males (2.9%) while other diseases constituted (47.6%).

Among the females majority (97.1%) had gynaecological problems followed by old age related problems (69%), leprosy (66.7%). Women suffered more from arthritis (64.7%) than males. While asthma (28.6%), *kala azar* (28.6%), diabetes and hypertension (25%), skin disease (24.1%), paralysis (20%), stomach pain (13%) and jaundice (2.8%) were low among females than males. There were considerable numbers of women who suffered from physical weakness (50.6%), diarrohea and dysentry (47.5%), fever (47.1%) and ENT related problems (40.4%). The reproductive health related problems observed among women included constant white discharge, urinary tract infection, excessive bleeding, anaemia, irregular menstruation and pregnancy related complications. They felt shy to disclose problems related to their reproductive health and hence, left them untreated.

The table given below shows the variations of diseases among the studied communities:

Table VI.5 showing the variation in diseases among the studied communities

Name of the Diseases	Individuals having diseases											
	Santal		Malpahari		Kora		Munda		Oraon		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Arthiritis	25	2.4	1	2.4	5	13.9	0	0.0	3	2.1	34	2.6
Asthma	3	0.3	1	2.4	1	2.8	0	0.0	2	1.4	7	0.5
Diabates & Hypertension	2	0.2	0	0.0	2	5.6	0	0.0	0	0.0	4	0.3
Diarrohea & Dysentry	364	35.2	3	7.3	2	5.6	17	48.6	56	39.2	442	34.3
Eye-Ear-Throat Problems	28	2.7	10	24.4	0	0.0	1	2.9	8	5.6	47	3.6
Fever	13	1.3	3	7.3	0	0.0	0	0.0	1	0.7	17	1.3
Sex Specific	83	8.0	2	4.9	4	11.1	4	11.4	10	7.0	103	8.0
Jaundice	61	5.9	3	7.3	1	2.8	0	0.0	6	4.2	71	5.5
Kala azar	13	1.3	0	0.0	0	0.0	1	2.9	0	0.0	14	1.1
Leprosy	1	0.1	0	0.0	7	19.4	1	2.9	0	0.0	9	0.7
Malaria & Filaria	2	0.2	2	4.9	0	0.0	0	0.0	0	0.0	4	0.3
Old Age Problems	99	9.6	4	9.8	5	13.9	1	2.9	17	11.9	126	9.8
Paralysis	9	0.9	1	2.4	0	0.0	0	0.0	0	0.0	10	0.8
Physical Weakness	73	7.1	3	7.3	1	2.8	2	5.7	6	4.2	85	6.6
Pox	0	0.0	0	0.0	0	0.0	1	2.9	0	0.0	1	0.1
Ricket	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
Skin Disease	46	4.5	0	0.0	1	2.8	3	8.6	4	2.8	54	4.2
Stomach Pain	92	8.9	1	2.4	2	5.6	0	0.0	13	9.1	108	8.4
TB	87	8.4	7	17.1	3	8.3	4	11.4	8	5.6	109	8.5
Others	31	3.0	0	0.0	2	5.6	0	0.0	9	6.3	42	3.3
Total	**1033**	100	**41**	100	**36**	100	**35**	100	**143**	100	**1288**	100

The main diseases affecting the tribal communities under study were diarrohea and dysentery (34.3%) followed by old age problems (9.8%), TB (8.5%), stomach pain (8.4%), physical weakness (6.6%) and jaundice (5.5%).

Diarrohea and dysentery were most among the Mundas (48.6%) followed by the Oraons (39.2%), Santals (35.2%), Malpaharis (7.3%) and the Koras (5.6%). Old age related problems were found mostly among the Koras (13.9%) followed by the Oraons, Malpaharis, Santals (9.6%). TB was found mostly among the Malpaharis (17.1%) followed by the Mundas, Santals, Koras and the Oraons (5.6%). Stomach pain was found to be most among the Oraons (9.1%) followed by the Santals, Koras, Malpaharis and nil among the Mundas. Jaundice was found to be most among the Malpaharis (7.3%) followed by the Santals, Oraons, Koras and nil among the Mundas.

The table given below shows the age wise distribution of diseases among the women:

VI.6 Table showing the diseases among women of different age groups

Name of the Diseases	Number of Individual									
	Upto 14	**%**	**15-44**	**%**	**45-59**	**%**	**60 +**	**%**	**Total**	**%**
Arthritis	0	0.0	7	4.6	10	6.4	5	7.9	**22**	3.8
Asthma	1	0.5	0	0.0	1	0.6	0	0.0	**2**	0.3
Diabates & Hypertension	0	0.0	0	0.0	1	0.6	0	0.0	**1**	0.2
Diarrohea & Dysentry	189	90.4	21	13.7	0	0.0	0	1.6	**210**	36.1
ENT Problems	4	1.9	6	3.9	7	4.5	2	3.2	**19**	3.3
Fever	0	0.0	3	2.0	5	3.2	0	0.0	**8**	1.4
Gynecological Problems	1	0.5	53	34.6	45	28.8	1	0.0	**100**	17.2
Jaundice	0	0.0	1	0.7	1	0.6	0	0.0	**2**	0.3
Kala azar	2	1.0	2	1.3	0	0.0	0	0.0	**4**	0.7
Leprosy	1	0.5	3	2.0	1	0.6	1	1.6	**6**	1.0
Malaria & Filaria	1	0.5	2	1.3	1	0.6	0	0.0	**4**	0.7
Old Age Problems	0	0.0	2	1.3	45	28.8	40	63.5	**87**	15.0
Paralysis	0	0.0	0	0.0	1	0.6	1	1.6	**2**	0.3
Physical Weakness	0	0.0	18	11.8	20	12.8	5	7.9	**43**	7.4
Ricket	1	0.5	0	0.0	0	0.0	0	0.0	**1**	0.2
Skin Disease	6	2.9	5	3.3	2	1.3	0	0.0	**13**	2.2
Stomach Pain	0	0.0	11	7.2	2	1.3	1	1.6	**14**	2.4
TB	0	0.0	8	5.2	8	5.1	5	7.9	**21**	3.6
Others	3	1.4	11	7.2	6	3.8	2	3.2	**22**	3.8
Total	**209**	100	**153**	100	**156**	100	**63**	100	**581**	100

The above table shows that upto the age of 14 girls mostly suffered from diarrohea & dysentery (90.4%) followed by other diseases (3%), skin diseases (2.9%), ENT diseases (1.9%), kala azar (1%) and the incidence of asthma, malaria, filaria, ricket, leprosy and gynaecological problems were insignificant i.e only 0.5% each.

Among the women of the reproductive age group i.e 15-44, the most common diseases were gynaecological problems (34.6%) followed by diarrohea & dysentery (13.7%), physical weakness (11.8%), stomach pain and other diseases (7.2%) each, TB (5.2%), arthritis (4.6%), ENT problems (3.9%), skin diseases (3.3%), fever and leprosy (2%) each, malaria, filarial, old age related problems and kala azar (1.3%) each and jaundice (0.7%).

Among the women of 45-59 age group 28.8% suffered from gynaecological problems, malaria & filarial each, followed by physical weakness (12.8%), arthritis (6.4%), TB (5.1%), ENT problems (4.5%), other diseases (3.8%), fever (3.2%), skin diseases and stomach pain (1.3%) each and paralysis, leprosy, jaundice, kala azar, asthma (0.6%) each.

Among the women upto the age of 60 and above the most common diseases found included old age problems (63.5%), physical weakness, TB and arthritis (7.9%) each, ENT problems and other diseases (3.2%) and diarrohea, dysentery, leprosy, paralysis, stomach pain (1.6%) each.

VI.7 Table showing the treatment preference for gynaecological treatment among women

Type of Treatment	**Gynaecological problems and treatment preferences**					
	upto 44		**45 & above**		**Total**	
	No	**%**	**No**	**%**	**No**	**%**
Traditional	1	3.1	0	0.0	**1**	1.0
Allopathy	33	103.1	19	48.7	**52**	52.0
Traditional & Allopathy	18	56.3	27	69.2	**45**	45.0
No Preference	2	6.3	0	0.0	**2**	2.0
Total	**54**	168.8	**46**	117.9	**100**	100.0

It is evident from the above table that among women upto the age of 44 had the tendency to opt for allopathy treatment (103.1%) followed by both traditional and allopathy (56.3%), women did not have any preference (6.3%) and only traditional treatment (3.1%).

Those women of the age of 45 and above mostly depended on both traditional and allopathy treatment (69.2%) followed by allopathy treatment (48.7%) Women of this age group did not depend on the traditional mode of treatment. Thus it is clear that among young women allopathy treatment was more popular for treating gynaecological problems while among older women both traditional and allopathy treatment were followed than other modes of treatment i.e only traditional or only allopathy. The reasons behind elderly women being more inclined towards traditional treatment in such female diseases were that they were more culturally acceptable, less expensive and having no side effects.

While we have discussed the diseases that affected the tribal population earlier, we will now attempt to analyze the variations of various diseases seasonally. We know that some diseases occur mostly in some particular seasons while some diseases occur all the year round. The table given below shows the seasonal variations of the diseases in the studied blocks:

VI.8 Table showing the seasonal variations in diseases in the studied blocks

Blocks	Seasonal diseases		
	Summer	**Rainy**	**Winter**
Old Malda	Chicken pox, dysentery, jaundice, stomach problems, fever	Filaria, typhoid, diarrohea, dysentery, skin disease, fever	Cold and cough, respiratory problem, pain in joints, fever, pain in throat and chest
Gazole	Malaria, chicken pox, dysentery, jaundice, stomach problems, fever	Filaria, malaria, kala azar, typhoid, diarrohea, dysentery, skin disease, fever	Cold and cough, respiratory problem, pain in joints, fever, pain in throat and chest
Habibpur	Malaria, chicken pox, dysentery, jaundice, stomach problems, fever	Filaria, typhoid, kala azar, diarrohea, dysentery, skin disease, fever	Cold and cough, respiratory problem, pain in joints, fever, pain in throat and chest
Bamongola	Malaria, chicken pox, dysentery, jaundice, stomach problems, fever	Filaria, kala azar, typhoid, diarrohea, dysentery, skin disease, fever	Cold and cough, respiratory problem, pain in joints, fever, pain in throat and chest

The above table shows that the most common seasonal diseases among the tribal communities were chicken pox, dysentery, jaundice, stomach problems, fever and

malaria during summer, filaria, kala azar, typhoid, diarrohea, dysentery, skin disease and fever during rainy season and cold and cough, respiratory problem, pain in joints, fever, pain in throat and chest during winter.

Malaria and kala azar were most common during summer and rainy season respectively in the blocks of Gazole, Habibpur and Bamongola while cold and cough, respiratory problems, fever, pain in joints, throat and chest were common among the tribals during winter in all the blocks under study.

It is also well known that diseases are of basically of two types – communicable and non-communicable. The main carriers of communicable diseases are air, water and vector. Among the diseases that existed among the tribals, arthritis, asthma, diabetes, hypertension, diarrohea, dysentery, jaundice, *kala azar*, sex specific problems, malaria, filarial, old age diseases, physical weakness, paralysis, rickets, skin diseases, stomach pain are all non-communicable diseases while fever and leprosy can be both communicable and non- communicable. Pox and tuberculosis are both communicable diseases.

The table below shows the attack of communicable and non-communicable diseases among the studied communities:

VI.9 Table showing the attack of communicable and non-communicable diseases among the studied communities

Communities	**Communicable**		**Non-Communicable**		**Total**
	No.	%	No.	%	
Santal	511	49.6	520	50.4	1031
Malpahari	10	27.0	27	73.0	37
Kora	6	16.7	30	83.3	36
Munda	26	83.9	5	16.1	31
Oraon	70	45.8	83	54.2	153
Total	**623**	48.4	**665**	51.6	**1288**

The above table shows that 51.6% among the studied communities suffered from non-communicable diseases while 48.4% suffered from communicable diseases. The attack

of communicable diseases were mostly among the Mundas (83.9%) followed by the Santals (49.6%), Oraons (45.8%), Malpaharis (27%) and Koras (16.7%). Non-communicable diseases were existent mostly among the Koras (83.3%) followed by the Malpaharis (73%), Oraons (54.2%), Santals (50.4%) and Mundas (16.1%).

The table below shows the carriers of communicable diseases among the studied communities:

VI.10 Table showing the carriers of communicable diseases among the studied communities

Communities	Water Borne		Air Borne		Vector Borne		Other		Total
	No.	%	No.	%	No.	%	No.	%	
Santal	564	54.7	90	8.7	16	1.6	361	35.0	1031
Malpahari	7	18.9	8	21.6	2	5.4	20	54.1	37
Kora	6	16.7	4	11.1	7	19.4	19	52.8	36
Munda	20	64.5	5	16.1	2	6.5	4	12.9	31
Oraon	81	52.9	10	6.5	0	0.0	62	40.5	153
Total	**678**	52.6	**117**	9.1	**27**	2.1	**466**	36.2	**1288**

The above table shows that 52.6% diseases among the tribals were water borne, 9.1% were air borne, 2.1% were vector borne and 36.2% were carried by other mediums. The threats from water borne diseases were most common among the Mundas (64.5%) followed by the Santals (54.7%), Oraons (52.9%), Malpaharis (18.9%) and Koras (16.7%). The spread of air borne diseases were most common among the Malpaharis (21.6%) followed by Mundas (16.1%), Koras (11.1%), Santals (8.7%) and Oraons (6.5%). Vector borne diseases were most common among the Koras (19.4%), Mundas (6.5%), Malpaharis (5.4%), Santals (1.6%) and Oraons (0%). Other mediums of disease carriers were most common among the Malpaharis (54.1%) followed by Koras (52.8%), Oraons (40.5%), Santals (35%) and Mundas (12.9%).

As we all know that there is a close relation between educational achievements, health practices and the threat of diseases, so in the present study an attempt was made to

understand it. The table below shows the relation between the educational level and the threat of diseases:

VI.11 Table showing educational level and the threat of diseases

Education Level	Having Diseases			
	No.	%	Yes	%
Can Sign & Can't Sign	1093	60.3	721	39.7
Upto Primary	434	64.4	240	35.6
Upto H.S	540	75.3	177	24.7
Graduate +	28	96.6	1	3.4
Total	**2095**	64.8	**1139**	35.2

(The present table has been prepared excluding 'not applicable' category)

The above table shows that among the studied population a total of 64.8% did not suffer from diseases while 35.2% suffered from diseases. The threat from diseases was maximum among those tribals who could sign or could not sign (39.7%) followed by those having primary level education 35.6%, higher secondary level 24.7% and graduation and above level of education only 3.4%.

It is well known that the tribals believe in traditional medicine. They have their traditional healers upon whom they have considerable faith and confidence. Their perception of health and diseases is mostly attributed to wrath of god, mischief of evil spirits and magic of human beings. Treatment is done by appeasing gods and controlling of evil spirits through counter magic and of course, herbal medicines. The role of quacks, *Ojhas/Gunins* or traditional medicinemen in healing practices is prominent among the tribal communities under study. They perform *pujas* to get rid of diseases. *Sitala Puja* during the Bengali month of *Baisakh* is a common practice. They also offer animals or birds during *pujas* if they get cured and their wishes are fulfilled to show honour to the goddess.

Loss of appetite and reluctance in taking food was commonly observed among infants and children. They are also more prone to seasonal illnesses that are minor in nature. There were also few instances of mental illness, fits and epilepsy among the studied

families. Discontinuation of polio drops and irregularity in the postnatal immunization coverage due to ignorance, carelessness and lethargy was also another feature observed in their attitude towards health and illness. They considered minor diseases as normal and they did not go for early detection, prevention, treatment and cure. They treated minor diseases normally with traditional medicines. It was only when diseases turn critical that they went for western treatment.

It will be worthy to mention here that it was observed during field study that there was a growing inclination to adopt western medicines and healthcare facilities among the young generation tribal members. They preferred adopting western healthcare facilities and medicine because they were easy to follow, effective, time saving and provided quicker relief in times of crisis. The yester generation tribals preferred traditional methods of treatment. Even a mixed view and faith towards both the systems were observed to be held by some villagers but with a more inclination towards western healthcare system in case of serious illness. Thus, it is evident from the study that the tribals availed western healthcare system but they were also deeply inter-wined with traditional practices of healthcare.

VI.4 Impact of food habits on tribal health

There is a direct relation between dietary habits and health and diseases. Balanced diet is a prerequisite for good health. The dietary habits among the studied families varied depending on the number of times of meal intake as well as itineraries. The number of meals intake and itineraries were closely associated with the economic condition of the family. Very poor tribal families could not afford for a square meal instead they restricted it to once or twice while medium to higher earning families took three to four meals per day. The breakfast of most of the tribal families included cooked rice of the previous day soaked in water overnight with onion and green chilly while some families had their breakfast with puffed rice and tea. The lunch consisted of only rice with salt for low income families and rice with pulses and vegetables for medium to higher income families. Lower income group families hardly could intake green vegetables, meat, fish or milk. Medium income group families had limited intake of green vegetables, milk or animal protein like once a week or twice a month. Due to rapid loss of vegetation in the area, the food habits of the tribals had undergone changes

and due to the rapid rise in the price of green vegetables it became impossible for most families to include green vegetables in their meals daily. This had directly affected their health and traditional healing techniques of diseases.

Apart from this, the use of liquor both indigenous and local made affected their health conditions badly. They also mixed additional intoxicating harmful chemicals with liquor which took its toll on their health and with uninterrupted consumption even cost them with their lives. Most of the tribals were addicted to liquor consumption and they spent ruthlessly from their little income for this and got further impoverished. Tribal men even children smoke local *bidi*. Habitual liquor consumption among tribal women was almost negligible especially among the young women while some elderly women consumed occasionally during festivals. Some elderly women were also seen to smoke locally made *bidi*.

VI.5 Practice of personal health and hygiene among the tribal families

The practice of health and hygiene was very poor among the tribal families. Most of the families did not have the basic sense of hygiene and defecation. As discussed earlier that most of the families used open fields for the purpose of defecation. The tribals wore dirty clothes and did not wash the clothes regularly with detergent. Most of the tribal families used unclean pond water surrounding their houses for washing clothes, utensils, drinking and bathing purposes. They did not also take bath regularly with soap and wash the hands thoroughly before taking food. They did not even wash the utensils properly before using them and left the cooked food items uncovered in the open air for which flies and mosquitoes often infected their foods. They also did not wash the raw food items properly before cooking them. The unclean living conditions of the tribal households made them suitable for the breeding of mosquitoes and flies. Those households which reared livestock cattle and pigs were very unhealthy and unhygienic and the cattle sheds were not properly cleaned everyday. Cattle, pigs, cats, dogs and hens loitered here and there around the tribal households even when they took food. No special attention towards the hygiene of the children was given by the parents and the elderly family members and the children played in the dust and dirt and then came to take food. The mothers of the tribal children did not clean their legs and hands with soap or made them bathe with soap regularly instead the infants were massaged

regularly with oil especially mustard oil which they considered to be healthy for the child.

VI.6 Maternal and child birth related traditional healthcare practices among the tribals

Maternal and child healthcare practices are an important issue in the discussion of health. Practice of traditional health practices with regard to maternal and child birth related practices is more common among tribals than in any other community. It is a feature that is guided by their cultural beliefs. They believe that pregnancy is a normal phenomena and children to be gifts of god. They also believe that if they have not committed anything wrong or any sin in their past and present life time, they will have healthy mothers and children. So no special care or rest was given to expectant mothers. No special diet was given to pregnant women. Antenatal care was not a common practice. Women carried out their normal chores like fetching water, working in agricultural fields, taking care of elder offspring, cooking, washing, collecting fuel wood etc.

During field work it was observed that among the studied communities there was prevalence of non-institutional deliveries. Deliveries that took place in home were conducted by traditional *dais* or mid-wives and assisted by other elderly women of the family and neighbourhood. Blade, sickle or bamboo blades were used to cut the umbilical cord in home deliveries attended by traditional village mid-wives. Turmeric powder, mustard oil, ash, mud or talcum powder, dettol, boroline were used as antiseptic and applied after cutting the cord. After delivery both the newborn and the mother were given a bath with warm water. The child was then exposed to the heat of earthen oven placed in a corner of the delivery room. The child was also given a massage with mustard oil. The mother then continued to breast feed her child for as long as four years. Those mothers who did not have enough breast milk to feed their infants were fed on goats' milk. After six months, the child was given supplementary foods like rice and *dal*. The infants were not given any special diet during their growing years and malnourishment was widespread. The tribal families had little care and concern over postnatal care and neither lactating mothers nor their infants were given

any special diet rather the diet of a lactating mother was restricted because they believed that it will adversely affect the health of the child.

Here some case studies on the negative effects and consequences of traditional maternal and child care practices are presented which were experienced during field study.

Case study: 6

Hoponmoi Mardi (Female, Age 17 years, Community – Santal, Village – Jamdanga, Block – Gazole) was pregnant. She felt labour pain at night and ultimately delivered at home because it was night time, the primary health centre was located at a long distance and there was no communication available at the dead hours of night. A village mid-wife was called for who attended the delivery. Initially it seemed that everything was alright but after three days the health condition of the child deteriorated and the child ultimately succumbed to infection. The mother now repents that if she could go to the hospital then, the child would have been saved.

Case study: 7

Somai Mal (Male, Age 3 years, Community – Malpahari, Village – Jhajra, Block - Old Malda). The child had an abnormally big abdomen and yellow eyes and was suffering from nourishment related ill health since birth. Moreover, due to economic constraints, the family could not provide nutrient rich food items or proper care and treatment. The child died due to ill health and chronic malnutrition.

Table VI.12 showing the status of mother and child care (in the last 15 years)

Communities	No. of Deliveries	Pre-natal & Post-natal Care			
		Yes	%	No	%
Santal	**950**	**749**	78.8	**201**	21.2
Malpahari	**75**	**53**	70.7	**22**	29.3
Kora	**49**	**16**	32.7	**33**	67.3
Munda	**84**	**71**	84.5	**13**	15.5
Oraon	**110**	**77**	70.0	**33**	30.0
Total	**1268**	**966**	76.2	**302**	23.8

'Yes' means taking pre-natal or post-natal or both care, whereas, 'No' means not taking those formal care.

The above table shows that 76.2% women from the studied communities received pre-natal and post-natal care while 23.8% did not receive pre-natal and post-natal care. About 84.5% women from the Munda community received pre-natal and post-natal care followed by the Santals (78.8%), Malpaharis (70.7%), Oraons (70%) and Koras (32.7%).

The table below shows status the pre-natal and post-natal care among the studied communities:

VI.13 Table showing the status of pre-natal and post-natal care among the studied communities

Communities	No. of Deliveries	Mother & Child Care			
		Pre-natal		Post-natal	
		No.	%	No.	%
Santal	**950**	**703**	74	**568**	59.8
Malpahari	**75**	**50**	66.7	**47**	62.7
Kora	**49**	**22**	44.9	**19**	38.8
Munda	**84**	**67**	79.8	**61**	72.6
Oraon	**110**	**71**	64.5	**70**	63.6
Total	**1268**	**913**	72	**765**	60.3

It is evident from the above table that in the last 15 years out of a total of 1268 deliveries only 72% mothers and child had received pre-natal care and 60.3% had received post-natal care.

Community wise we see that the Mundas received the maximum pre-natal (79.8%) and post-natal care (72.6%) followed by Santals receiving 74% pre-natal care and 59.8% post-natal care, Malpaharis receiving 66.7% pre-natal care and 62.7% post-natal care, Oraons receiving 64.5% pre-natal care and 63.6% post-natal care and the Koras receiving the minimum benefits of the maternal and childcare programmes; pre-natal care 44.9% and post-natal care 38.8%.

Due to inadequate, inaccessible health institutions and the irregular services provided by the sub-centres at the village level, maternal and childcare services have failed to bring the desired outcomes. Therefore, the complications relating to childbirth, risks of the mother and the child both before and after birth and the ante-natal, post-natal care have remained neglected which in turn have taken its toll on the mother and the child.

Child mortality was a common feature among the tribal families which reflected the poor state of maternal and child health. Child malnourishment was also widespread leading to child mortality in the post-natal period or early childhood. The incidences of child mortality also varied from one community to the other. This degree of variation also depended on the level of backwardness, ignorance, too much dependence on traditional life styles and life support systems etc.

During the field study an attempt was made to figure out the community wise incidences of child mortality among the studied population. Tribal women of the families under study were interviewed and they responded likewise reporting incidences of child mortality in their respective families. Their responses have been shown in the following table:

VI.14 Table showing community wise occurrence of child mortality

Child Mortality	**Number of Families**											
	Santal		**Malpahari**		**Kora**		**Munda**		**Oraon**		**Total**	
	No	%	No	%	No	%	No	%	No	%	No	%
Yes	166	28.1	7	14.6	12	34.3	16	32.0	12	18.8	213	27.1
No	424	71.9	41	85.4	23	65.7	34	68.0	52	81.3	574	72.9
Total	**590**	100	**48**	100	**35**	100	**50**	100	**64**	100	**787**	100

The above table shows that among the studied families, a total of 27.1% tribal women reported incidents of child mortality while 72.9% told that they have not experienced incidences of child mortality.

Among the studied families, Koras (34.3%) reported the highest incidents of child mortality followed by Mundas (32%), Santals (28.1%), Oraons (18.8%) and Malpaharis (14.6%).

One of the major constraints to fight back child mortality was prevalence of non-institutional deliveries among the tribals. Lack of awareness among the tribals along with the limited rural outreach of medical services and lack of emergency transportation facilities are to be pointed for this. This problem had been compounded by the insensitive and discriminatory attitude of some medical staffs at service in the government health institutions and the financial constraints of the tribal families.

Government programmes to raise the health awareness and improve the accessibility to primary health centres have not had the desired impact. Despite the central government's initiative to popularize institutional deliveries through the *Janani Suraksha Yojana* and *Janani Sishu Suraksha Karyakram* to minimize risks related to child birth, the tribal families under study aroused some critical areas of concern relating to child birth. It was seen that non-institutional deliveries are still prevalent among the tribal families. Prevalence of non-institutional deliveries rises as we move up the age ladder. Children upto the age of 15 have been considered to establish the trends relating to the place of child birth. The rates of non-institutional deliveries have certainly dropped among the studied communities over the years as against the earlier trends. For children above 15 years of age and adult persons above the age of 20 years or so the rate of non-institutional rises. So reflecting on the place of delivery of the children upto the age of 15 years will definitely serve the purpose of understanding the trend of the institutional and non- institutional births. Further, it is difficult to establish the place of delivery of the older persons as most of them do not have their parents or guardians alive.

The table given below highlights on the incidences of institutional and non-institutional deliveries among the studied communities in the last 15 years:

VI.15 Table showing the community wise institutional/non-institutional deliveries (in the last 15 years)

Community	Place of Deliveries					
	Institutional		Non-Institutional		Total	
	No.	%	No.	%	No.	%
Santal	**783**	82.4	**167**	17.6	**950**	100.0
Malpahari	**58**	77.3	**17**	22.7	**75**	100.0
Kora	**28**	57.1	**21**	42.9	**49**	100.0
Munda	**72**	85.7	**12**	14.3	**84**	100.0
Oraon	**82**	74.5	**28**	25.5	**110**	100.0
Total	**1023**	80.7	**245**	19.3	**1268**	100.0

The above table shows the rate of institutional and non-institutional deliveries among the studied communities in the last 15 years. It is seen that the Mundas had 85.7% institutional and 14.3% non-institutional deliveries followed by the Santals who had 82.4% institutional births and 17.6% non-institutional births, Malpaharis had 77.3% institutional births and 22.7% non-institutional births, the Oraons had 74.5% institutional births and 25.5% non-institutional births and the Koras had only 57.1% institutional and 42.9% non-institutional births.

The rate of non-institutional births in the last 15 years had remained considerably high among the Koras followed by the Oraons, Malpaharis, Santals and the Mundas.

VI.16 Table showing institutional/non-institutional deliveries among children upto 15 years

Age Groups	Total number of Deliveries	Place of Deliveries			
		Institutional		Non-Institutional	
		No.	%	No.	%
01--05	432	416	96.3	16	3.7
06--10	473	384	81.2	89	18.8
11--15	363	223	61.4	140	38.6
Total	1268	**1023**	80.7	**245**	19.3

The above table shows that the maximum number of institutional deliveries i.e. 96.3% took place among the children of 1-5 age groups followed by 81.2% in the 6-10 age groups and 61.4% in the 11-15 age groups.

The table below shows the status of the place of delivery and the attendant during birth for children upto 15 years of age:

VI.17 Table showing the status of the institutional/non-institutional deliveries by age

Age Groups	Place of Delivery	Attended by	Total	
			No	%
Upto 5	Institutional	Trained health personnel	416	32.8
	Non-Institutional	Traditional 'dai'	16	1.3
06 – 10	Institutional	Trained health personnel	384	30.3
	Non-Institutional	Traditional 'dai'	89	7
11 - 15	Institutional	Trained health personnel	223	17.6
	Non-Institutional	Traditional 'dai'	140	11
Total	**Institutional**		**1023**	**80.7**
	Non - Institutional		**245**	**19.3**

It is evident from the table given above that in the 01-05 age groups 32.8% births were institutional while 1.3% births were non-institutional. In the 06-10 age groups 30.3% births were institutional and 7% were non-institutional. In the 11-15 age groups only 17.6% births were institutional and 11% were non-institutional.

The above table shows that among children upto the age of 15 years 80.7% births were institutionalized while 19.3% births were non-institutionalized. In the 01-05 age groups the maximum number of institutional deliveries took place while the maximum number of non-institutional deliveries took place in the 11-15 age groups.

While institutional deliveries were attended by trained health personnels non-institutional deliveries were attended by traditional mid-wives or *'dais'*. Distance of primary health centres and rural hospitals from the village was one of the main factors underlying the prevalence of non-institutional deliveries.

The table given below shows the incidence of institutional and non-institutional deliveries among the studied communities upto children of 15 years age:

VI.18 Table showing the incidence of institutional/non-institutional deliveries among the studied communities by age (upto 15 years)

Age Groups	Place of Delivery	Communities											
		Santal		Malpahari		Kora		Munda		Oraon		Total	
		No	%	No	%	No	%	No	%	No	%	No	%
01 -- 05	Institutional	**326**	34.3	**24**	32.0	**14**	28.6	**24**	28.6	**28**	25.5	**416**	32.8
	Non-institutional	**15**	1.6	**0**	0.0	**1**	2.0	**0**	0.0	**0**	0.0	**16**	1.3
06 -- 10	Institutional	**291**	30.6	**24**	32.0	**7**	14.3	**30**	35.7	**32**	29.1	**384**	30.3
	Non-institutional	**56**	5.9	**7**	9.3	**14**	28.6	**5**	6.0	**7**	6.4	**89**	7.0
11 -- 15	Institutional	**166**	17.5	**10**	13.3	**7**	14.3	**18**	21.4	**22**	20.0	**223**	17.6
	Non-institutional	**96**	10.1	**10**	13.3	**6**	12.2	**7**	8.3	**21**	19.1	**140**	11.0
Grand Total	**Institutional**	**783**	82.4	**58**	77.3	**28**	57.1	**72**	85.7	**82**	74.5	**1023**	80.7
	Non-institutional	**167**	17.6	**17**	22.7	**21**	42.9	**12**	14.3	**28**	25.5	**245**	19.3
	Total	**950**	100	**75**	100	**49**	100	**84**	100	**110**	100	**1268**	100

It is seen in the above table that among the Santals in the 01-05 age groups there were 34.3% institutional deliveries as against 1.6% non-institutional deliveries. In the 06-10 age groups there were 30.6% institutional deliveries as against 5.9% non-institutional deliveries. In the 11-15 age groups there were 17.5% institutional deliveries as against 10.1% non-institutional deliveries.

Among the Malpaharis in the 01-05 age groups there were 32% institutional deliveries as against 0% non-institutional deliveries. In the 06-10 age groups there were 32% institutional deliveries as against 9.3% non-institutional deliveries. In the 11-15 age groups there were 13.3% institutional and 13.3% non-institutional deliveries.

Among the Koras in the 01-05 age groups there were 28.6% institutional deliveries as against 2% institutional deliveries. In the 06-10 age groups there were 14.3%

institutional deliveries and 28.6% non-institutional deliveries. In the 11-15 age groups there were 14.3% institutional and 12.2% non-institutional deliveries.

Among the Mundas in the 01-05 age groups there were 28.6% institutional deliveries as against 0% non-institutional deliveries. In the 06-10 age groups there were 35.7% institutional deliveries and 6% non-institutional deliveries. In the 11-15 age groups there were 21.4% institutional deliveries as against 8.3% non- institutional deliveries.

Among the Oraons in the 01-05 age groups were 25.5% institutional deliveries and 0% non-institutional deliveries. In the 06-10 age groups there were 29.1% institutional deliveries as against 6.4% non-institutional deliveries. In the 11-15 age groups there were 20% institutional deliveries as against 19.1% non- institutional deliveries.

As far as attack of diseases is concerned the children remain the most vulnerable. The disease pattern of the children also differs from that of the adults. As we know that children have poor immunity as compared to that of the adults so they get affected by diseases more frequently. The unhealthy living conditions and unhygienic life styles also affects child health badly especially in the growing years. Moreover, as has been discussed earlier that due to lack of awareness and financial constraints among the tribals proper and timely treatment of the children coupled with their inborn under nourishment, lack of care and poor immunity to fight diseases makes matter even worse. The ignorant tribal parents also do not give any special attention to the growing children who are on the footsteps of attaining puberty and do not teach them healthy lifestyles, food habits or living practices. As a result the adolescents grow unruly, wild and tend to invite diseases more often than not. Therefore, during the study an attempt was made to point out the most common diseases among the children.

The table given below shows the diseases affecting the children of the population under study:

VI.19 Table showing the distribution of diseases among the children

Name of the Diseases	Number of Children					
	Male	**%**	**Female**	**%**	**Total**	**%**
Asthma	1	0.4	1	0.5	2	0.5
Diarrohea & Dysentry	210	90.5	189	90.4	399	90.5
ENT problems	8	3.4	4	1.9	12	2.7
Gynecological Problems	0	0.0	1	0.5	1	0.2
Kala azar	4	1.7	2	1.0	6	1.4
Leprosy	0	0.0	1	0.5	1	0.2
Malaria & Filaria	0	0.0	1	0.5	1	0.2
Physical Weakness	1	0.4	0	0.0	1	0.2
Ricket	0	0.0	1	0.5	1	0.2
Skin Disease	5	2.2	6	2.9	11	2.5
Stomach Pain	1	0.4	0	0.0	1	0.2
Others	2	0.9	3	1.4	5	1.1
Total	**232**	100	**209**	100	441	100

The main diseases among the children are diarrohea, dysentery, ENT problems, skin diseases and *kala azar*. The type of diseases among the children reflects that there is lack in necessities like safe drinking water and clean living conditions.

It is seen in the above table that most children both males and females suffered from diarrohea and dysentery, 90.5% and 90.4% respectively followed by ENT problems 3.4% for males and 1.9% for females. Skin diseases were common among children i.e 2.2% for males and 2.9% for females. Prevalence of *kala azar* is 1.7% among male child and 1% among the female child. Occurrences of other diseases were insignificant among the children.

Children are generally more prone to certain seasonal diseases as compared to adults. The tribal children of the study area suffered mainly from diarrohea, dysentery, chicken pox, jaundice, fever, conjunctivitis, nose bleeding and liver related problems during summer while they were more prone to diarrohea, dysentery, typhoid, stomach pain, skin diseases, fever, hook worm, guinea worm, ENT diseases and filaria during the rainy season. The most common diseases among the children during winter included common cold and cough, influenza, tonsillitis, respiratory diseases, ENT diseases and chest pain.

VI.8 Traditional health and herbal medicine practices among the tribal families

Health problems and health practices of tribal communities have been profoundly influenced by the inter-play of complex social, cultural, education, economic and political practices. Most of the traditional knowledge in health practices among the tribals is based on common values, beliefs, experiences and practices held that have been transferred over by generations. The common beliefs, customs, traditions, values and practices connected with health and disease have been closely associated with the treatment of diseases. Health practices among tribals come by evolution and not by revolution (Chaudhuri; 1990).

The World Health Organization at the Alma Ata Conference (1978) recognized indigenous medicine as a part of attaining primary healthcare. The United Nations Declaration on the Rights of Indigenous Peoples (2007) also makes provisions for the indigenous peoples to promote, develop and maintain their institutional structures, their distinctive customs, spirituality, traditions, procedures and practices in accordance with international human rights standards. This implies a greater obligation of states to uphold not only the indigenous individual's right to health but also the collective right of indigenous peoples to maintain and use their health systems and practices in pursuit of their right to health. The Declaration in Article 24 further specifies that the indigenous peoples have the right to their traditional medicines and to maintain their health practices including the conservation of their vital medicinal plants, animals and minerals and the indigenous individual's right to access, without any discrimination, to all social and health services.

The tribal communities have their own indigenous methods of treating different kinds of diseases. Various locally available herbs and leaves of wild plants are used by them as medicines. The herbal specialists and medicinemen have commendable knowledge about the herbs and its medicinal use. Normally, they learn about these medicinal plants and its uses from their ancestors. Besides the medicinemen many elderly persons of the tribal communities know about the use of herbal medicines (Chaudhuri; 2012).

Some of the traditional methods of treatment with herbal medicines and home remedies for certain illnesses were learnt from interviewing the villagers and the medicinemen among the studied tribal families. A brief account of certain remedial treatment for selected common diseases is mentioned as under:

(a) Minor cuts and bruises: Smashed pulp of marigold flower leaves and green grasses is used for bandage purposes in the injured parts.

(b) Cough and Cold:

- Juice of *tulsi (ocimum tenuiflorum)* leaves mixed with honey.
- Black pepper and ginger juice mixed with honey.
- Ginger juice with honey.
- Juice of *basaka (Adhatoda vasica)* leaves with honey for curing chronic cough and cold.

(c) Fever:

- Mixture of equal proportion honey and ginger juice taken three to four times daily to cure fever.
- Black pepper powder, powder of *tulsi (ocimum tenuiflorum)* leaves in *misiri* (date palm sugar crystals) water to be taken in empty stomach daily.
- Juice of *shiuli (Nyctanthes arbor-tristis)* flower fresh leaves.

(d) Hookworms:

- Juice of *neem (Azadirachta indica)* leaves taken in empty stomach in the morning.
- *Chirata (Swertia)* twigs soaked in water overnight and taken in empty stomach in the morning.

- Juice of *kalmegh (Andrographis paniculata)* leaves to be taken in empty stomach in the morning.

(e) Tonsilitis:

- Chewing of *labanga* (clove) three to four times daily or as and when irritation is felt in the throat.
- Regular gargles for at least a week with salt and black pepper in moderately warm water.
- Regular gargles with salt and ginger juice in moderately warm water.
- Chewing of *bach (Acorus calamus)*

(f) Toothache:

- Salt in moderately warm water for mouthwash.
- Applying little salt mixed with mustard oil in the infected teeth.
- Applying *labanga* oil (clove oil) in the area where pain is felt.
- Chewing or applying of juice of green guava leaves taken for relief in toothache.

(g) Pain in ear:

- Mild warm garlic and onion juice in 2-3 drops to be poured in ears.
- Boiled juice of *tulsi (ocimum tenuiflorum)* leaves to be poured in 2-3 drops in the ears.
- 3-4 drops of mild warm ginger juice can cure earache.

(h) Nose Bleeding:

- Juice of green grasses in 3-4 drops to be poured in the nostrils.
- Juice of fresh *tulsi (ocimum tenuiflorum)* leaves poured in drops in the nose can cure nose bleeding.
- Flower of pomegranate *(Punica granatum)* is crushed and poured in 3-4 drops in the nostril for immediate relief from nose bleeding.

(i) Jaundice:

- Juice of *batabi (Citrus maxima/citrus grandis)* lemon to taken twice daily.
- Sugarcane juice to be taken twice daily.
- Juice of *arhar (Cajanus cajan)* leaves mixed with sugar to be taken in empty stomach.
- Boiled papaya.

- 3-4 spoonful juice of radish.
- Boiled rice mixed with salt and raw turmeric powder.

(j) Liver Disease:

- Juice of fresh date palm to be taken in empty stomach in the morning.
- Boiled papaya mixed with salt taken with afternoon meals.
- Curry prepared from bud of banana.
- Spiceless curry of unripe banana and unripe papaya.

(k) Dysentery:

- Juice of *gadal (Paederia foetida)* leaves.
- Lime juice in mild warm water and mixed with salt is used to cure dysentery.
- Juice of *thankuni (Centella asiatica)* leaves.

(l) Pox:

- *Methi (Trigonella foenum-graecum)* soaked in water overnight and taken in empty stomach in the morning.
- Applying a mixture of crushed turmeric and *neem (Azadirachta indica)* leaves on the affected parts.
- Bathing with mild warm water with *neem (Azadirachta indica) leaves* boiled in it.

(m) Arthritis:

- Massage in the affected parts with garlic boiled in mustard oil.
- Massage of mild warm ginger juice.
- Massage of *karpur* (camphor) oil with mint.
- Leaves of *nisinda (Bitex negunda)* leaves grinded and mixed with milk are used for relieving external pain.

(n) Diabetes:

- Small flowers of *bel* or wood apple *(Aegle marmelos)* tree soaked in water overnight and taken in empty stomach in the morning.
- Juice of fresh *neem (Azadirachta indica)* leaves in empty stomach in the morning.
- *Methi (Trigonella foenum-graecum)* soaked in water overnight and taken in the morning in empty stomach.

(o) Constipation:

- Raw *isabgol* or *psyllium* seed husk soaked in water taken at bed time to clear bowels.
- Pulp of *bel* or wood apple *(Aegle marmelos)* taken after meals provides immediate relief in case of irregular bowels.
- Green vegetables like *bhendi* (lady's finger), ripe banana, ripe papaya and wild leaves taken as mixed curry.
- Green *amloki (Phyllanthus emblica)* soaked in water overnight and taken the next morning in empty stomach

(p) Heart Diseases:

- Powder made from the bark of *arjun (Terminalia arjuna)* tree to be taken in the morning in empty stomach.

(q) Gynaecological Problems:

- Powder prepared from the root of *anantamool (Hemidesmus indicus)* plant.
- Water of overnight soaked rice taken in empty stomach is effective to cure white discharge.
- Crushed root of the *palash (Butea monosperma)* tree.
- Bark of *ashok (Saraca indica)* tree soaked in water overnight and taken in empty stomach in the morning.

(r) Urine Infection:

- Juice of *patharkuchi (Kalanchoe pinnata)* leaves taken in the morning in empty stomach.

(s) High Blood Pressure:

- Juice made from rhizome of *swarpagandha (Rauwolfia serpentina).*

Section - B

VI.9 Modern health facilities accessed by the tribal families under study

Health is a universally cherished goal. Health cannot be forced upon people. Health services to all people are a key step towards development. Access to modern healthcare is basic to development and realization of health rights.

With this objective in view, an attempt has been made to assess the impact of modern health facilities and their accessibility while considering the distance of the studied villages and its nearest health institutions including the referral health units.

The next table shows the villagewise first treatment centres with their corresponding distances from the studied villages, the fist referral units under whose jurisdiction the villages come alongwith their distance and the distance of the village from the District Medical College and Hospital located at Malda Town.

As the sub-centres are the primary treatment centres at village level so the distance of the sub-centres from the households needs to be dealt with as it is an important factor while discussing accessibility to health institutions.

The table given below shows the accessibility to such health institutions:

.VI.20 Table showing the accessibility to health facilities in the study area

Blocks	Villages	Name & Sub-centre distance (in Km)	PHC/Rural Hospital Name & Distance (in Km)	Dist.Hosp/ Medical College
Habibpur	Anail	Manoharpur (2)	Habibpur RH (1)	21 km
	Dholakandar	Sahapur (4)	Habibpur RH (5)	23 km
	Aktoil	Kendpukur (3)	Habibpur RH (14)	30 km
	Nityanandapur	Jordanga (1)	Habibpur RH (7)	22 km
	Chachaichandi	Bakshinagar (2)	Habibpur RH(5)	20 km
	Raghabbati	Kharibari (5)	Habibpur RH (21)	20 km.
Bamongola	Nimdanga	Chhatia (3)	Kashimpur (4)	60 km
	Manikpur	Mudipukur (2)	Bamongola RH (6)	44 km
	Baganpara	Mudipukur (4)	Bamongola RH (5)	46 km
	Mirzapur	Bahadipur (1.5)	Bamongola RH (4)	43 km
	Gurullya	Gurullya (0)	Bamongola RH (2)	50 km
	Kumarpur	Gurullya (1)	Bamongola RH (3)	49 km
	Bamongola	Bamongola (0)	Bamongola RH (6)	43 km
Gazole	Habinagar	Habinagar (2)	Babupur (3)	50 km
	Chakol	Habinagar (2)	Babupur (5)	52 km
	Jamdanga	Masimpur(2)	Babupur (6)	45 km
	Shankarpur	Bandhail (1)	Gazole RH (2)	27 km
	Lakhripir	Khardah babupur(2)	Hatimari RH (1)	25 km
	Dahil-Mahil	Karkach (2)	Gazole RH (7)	35 km
	Updel	Araji-Misrabati (3)	Gazole RH (7)	40 km
Old Malda	Jhajra	Narayanpur (3)	Moulpur BPHC (5)	6.5 km
	Jhimuli	Mangalbari (.5)	Moulpur BPHC (5)	6.5 km
	Nariali	Narayanpur(4)	Moulpur BPHC (6)	7.5 km
	Arotpur	Narayanpur (.8)	Moulpur BPHC (7.5)	9 km
	Narayanpur Schoolpara	Narayanpur (1)	Moulpur BPHC (7.5)	9 km
	Narayanpur	Narayanpur (1)	Moulpur BPHC (7.5)	9 km
	Maligram	Narayanpur (1.5)	Moulpur BPHC (8)	9.5 km
	Katabari	Narayanpur (2)	Moulpur BPHC (7)	8.5 km
	Tolabhangi	Sayedpur (2)	Moulpur BPHC (21)	24 km
	Sukandighi	Jharpukuria (2)	Moulpur BPHC (8)	10 km
	Morgram	Madhaipur (.9)	Moulpur BPHC (6.5)	6.5 km

Source: BMOH of Old Malda, Gazole, Habibpur and Bamongola.

The table given below shows the familywise distance of the sub-centres in the studied blocks:

VI.21 Table showing the distance of the sub-centres (Block wise) from the studied families

Distance (in km)	Number of families in the blocks									
	Old Malda		Bamangola		Gazole		Habibpur		Total	
	No	%	No	%	No	%	No	%	No	%
Within 1	75	39.5	117	59.7	19	9.4	51	25.6	262	33.3
1--3	96	50.5	64	32.7	183	90.6	107	53.8	450	57.2
Above 3	19	10.0	15	7.7	0	0.0	41	20.6	75	9.5
Total	**190**	100.0	**196**	100.0	**202**	100.0	**199**	100.0	**787**	100.0

The above table shows that among all the studied families in the four blocks only 33.3% families had sub-centres within 1 km, 57.2% families had sub-centres between 1-3 kms while 9.5% families got access to sub-centres above the distance of 3 kms.

In Old Malda 39.5% families had access to sub-centres within 1 km, 50.5% families had sub-centres within 1-3 kms and 10 % families had access to sub-centres above 3 kms.

In Bamongola 59.7% families had access to sub-centres within 1 km, 32.7% families had sub-centres within 1-3 kms and there were 7.7% families which had to access sub-centres above 3 kms distance.

In Gazole there were 9.4% families which had sub-centres within 1 km distance, 90.6% families had sub-centres within 1-3 kms while 0% families had to access sub-centres above the distance of 3 kms.

In Habibpur 25.6% families had sub-centres within 1 km distance, 53.8% families had to access sub-centre facilities between 1-3 kms and 20.6% families got access to sub-centres above 3 kms distance.

The number of families which could access sub-centres within 1 km distance was maximum in Bamongola followed by Old Malda, Habibpur and Gazole. The number of families which can accessed sub-centres between 1-3 kms distance was maximum in Gazole followed by Habibpur, Old Malda and Bamongola. The number of families which got access to sub-centres above 3 kms distance was maximum in Habibpur followed by Old Malda and Bamongola while in Gazole the number of families having access to sub-centres beyond 3 kms distance was nil.

The table below shows the community wise variation while accessing the sub-centres in the studied areas:

VI.22 Table showing the distance of the sub-centres (Community wise) from the studied families

Distance (in km)	**Number of families**											
	Santal		**Malpahari**		**Kora**		**Munda**		**Oraon**		**Total**	
	No	%	No	%	No	%	No	%	No	%	No	%
Within 1	223	37.8	0	0.0	18	51.4	21	42.0	0	0.0	262	33.3
1--3	328	55.6	48	100.0	17	48.6	8	16.0	49	76.6	450	57.2
Above 3	39	6.6	0	0.0	0	0.0	21	42.0	15	23.4	75	9.5
Total	**590**	100.0	**48**	100.0	**35**	100.0	**50**	100.0	**64**	100.0	**787**	100.0

It is still a matter of concern as is evidenced from the above table that a total of 9.5% families among the studied communities have to access sub-centres above 3 km distance and 57.2% have access to sub-centres within 1-3 kms while 33.3% have access within 1 km.

As far as the communitywise variation in accessing health facilities is concerned, 37.8% Santals access sub-centres within 1 km distance, 55.6% have to access sub-centres between 1-3 kms and 6.6% have sub-centres above 3 km distance.

Among the Malpaharis 0% have sub-centres within 1 km distance and above 3 km distance and 100% Malpahari families have sub-centres between 1-3 kms distance.

Among the Koras 51.4% can access sub-centres within 1 km distance while 48.6% families have to access sub-centres between 1-3 km distance and no families have to access sub-centres above 3 km distance.

Among the Mundas 42% can access sub-centres within 1 km distance and 16% families have to sub-centre facilities between 1-3 kms and 42% families get access to sub-centres above 3 km distance.

Among the Oraons the number of families who had sub-centre access within 1 km distance was nil while 76.6% families had access to sub-centres between 1-3 kms and 23.4% families had sub-centres facilities above 3 kms.

Thus it is seen there that among the studied communities only the Koras had the maximum access to sub-centres within 1 km distance followed by the Mundas and the Santals. No Malpahari and Munda families got access to sub-centres within 1 km distance. Most of the Malpahari families got access to sub-centres between 1-3 km distance followed by the Oraons, Santals, Koras and Mundas. The maximum number of families that had access to sub-centre facilities above 3 km distance belonged mostly to the Munda community which was followed by the Oraons and Santals. No Malpahari and Kora families had to access sub-centres above 3 km distance and they remained better privileged on this than the other communities.

The table given below shows the distance of the primary health centres in the studied blocks:

VI.23 Table showing the distance of the primary health centres in the studied blocks

Distance (in km)	**Number of families in the blocks**									
	Old Malda		**Bamongola**		**Gazole**		**Habibpur**		**Total**	
	No	%	No	%	No	%	No	%	No	%
Within 3	0	0.0	84	42.9	93	46.0	28	14.1	205	26.0
3--5	41	21.6	57	29.1	14	6.9	47	23.6	159	20.2
Above 5	149	78.4	55	28.1	95	47.0	124	62.3	423	53.7
Total	**190**	100.0	**196**	100.0	**202**	100.0	**199**	100.0	**787**	100.0

The primary health centres are the first referral units in the rural areas. So their accessibility is an important dimension in the present discussion. In the studied blocks 53.7% primary health centres were situated above the distance of 5 kms while 26% primary health centres were located within the distance of 3 kms and 20.2% primary health centres were located between 3-5 kms distance.

In Old Malda 78.4% families had access to primary health centres above 5 km distance, 21.6% families had to access primary health centres within 3-5 kms while there were no families that had access within 3 km distance.

In Bamongola 42.9% families could access primary health centre facilities within 3 km distance, 29.1% could access it between 3-5 km and 28.1% could access it above 5 km distance.

In Gazole 47% families could get access to primary health centre facilities above 5 km distance, 46% within 3 km distance and only 6.9% within 3-5 km distance.

In Habibpur 62.3% families could get access to PHCs above 5 km distance while 23.6% had access between 3-5 kms and only 14.1% had PHCs within 3 km distance.

The above table shows that within 3 km distance the maximum number of families who accessed primary health centres is in Gazole followed by Bamongola, Habibpur and Old Malda. The maximum number of families accessing health centres between 3-5 kms was in Bamongola followed by Habibpur, Old Malda and Gazole. The maximum number of health centres above 5 km distance was in Old Malda, Habibpur, Gazole and Bamongola.

The table below shows the distance covered by the studied communities while accessing the first referral health units:

VI.24 Table showing the distance of the primary health centres among the studied communities

Distance (in km)	Number of families											
	Santal		**Malpahari**		**Kora**		**Munda**		**Oraon**		**Total**	
	No	%	No	%	No	%	No	%	No	%	No	%
Within 3	180	30.5	0	0.0	18	51.4	7	14.0	0	0.0	205	26.0
3--5	102	17.3	21	43.8	0	0.0	8	16.0	28	43.8	159	20.2
Above 5	308	52.2	27	56.3	17	48.6	35	70.0	36	56.3	423	53.7
Total	**590**	100.0	**48**	100.0	**35**	100.0	**50**	100.0	**64**	100.0	**787**	100.0

It is clear from the table above that among all the communities under study only 26% had access to primary health institutions within 3 km distance while 20.2% families had access to PHCs between 3-5 kms and large section i.e 53.7% families had PHCs above 5 km distance.

Among the Santals 52.2% families could get access to PHCs above 5 km distance, 30.5% families got access within 3 kms and only 17.3% families got access to PHCs between 3-5 kms.

Among the Malpaharis 56.3% families could get access to PHCs above 5 km distance and the rest 43.8% families accessed it between 3-5 kms while there were no families who could access it within 3 km distance.

Among the Koras 51.4% families could get access to PHCs within 3 km distance while rest of the 48.6% had to access above 5 km distance and there were no families who could access PHCs between 3-5 kms.

Among the Mundas 70% families had to access PHCs above 5 km distance, 16% families had to access it between 3-5 kms distance and 14% families got access within 3 km distance.

Among the Oraons 56.3% families had to access PHCs above 5 km distance and the rest 43.8% families had to access it between 3-5 kms while there were no families who could get access within 3 km distance.

Thus it is evident from the above table that within 3 km distance the maximum number of families who accessed primary health centres belonged to the Kora community followed by the Santals and the Mundas while there were no Malpahari and Oraon families having PHCs within 3 km distance. The number of families who had access to PHCs between 3-5 kms belonged mainly to Malpahari and Oraon community followed by the Santals and the Mundas. The Koras did not have to access PHCs within this distance range. The number of families that had to access PHCs above 5 km distance belonged mostly to the Munda community followed by the Malpaharis, Oraons, Santals and Koras.

VI.10 Response of the tribal families to major family welfare health programmes

Among the major health programmes that have been mainly carried out in the study area with government initiatives included immunization and family planning programmes. Although the government has taken some steps to popularize these two family welfare programmes yet its response has been mixed with variations in rural and urban divide as well as among different communities. This holds true for the tribals as well. The tribal families in the study area have not shown much interest to this form of western family welfare service or rather the implementation of the family welfare services have not achieved much success in the tribal areas under study.

The table below gives a picture of the immunization status of the studied population:

VI.25 Table showing the immunization turnover among the studied population

Vaccinated	No. of individuals	Percentage (%)
Yes	1100	30.8
No	2467	69.2
Total	**3567**	**100.0**

The table reveals that 69.2% individuals were not immunized and only 30.8% individuals were immunized.

The table given below shows the response of the tribals to the immunization programmes:

VI.26 Table showing the immunization status among the studied communities

Vaccinated	Number of individuals											
	Santal		**Malpahari**		**Kora**		**Munda**		**Oraon**		**Total**	
	No	%	No	%	No	%	No	%	No	%	No	%
Yes	807	30.5	79	36.1	49	31.4	84	35.0	81	26.7	1100	30.8
No	1842	69.5	140	63.9	107	68.6	156	65.0	222	73.3	2467	69.2
Total	**2649**	100.0	**219**	100.0	**156**	100.0	**240**	100.0	**303**	100.0	**3567**	100.0

Among the modern family welfare programmes, the immunization programme is very important. The above table shows the community wise immunization status among the studied population. There were a considerable number of non-immunized persons among all the communities.

The above table shows that the highest number of non-immunized individuals belonged to the Oraon community (73.3%) followed by Santals (69.5%), Koras (68.6%), Mundas (65%) and Malpaharis (63.9%) Among the Santals 69.5% were reported to be non-immunized while 30.5% were immunized. Among the Malpaharis only 36.1% had undergone immunization while 63.9% were non-immunized. Among the Koras 68.6% were reported to be non-immunized and the rest 31.4% were reported to be immunized. 65% of the Mundas were reported to be non-immunized and the rest 35% were immunized. 73.3% of the Oraons were not immunized and only 26.7% were reported to be immunized.

The table below shows the sex-wise status of the vaccinated individuals:

VI.27 Table showing the sex-wise vaccinated individuals among the studied population

Sex	No. of individuals	Percentage (%)
Male	559	50.8
Female	541	49.2
Total	1100	100.0

The table given above shows that out of a total of 1100 vaccinated individuals, only 50.8% were male and 49.2% were females.

The table below shows the sex-wise vaccinated persons among the studied communities:

VI.28 Table showing the sex-wise distribution of vaccinated population among the studied communities

Sex	Number of individuals											
	Santal		**Malpahari**		**Kora**		**Munda**		**Oraon**		**Total**	
	No	%	No	%	No	%	No	%	No	%	No	%
Male	396	49.1	40	50.6	31	63.3	40	47.6	52	64.2	559	50.8
Female	411	50.9	39	81.3	18	36.7	44	52.4	29	35.8	541	49.2
Total	**807**	100.0	**79**	164.6	**49**	100.0	**84**	100.0	**81**	100.0	**1100**	100.0

It is seen from the above table that among the studied communities only 50.8% males were vaccinated compared to 49.2% females. The percentage of vaccinated males is highest among the Oraons (64.2%) followed by the Koras (63.3%), Malpaharis (50.6%), Santals (49.1%) and Mundas (47.6%). Among the females the percentage of

vaccinated individuals are highest among the Malpaharis (81.3%) followed by Mundas (52.4%), Santals (50.9%), Koras (36.7%) and Oraons (35.8%).

The table given below shows the vaccinization status of the children upto 15 years of age:

VI.29 Table showing the vaccinization status of the children up to 15 years

Age Groups	Taken Vaccine	Number of individuals											
		Santal		Malpahari		Kora		Munda		Oraon		Total	
		No	%	No	%	No	%	No	%	No	%	No	%
upto 5	Yes	324	95.0	23	95.8	15	100.0	23	95.8	27	96.4	412	95.4
	No	17	5.0	1	4.2	0	0.0	1	4.2	1	3.6	20	4.6
	Total	**341**	**100**	**24**	**100**	**15**	**100**	**24**	**100**	**28**	**100**	**432**	**100**
6--10	Yes	320	92.2	27	87.1	21	100.0	31	88.6	31	79.5	430	90.9
	No	27	7.8	4	12.9	0	0.0	4	11.4	8	20.5	43	9.1
	Total	**347**	**100**	**31**	**100**	**21**	**100**	**35**	**100**	**39**	**100**	**473**	**100**
11--15	Yes	133	50.8	15	75.0	10	76.9	22	88.0	19	44.2	199	54.8
	No	129	49.2	5	25.0	3	23.1	3	12.0	24	55.8	164	45.2
	Total	**262**	**100**	**20**	**100**	**13**	**100**	**25**	**100**	**43**	**100**	**363**	**100**
Grand Total	Yes	777	81.8	65	86.7	46	93.9	76	90.5	77	70.0	1041	82.1
	No	173	18.2	10	13.3	3	6.1	8	9.5	33	30.0	227	17.9
	Total	**950**	100	**75**	100	**49**	100	**84**	100	**110**	100	**1268**	100

The above table shows that upto the age of 5, 95% children among the Santals, 95.8% children among the Malpaharis, 100% among the Koras, 95.8% among the Mundas and 96.4% among the Oraons have taken vaccines.

In the 6-10 age groups, 92.2% children among the Santals, 87.1% among the Malpaharis, 100% among the Koras, 88.6% among the Mundas and 79.5% among the Oraons have been vaccinated.

In the 11-15 age group 50.8% children among the Santals, 75% children among the Malpaharis, 76.9% children among the Koras, 88% children among the Mundas and 44.2% children among the Oraons have been vaccinated.

While considering all the children upto the age of 15 among the studied communities, we find from the above table that a total of 82.1% have been vaccinated while 17.9% are still not immunized.

The above table shows that upto the age of 5, 95.4% children among all the communities under study were vaccinated except 4.6% children. In this age group the maximum numbers of children who were vaccinated belonged to the Kora community followed by the Oraons, Mundas, Malpaharis and the Santals.

In the 6-10 age group 90.9% children among all the communities were vaccinated while 9.1% still were left out. Within these age groups, the children who were vaccinated mostly belonged to the Kora community followed by the Santals, Mundas, Malpaharis and the Oraons.

Within the age groups of 11-15, only 54.8% were vaccinated while 45.2% were not. The communities in order of the vaccination status included the Mundas, Koras, Malpaharis, Santals and Oraons.

The table below shows the youth population who has been vaccinated by their age:

VI.30 Table showing the age-wise vaccinated children and youth population

Age Groups	No. of individuals	Percentage (%)
Upto 5	412	37.5
6-10	430	39.1
11-15	199	18.1
16-20	51	4.6
20 above	8	0.7
Total	**1100**	**100.0**

The table shows that upto the 5 age group 37.5% were vaccinated while between 6-10 age groups 39.1% were vaccinated, 11-15 age group 18.1% were vaccinated, 16-20 age groups only 4.6% were vaccinated and above the age of 20 years just 0.7% were vaccinated.

The table below shows the communitywise vaccination status of the children and youth population:

VI.31 Table showing the age-wise distribution of vaccinated younger generation population among the studied communities

Age Groups	Number of individuals											
	Santal		**Malpahari**		**Kora**		**Munda**		**Oraon**		**Total**	
	No	%	No	%	No	%	No	%	No	%	No	%
upto 5	324	40.1	23	29.1	15	30.6	23	27.4	27	33.3	412	37.5
6--10	320	39.7	27	34.2	21	42.9	31	36.9	31	38.3	430	39.1
11--15	133	16.5	15	19.0	10	20.4	22	26.2	19	23.5	199	18.1
16--20	25	3.1	13	16.5	2	4.1	7	8.3	4	4.9	51	4.6
20 above	5	0.6	1	1.3	1	2.0	1	1.2	0	0.0	8	0.7
Total	**807**	100	**79**	100	**49**	100	**84**	100	**81**	100	**1100**	100

The above table shows that among the Santals upto the age of 5, 40.1% children were vaccinated followed by the 6-10 age groups in which 39.7% children were vaccinated, 11-15 age groups had 16.5% vaccinated children, in the 16-20 age groups 3.1% children were vaccinated and above the age of 20 years only 0.6% were vaccinated.

Among the Malpaharis upto the age of 5, 29.1% children were vaccinated, in the 6-10 age groups, 34.2% children were vaccinated, in the 11-15 age group 19% children were vaccinated, in the 16-20 age group 16.5% children were vaccinated and above the age of 20 only 1.3% children were vaccinated.

Among the Koras upto the age of 5, 30.6% children were vaccinated, in the 6-10 age groups 42.9% children, in the 11-15 age groups 20.4% children, in the 16-20 age groups 4.1% and above 20 years of age only 2% were vaccinated.

Among the Mundas upto the age of 5, 27.4% children were vaccinated, in the 6-10 age groups only 36.9% children were vaccinated, in the 11-15 age groups 26.2% children

were vaccinated, in the 16-20 age groups only 8.3% and above the age of 20 years 1.2% were vaccinated.

Among the Oraon community upto the age of 5, 33.3% children were vaccinated, in the 6-10 age groups 38.3% children were vaccinated, in the 11-15 age groups 23.5% children, 16-20 age groups 4.9% children and above 20 years age 0% were vaccinated.

Upto the age of 5, the maximum number of children who were vaccinated belonged to the Santals followed by the Oraons, Koras, Malpaharis and Mundas. The children in the age groups of 6-10 who were vaccinated belonged mostly to the Koras followed by the Santals, Oraons, Mundas and Malpaharis. The number of children who were being vaccinated in the 11-15 age groups were maximum among the Mundas followed by the Oraons, Koras, Malpaharis and Santals. The rate of vaccinated children dramatically dropped among all the communities beyond the age of 15. In the 16-20 age groups the number of vaccinated children were maximum among the Malpaharis followed by the Mundas, Oraons, Koras and Santals. The number of youths above 20 years age who were not been vaccinated belong mostly to the Oraon community followed by the Santals, Mundas, Malpaharis and Koras.

The table below shows the family planning practices among the studied families:

VI.32 Table showing the status of family planning practices among the studied families

Using Family Planning Measures	No. of families	Percentage (%)
Yes	248	31.5
No	539	68.5
Total	**787**	**100.0**

The above table shows that out of a total of 787 families under study only 31.5% had adopted family planning measures while 68.5% had not yet adopted family planning measures.

The table given below shows the communitywise status of family planning measures:

VI.33 Table showing the practice of family planning among the studied communities

Using Family Planning Measures	Number of families											
	Santal		**Malpahari**		**Kora**		**Munda**		**Oraon**		**Total**	
	No	%	No	%	No	%	No	%	No	%	No	%
Yes	170	28.8	13	27.1	18	51.4	17	34.0	30	46.9	248	31.5
No	420	71.2	35	72.9	17	48.6	33	66.0	34	53.1	539	68.5
Total	**590**	100.0	**48**	100.0	**35**	100.0	**50**	100.0	**64**	100.0	**787**	100.0

(Only 7 families practiced male contraceptive procedure along with female. Amongst them 4 from Kora, 2 from Santal & 1 from Oraon family. Rest of the families are using female contraceptive procedure.)

From the above table it is evident that family planning practices were not much popular among the tribal communities. Out of the studied of the studied families only 31.5% families replied positive in matters of use of family planning measures while 68.5% replied in the negative. The practice of family planning were most common among the Koras (51.4%) followed by Oraons (46.9%), Mundas (34%), Santals (28.8%) and Malpaharis (27.1%).

Tribal health practices are still a mystery to the outsiders as most of the tribal families still have faith in traditional medicines and health practices. But with the advent of western medicines, the younger generation seems to have grown dependence on the western healthcare system. Although modern family welfare programmes are being introduced among the tribals for quite some years now but it is yet to get strong acceptance and the desired outcome among them. To fight maternal and mortality, the tribals have to be aware because there is a risk of life and death at the time of delivery in a non-institutional way. Communication problems still remain in the remote villages which always hamper the timely accessibility modern healthcare. Irregular attendance of medical staffs at village level health services is an impediment to the availability of healthcare which is badly needed by this poor tribal population.