

CHAPTER-VI

HEALTH CONDITION OF THE TRIBAL POPULATION

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'Health is wealth' is a widely used proverb. Because living a healthy life is most essential for a happy life. To be active both mentally and physically, it is essential to be healthy. The working ability of a person depends on his health conditions and thus, it affects his overall wellbeing. Hence, it can be stated that the socio-economic condition of a person is reflected in his and his family's health condition.

In Dakshin Dinajpur, about 16.43% inhabitants belong to the Scheduled Tribe community. Here, the tribal people do not isolate themselves from the other communities. Infact, they are living in the close contact with the mainstream population. However, their cultural isolation inhibits them to some extent to get influenced by the non-tribal lifestyle.

The tribal people, who live in the remote areas far away from the mainstream where the health care delivery system is not improved, suffer from different health problems. But, in those areas where the health care delivery system is improved, there is a probability of improvement of health condition of its population owing to the better accessibility of health care facilities and it is true for the tribal people also if they are not restricted by their cultural differentiation as well as unawareness. So, before discussing the health condition of tribal people, it is better to have an idea of the available health care facilities of Dakshin Dinajpur.

6.1 Health Resources in Dakshin Dinajpur

After independence, the Government has given priority to the development of health care delivery system. It aims to increase the coverage of the existing health care system. Therefore, a chain of health institutes comprising of District Hospital, Rural Hospital (RH), Block Primary Health Centre (BPHC), Primary Health Centre (PHC), Sub-centre are established. The table 6.1 represents the existing medical institutions and sanctioned beds in the district of Dakshin Dinajpur. The available beds in different health centres are surely inadequate compared to the total population of district yet the chain of health institutions has improved the accessibility to primary health care facilities especially in rural areas.

Table 6.1 Existing Medical Institutions and Sanctioned Beds in Dakshin Dinajpur, 2011-12

Medical Institution	Number	Available Beds
District Hospital	1	400
Sub-Divisional Hospital	1	300
Hospital under Other Department	1	50
Hospital under Local Body	1	32
Hospital under NGO	9	110
Rural Hospital	7	210
Block Primary Health Centre	1	10
Primary Health Centre	18	180
Sub-Centre	248	Not Applicable

Source: State Bureau of Health Intelligence, Govt. of West Bengal, March-2011-12¹

6.2 Occurrences of Different Diseases among the Sample Population

The tribal people of Dakshin Dinajpur suffer from different diseases. The diseases are categorized into five groups considering their severity. The category-I includes the diseases like fever, cough & cold, headache, etc.; category-II includes back pain, body pain, general weakness, skin diseases, etc.; category-III includes dysentery, diarrhea, anemia, menstruation problems etc.; category-IV includes respiratory diseases, gall stone, arthritis, jaundice, ulcer, etc. and category-V includes different chronic ailments e.g. blood pressure, diabetes, thyroid, uric acid, eye problems, heart diseases, leprosy, TB, cancer, etc. To study the sufferings of the tribal people from different illness, the last two years prior to the survey is considered. It is evident from table 6.2 that majority (31.22%) of respondents is suffering from different types of ache which may be due to their rigorous labour. About 18.42% respondents suffer from dysentery, diarrhea, etc. It is observed that these are mostly water borne diseases. The main reason of occurrences of such diseases is their poor access to purified drinking water. The study reveals that about 93.84% respondents do not purify the drinking water. Their food habits also increase the occurrences of different illness as their daily diet mainly contains carbohydrate and lacks other nutrients. They live in a very unhealthy environment, congested in a single room, sometimes with the cattle. Besides, their addiction to alcohol, smoking also causes several fatal diseases. About 20.78% respondents suffer from different chronic ailments like blood pressure, diabetes, thyroid, eye problems, heart diseases, leprosy, TB etc. The study reveals that only 6.03% respondents do not suffer from any kind of illness in the last two years. The rest of the

sample population has reported the occurrence of diseases at least one time. Hence, it can be stated that the occurrences of illness is more among the tribal people of this district.

The application of Chi-Square reveals that occurrences of illness are dependent on the type of tribes and there is significant difference among the seven tribal groups regarding their sufferings from different illness (**Pearson Chi-Square= 120.343, Degree of Freedom=30, p= .000 i.e. <0.05**).

Table 6.2 Occurrences of Different Diseases among the Sample Population

Tribal Groups	Category-I	Category-II	Category-III	Category-IV	Category-V	Healthy	Total
Santal	9.34	33.02	17.90	13.56	19.68	6.50	1799
Oraon	5.94	29.16	19.31	16.73	22.28	6.57	1279
Munda	9.61	31.69	15.84	15.32	21.82	5.71	385
Bedia	6.65	36.82	23.04	12.59	17.10	3.80	421
Mahali	11.19	28.36	9.70	23.88	23.88	2.99	134
Mal Pahariya	2.86	24.29	11.43	30.48	22.86	8.10	210
Lohara	8.26	25.23	25.23	15.14	22.48	3.67	218
Total	7.83	31.22	18.42	15.72	20.78	6.03	4446

Pearson Chi-Square= 120.343, Degree of Freedom=30, p= .000 i.e. <0.05. Hence, it is statistically significant .

Source: Field Survey, 2017-2018

6.3 Type of Medicare System and Preference for Source of Treatment

The tribal people generally believe in their traditional medicare system as well as magic and sorcery. Presently, their approach towards traditional medicare system is changed. They are now accepting the modern treatment too. They first go to their traditional healer (*kabiraj*) and also try the magical practices (*jharphuk*) and when it fails, they go for modern medicare system. It is observed from table 6.3 that their preference for treatment varies from allopath, homeopathy to *kabiraji* and even *jharphuk*. About 61.14% tribal people prefer allopath treatment. However, those who are accepting allopath treatment do not consult with doctors all the time. Table 6.4 shows that 13.84% respondents consult only with registered practitioners during illness. However, 72.23% out of total respondents consult mainly quacks and only in serious situation they seek help from doctors. Homeopathy is also preferred by 9.95% respondents just because it is cheap and available in the local area. It is observed that 13.93% respondents still accept the traditional treatment but there is 14.98% respondents also, who accept traditional treatment but as a combination with any of the modern medicare treatment.

Table 6.3 Preference for Types of Treatment

Tribal Groups	Percentage Distribution				Total
	Allopathy	Homeopathy	Traditional Medicine	All The Type	
Santal	53.57	6.19	21.67	18.57	420
Oraon	62.58	12.91	9.93	14.57	302
Munda	66.67	13.33	5.56	14.44	90
Bedia	66.67	10.78	10.78	11.76	102
Mahali	78.05	9.76	7.32	4.88	41
Mal Pahariya	79.17	10.42	4.17	6.25	48
Lohara	63.46	15.38	9.62	11.54	52
Total	61.14	9.95	13.93	14.98	1055

Pearson Chi-Square statistic= 62.847, Degree of Freedom= 18, p= .000 i.e. <0.05. Hence, it is statistically significant.

Source: Field Survey, 2017-2018

The figure 6.1 shows that among the seven tribal groups traditional medicine is mainly preferred by the Santals while allopathy is mostly preferred by the Mal Pahariyas. But, the Mahalis are the highest (Figure 6.2) to consult doctors while the Bedias are the lowest. To find out the inter-tribal disparity in the preference of types of treatment as well as the source of treatment, the Pearson Chi-Square statistic is applied. The result shows that there is significant difference among the seven selected tribal communities regarding their preference for types of treatment (**Pearson Chi-Square statistic= 62.847, Degree of Freedom= 18, p= .000 i.e. <0.05**) as well as the source of treatment (**Pearson Chi-Square statistic= 49.302, Degree of Freedom= 12, p= .000 i.e. <0.05**).

Table 6.4 Preference for Source of Treatment

Tribal Groups	Percentage Distribution			Total
	Doctor	Quacks	Traditional Healers and Magicman	
Santal	13.81	64.52	21.67	420
Oraon	14.24	75.83	9.94	302
Munda	18.89	75.56	5.56	90
Bedia	6.86	82.35	10.78	102
Mahali	21.95	70.73	7.32	41
Mal Pahariya	6.25	89.58	4.17	48
Lohara	17.31	73.08	9.62	52
Total	13.84	72.23	13.93	1055

Pearson Chi-Square statistic= 49.302, Degree of Freedom= 12, p= .000 i.e. <0.05. Hence, it is statistically significant.

Source: Field Survey, 2017-2018

So, it is evident from the discussion that the tribal people are availing modern treatment besides the traditional treatment and even sometimes giving up the traditional one. During field survey, it is noticed that wherever the health centre is located nearer the village, people first visit the health centre for treatment. But, where it is not within easy accessibility or irregular in providing service, people go to the quacks. Generally, these health centers are Sub-Centres where no doctors are assigned on duty. Here, the health care givers are the ANMs who provide the first aid to the local people, especially, the maternal and child health care, family planning, immunization of communicable diseases, health and nutrition related awareness etc. The study finds that the respondents largely depend on these Sub-Centres and in spite of being referred by the ANMs to the hospital in serious cases, they do not go to the hospital, rather continue their treatment by quacks. Obviously, in such cases the diseases are not detected properly as well as the treatment is not received which increases their sufferings several times.

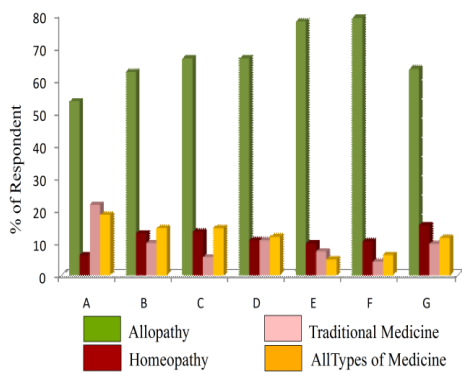


Figure 6.1 Preference for Types of Treatment

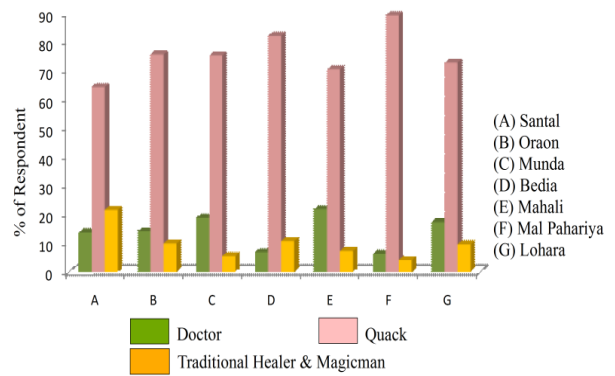


Figure 6.2 Preference for Source of Treatment

6.4 Preference for Government Health Care Facilities

Those who ever consult doctors (both those who solely depend on doctors or those mainly depend quack but in serious situation consult with doctors) during illness may accept the Government health care system or may consult the doctors in private. The Government health care system most of the time provides the service at free of cost while the cost of private health services is huge. Yet people spend huge amount of money to avail the private service as they have experienced that most of the time the quality of the Government health care services is very poor. Hence, people belonging to either poor or well off families always want to avail the private health care services. The similar trend is noticed in the study area. The tribal people who are now conscious about the importance of consulting qualified practitioner, try to avail the private health services for better treatment. In the

study area, it is observed that those respondents who consult with doctors (Table 6.5), 39.43% of them go to Government health institutions, about 7.68% respondents consult with private practitioner while 38.96% respondents avail both the Government as well as private treatment facilities.

In order to know whether there is significant difference among the selected tribal communities regarding their decision of selecting government health care system or consult the private practitioners, the Chi-Square is applied. The result of Chi-Square shows that there is significant difference among the tribal groups regarding their preference for Government health care facilities or private practitioner (**Pearson Chi-Square= 67.709, Degree of Freedom=18, p= .000 i.e. <0.05**).

Table 6.5 Preference for Government Health Care Facilities

Tribal Groups	Percentage Distribution				Total
	Govt. Health Facilities	Private Health Facilities	Both	Not Applicable	
Santal	30.00	5.71	42.62	21.67	420
Oraon	47.02	8.94	34.11	9.93	302
Munda	51.11	4.44	38.89	5.56	90
Bedia	36.27	14.71	38.24	10.78	102
Mahali	48.78	2.44	41.46	7.32	41
Mal Pahariya	45.83	8.33	41.67	4.17	48
Lohara	44.23	11.54	34.62	9.62	52
Total	39.43	7.68	38.96	13.93	1055

Pearson Chi-Square= 67.709, Degree of Freedom=18, p= .000 i.e. <0.05. Hence, it is statistically significant .

Source: Field Survey, 2017-2018

6.5 Maternal Health and Child Care

The discussion of health condition of a community or a group, necessarily includes the evaluation of its maternal health condition and child health care. A developed society always prioritizes the health of the expected mother and child population. Pregnancy is the most ‘**critical time in the course of woman’s life**’². It bears in itself certain risks which need to be handled in a delicate way, otherwise it may cause life risk to both the mother and her foetus. The healthiness of the foetus depends on the healthfulness of the mother. Hence, from the first trimester of the pregnancy, proper health care, medicines, nutritious food and utmost care should be provided to the pregnant lady. The care should not be given only for the period of pregnancy, the postnatal check-up is equally important. Similarly, the child at its different stages of development needs special care, nutrition and vaccination which have

immense effect on his or her good health and longevity of life. The National Rural Health Mission estimated that in case of 15% pregnancy, different complications arise while in case of rest, delivery takes place normally.³

In the tribal society, the maternal health care was totally neglected. Here, the pregnancy was detected on the basis of certain symptoms like vomiting, escape the periods, weakness etc. It is also observed among the Ao Naga tribe that they detect pregnancy on the basis of certain symptoms.⁴ There was no such concept of systematic antenatal check up or postnatal check up in tribal society. However, in every tribal society, a pregnant lady has to take some precautions yet those are not enough for the wellbeing of mother and new born. It is observed that the pregnant lady performs all her duties regularly. It is true that the pregnant women are recommended to be physically active in order to stay healthy⁵ but the tribal women have to take excessive work load which may be harmful during pregnancy. Hence, the maternal death rate was very high among the tribes.

At present, the health care infrastructure has been improved a lot. The accessibility to better health care facilities has increased even for the tribal people. Yet, is the level of their maternal health and child care improved?

In British India, the health care system was very poor both in terms of quality and coverage. After independence, priority was given to the expansion of the existing health services. The improvement of the maternal and child health was given much importance but it was accelerated after the announcement of the first national health policy in 1983, when definite target was set to reduce the Infant Mortality Rate to below 60 and Maternal Mortality Rate to below 2 by the year 2000. Besides, the development of the three-tier health care delivery system is also improved which makes it accessible to large number of people. Finally, the initiation of National Rural Health Mission (NRHM) in 2005 brings revolutionary changes to the health care delivery system yet a long way to go to achieve the target of 'health for all'.⁶ The present study of maternal health of the tribal women of the district of Dakshin Dinajpur is based on 800 ever married women of reproductive age group (15-49 years) who have at least one child.

6.5.1 Acceptance of Antenatal Check-Ups

WHO defines Antenatal care “ **as the care provided by skilled health-care professionals to pregnant women and adolescent girls in order to ensure the best health conditions for both mother and baby during pregnancy**”.⁷ NRHM expresses its objectives that

“antenatal check-up provides necessary care to the mother and helps identify any complications of pregnancy such as anaemia, pre-eclampsia and hypertension etc. in the mother and slow/inadequate growth of the foetus”.⁸ So, Antenatal check-up is the routine check up for a pregnant woman during the total period of pregnancy. It includes at least four time⁹ visits by the pregnant lady to her doctor. During pregnancy different complications may arise at any time. Through antenatal check up the early detection of diseases, if any, can be made and further unwanted complications can be avoided. Hence, for the pregnant lady, the antenatal care is very important.

Previously, there was no concept of antenatal check-up in tribal society. But with the development of health care delivery system and also for the growing awareness for maternal health, they have started to avail the modern health care facilities. The present study shows the acceptance of antenatal check-ups among the tribal people of Dakshin Dinajpur. Table 6.6 shows that out of the total respondents of reproductive ages who have at least one child, 51.63% respondents have visited for three or more times while 28.13% respondents have visited two time and 7.75% have visited one times. But, the rest of the respondents have not accepted any antenatal check-up.

The figure 6.3 shows the tribe-wise variation of the acceptance of antenatal check-up. To find out the inter-tribal disparity in the acceptance of antenatal check-up, the Pearson Chi-Square statistic is applied. The result of the Chi-Square shows significant difference among the women of seven tribal communities regarding their decision to accept antenatal check-up (**Pearson Chi-Square Statistic=34.010, Degree of Freedom=18, p= .013 i.e. <0.05**).

Table 6.6 Acceptance of Antenatal check-ups among Respondents

Tribal Groups	Percentage Distribution				Total
	1 Time	2 Time	3 & More Time	Never	
Santal	9.58	33.23	47.92	9.27	313
Oraon	4.60	24.27	57.74	13.39	239
Munda	12.12	21.21	50.00	16.67	66
Bedia	8.75	20.00	60.00	11.25	80
Mahali	6.90	37.93	44.83	10.34	29
Mal Pahariya	6.06	18.18	48.48	27.27	33
Lohara	5.00	40.00	37.50	17.50	40
Total	7.75	28.13	51.63	12.50	800

Pearson Chi-Square Statistic=34.010, Degree of Freedom=18, p= .013 i.e. <0.05. Hence, it is statistically significant.

Source: Field Survey, 2017-2018

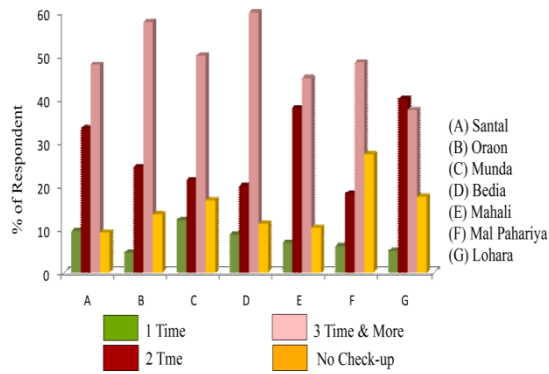


Figure 6.3 Acceptance of Antenatal check-ups

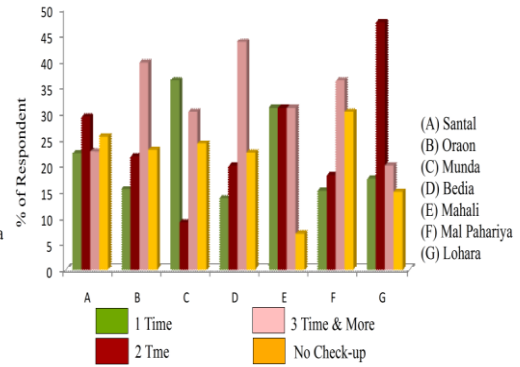


Figure 6.4 Acceptance of Postnatal check-ups

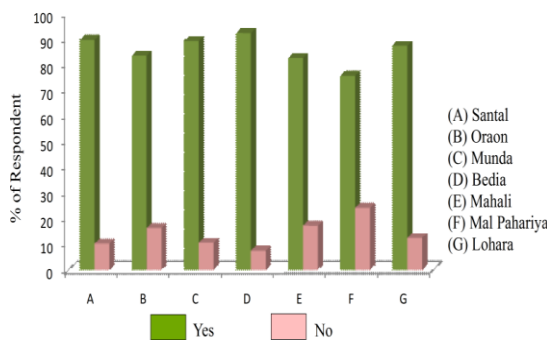


Figure 6.5 Intake of Iron and Folic Acid Supplements

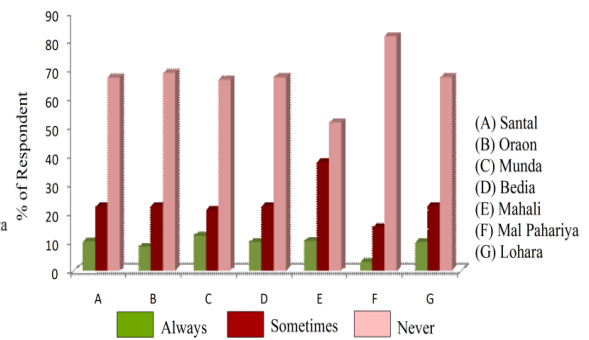


Figure 6.6 Accessability to Nutritious Diet

6.5.2 Acceptance of Postnatal Check-Ups

The postnatal care is equally important in deciding the maternal and child health. The postnatal period is considered as the most risky stage for a mother and neonate because of higher occurrences of maternal and infant death. Hence, postnatal check-ups are very important both for mother and neonate. WHO has prescribed for at least four postnatal check-ups— first, within 24 hours of birth, next on 3rd day, then between 7-14 days and last on 6 weeks after birth.¹⁰

The study reveals that the tribal people of this district are not very much concerned about the postnatal care. In fact, those who have accepted antenatal check-ups, not all of them accepted the postnatal check-ups. During this phase, they pay all attention to practice the rituals regarding birth. All the tribes considered the first few days after birth as unclean and during this time the newborn and mother are kept isolated and at the end of the period after performing different rituals, they are considered as sanctified.¹¹ The postnatal care includes the care of both newborn and mother. But, they accept medical check-up for mother only if any complication arises. Comparatively, the new born babies receive more care than the

mother, yet it does not include the systematic postnatal care. Rather the traditional home based methods are applied. However, the situation has started to change. Table 6.7 represents that about 31.25% respondents have received the three & more time postpartum medical check-ups where as 20.38% respondents have received one time and 25% received two time check-ups. There are about 23.38% respondents who have never got any postnatal care. The NFHS-4 report shows that 35.3% tribal women belonging to the age-group of 15-49 with a live birth in the five years preceding the survey have not received any postnatal check up.¹²

Among the seven tribal communities, the Bedias are the highest (Figure 6.4) to accept three and more time postnatal check-ups. To find out the inter-tribal disparity in the acceptance of postnatal check-ups, the Chi-Square is applied. The result shows significant difference among the selected tribal communities regarding their access to postnatal care (**Pearson Chi-Square =60.418, Degree of Freedom=18, p= .000 i.e. <0.05**).

Table 6.7 Acceptance of Postnatal check-ups among Respondents

Tribal Groups	Percentage Distribution				Total
	1 Time	2 Time	3 & More Time	Never	
Santal	22.36	29.39	22.68	25.56	313
Oraon	15.48	21.76	39.75	23.01	239
Munda	36.36	9.09	30.30	24.24	66
Bedia	13.75	20.00	43.75	22.50	80
Mahali	31.03	31.03	31.03	6.90	29
Mal Pahariya	15.15	18.18	36.36	30.30	33
Lohara	17.50	47.50	20.00	15.00	40
Total	20.38	25.00	31.25	23.38	800

Pearson Chi-Square =60.418, Degree of Freedom=18, p= .000 i.e. <0.05. Hence, it is statistically significant.

Source: Field Survey, 2017-2018

6.5.3 Intake of Iron and Folic Acid Supplements during Pregnancy

WHO recommends pregnant women to take the Iron and Folic Acid supplements daily to avoid different complications related to maternal stage.¹³ In India, the guidelines for Antenatal care also include this recommendation and set the norms to supply at least 100 tablets of IFA¹⁴ or it may be 360 tablets.

The data highlights that the tradition bound tribal people have started to shift from their traditional health care practices to modern system as 87.25% respondents of reproductive

ages have taken IFA supplementation during pregnancy. It is true that they all have not been able to follow the instruction properly yet they have started to realize the importance of taking the IFA supplementation. The NFHS-4 report reveals that 78.4% Scheduled Tribe women within the age-group of 15-49 with a live birth in the five years preceding the survey took IFA tablets during pregnancy.¹⁵ This study is based on women ages 15-49 years who have at least one child. Among them 87.25% respondents (Table 6.8) have taken the IFA supplementation during pregnancy.

It is evident from the figure 6.5 that majority of the seven tribal groups have intake IFA supplements during pregnancy. To find out whether the tribal communities differ significantly in the intake of IFA supplements during pregnancy, the Pearson Chi-Square statistic is done. On the basis of result of Chi-Square, it can be concluded that there is no significant difference among the women of the seven tribal groups regarding their intake of IFA tablets (**Pearson Chi-Square Statistic=11.232, Degree of Freedom= 6, p= .081 i.e. >0.05**).

Table 6.8 Intake of Iron and Folic Acid Supplements among Respondents

Tribal Groups	Percentage Distribution		Total
	Yes	No	
Santal	89.78	10.22	313
Oraon	83.68	16.32	239
Munda	89.39	10.61	66
Bedia	92.50	7.50	80
Mahali	82.76	17.24	29
Mal Pahariya	75.76	24.24	33
Lohara	87.50	12.50	40
Total	87.25	12.75	800

Pearson Chi-Square Statistic=11.232, Degree of Freedom= 6, p= .081 i.e. >0.05. Hence, it is statistically not significant.

Source: Field Survey, 2017-2018

6.5.4 Accessibility to Nutritious Diet during Pregnancy

For the healthy growth of baby and maintaining good health of the pregnant woman, they need nutritious diet rich in iron, calcium, protein, vitamin and other micronutrients and the entire diet must contain high fiber. The food suggested by the NRHM for the pregnant and lactating women are cereals, pulses, vegetables mainly green leafy vegetables, eggs, meat, fruits mainly rich in vitamin C, groundnuts, milk and milk products.¹⁶

Unfortunately, the tribal people are unable to have nutritious diet and the pregnant women are not much different. What they intake, includes large amount of cereals and roots and green leafy vegetables which are available in surrounding area. Besides, with the change of seasons, their diets change a lot. In rainy season, they eat fish as it is easily available at that time while in lean season, the fish consumption is irregular. The consumption of egg and meat is also not much frequent. Pulses, fruits and milk are almost absent from their daily diet.

It is observed (Table 6.9) that only 9.50% respondents can have intake nutritious diet regularly during the antenatal and postnatal period while 22.63% respondents have accessed for a few days. But, 67.88% respondents have never accessed the nutritious diet in gestational period which indicates that majority of tribal women cannot access nutritious diet during pregnancy though it is very much essential for a healthy baby and healthy mother.

Table 6.9 Accessibility to Nutritious Diet among Respondents during Pregnancy

Tribal Groups	Percentage Distribution			Total
	Always	Sometimes	Never	
Santal	10.22	22.36	67.41	313
Oraon	8.37	22.59	69.04	239
Munda	12.12	21.21	66.67	66
Bedia	10.00	22.50	67.50	80
Mahali	10.34	37.93	51.72	29
Mal Pahariya	3.03	15.15	81.82	33
Lohara	10.00	22.50	67.50	40
Total	9.50	22.63	67.88	800

Pearson Chi-Square =8.499, Degree of Freedom=12, p= .745 i.e. >0.05. Hence, it is statistically not significant.

Source: Field Survey, 2017-2018

Figure 6.6 shows that among the selected tribal groups, the Mal Pahariyas are the lowest in terms of accessibility to nutritious diet during pregnancy. To find out the inter-tribal disparity in the accessibility to nutritious diet for the pregnant women, the Chi-Square is done. The result of Chi-Square shows that there is no significant difference among the seven tribal communities in their accessibility to nutritious diet during pregnancy (**Pearson Chi-Square =8.499, Degree of Freedom=12, p= .745 i.e. >0.05**).

6.5.5 Place of Child Delivery

The place of child delivery is an important determiner of the maternal health condition. The institutional delivery is always encouraged because it provides a safe set-up i.e. professionally qualified birth attendant, developed medical equipments and improved hygienic condition for delivery and thus, reduces the risk of maternal mortality.

However, even after the extension of the health care system, the practice of child delivery at home still persists. In traditional tribal society, the preference for home delivery is much higher as their awareness about the importance of institutional delivery is lacking. Besides, very often, these people reside in obscure interiors, from where it is difficult to access the health facilities. Moreover, they have some community restrictions which do not allow them to avail the modern health facilities. Moreover, their preference of home atmosphere for child birth also works as a demotivating factor.

In the study area, it is observed (Table 6.10) that out of the total women of childbearing age, 39.13% women have given birth at home where as 42.13% respondents have accepted the institutional delivery. Besides, there are 18.75% respondents also, in case of them, one or two births has taken place at home while the rest in hospital. So, on an average, more than 50% tribal women of reproductive age have given at least one birth in hospital. It is really encouraging that the people from marginal communities are accepting the institutional deliveries leaving behind their age old practices of home delivery. It is really a remarkable step towards development. The NFHS-4 report shows that 68% Scheduled Tribe women ages 15-49 with a live birth in the five years preceding the survey have given birth availing proper facility.¹⁷

Table 6.10 Place of Child Delivery among Respondents

Tribal Groups	Percentage Distribution			Total
	Hospital	Home	Some at Home, Some at Hospital	
Santal	40.26	38.66	21.09	313
Oraon	39.33	43.51	17.15	239
Munda	46.97	28.79	24.24	66
Bedia	46.25	38.75	15.00	80
Mahali	72.41	24.14	3.45	29
Mal Pahariya	36.36	39.39	24.24	33
Lohara	40.00	45.00	15.00	40
Total	42.13	39.13	18.75	800

Pearson Chi-Square =20.380, Degree of Freedom=12, p= .060 i.e. >0.05. Hence, it is statistically not significant.

Source: Field Survey, 2017-2018

The study reveals (Figure 6.7) that among the seven tribal groups, the Mahalis are the highest to give birth to their child at hospital while majority of the Mal Pahariyas have given birth at home. To find out the inter-tribal disparity in the place of childbirth, the Pearson Chi-Square is done. The result shows that there is no significant difference among the seven tribal communities in terms of the place of child delivery (**Pearson Chi-Square =20.380, Degree of Freedom=12, p= .060 i.e. >0.05**).

6.5.6 Attendants for Child Delivery

Among the respondents of childbearing age, 39.13% have accepted delivery at home for all of their children while 18.75% have given birth to few of their children at home and others at hospital. Generally, in case of home delivery, the family members or Dai (traditional birth attendant) have served the purpose of birth attendant. Table 6.11 shows that among the respondents, most of the home deliveries are done by the Dai who are not professionally trained but experienced to some extent. It is observed that when the labour pain starts, the Dai is called by the family members to help the pregnant woman to give birth safely. The study reveals that 84.67% home deliveries are done by Dai or traditional birth attendants while 15.33% are done by family members.

Among the seven tribal groups, it is observed that in case of the Mahalis, all the child deliveries at home are done by traditional birth attendant i.e. Dai. But, among other six tribes, some of the child deliveries are done by family member also and it is highest among the Oraons (26.90%).

Table 6.11 Birth Attendant during Child Delivery among Respondents

Tribal Groups	Percentage Distribution		Total
	Traditional Birth Attendant or Dai	Family Member	
Santal	89.30	10.70	187
Oraon	73.10	26.90	145
Munda	94.29	5.71	35
Bedia	86.05	13.95	43
Mahali	100.00	0.00	8
Mal Pahariya	95.24	4.76	21
Lohara	87.50	12.50	24
Total	84.67	15.33	463

Source: Field Survey, 2017-2018

6.5.7 Reasons of Not Accepting Institutional Delivery

The respondents have cited different reasons (Table 6.12) for not accepting institutional delivery. About 46.65% respondents prefer the home atmosphere for child delivery. Some of them believe that the child delivery should be done at home in the presence of ancestral spirits and also stated that previously institutional delivery was not popular. Due to long distance of the hospitals and transportation problem, 28.08% respondents could not access institutional delivery. It is a serious problem for those who are located in rural interiors especially if the labour pain begins at night. It becomes very difficult for them to hire a vehicle at that time. Sometimes, it has been observed that before the completion of arrangements, the mother has given child birth at home. Financial crisis is another barrier which restricts them (8.64%) to avail the institutional delivery. It is true that in Government hospital, the treatment is available at free of cost but the other cost like vehicle or transportation fare, expenditure for accompanying persons, medicines etc. are not affordable to them. In Kerala also, it is observed that such expenditure discourages the poor tribal people to utilize the health care facility.¹⁸ 14.25% respondents express their fear about hospital as they have a misconception that if they visit the hospital for delivery, they have to go through the process of surgery. There are very few respondents who did not accept the institutional delivery owing to their community restriction.

Table 6.12 Reasons of not Accepting Institutional Delivery by the Respondents

Reasons	Percentage Distribution							Total
	Santal	Oraon	Munda	Bedia	Mahali	Mal Pahariya	Lohara	
Transport Problem	25.13	26.90	40.00	41.86	12.50	19.05	29.17	28.08
Financial Crisis	10.70	7.59	11.43	2.33	0.00	0.00	16.67	8.64
Community Restriction	2.14	3.45	0.00	2.33	0.00	0.00	4.17	2.38
Afraid of operation	14.44	13.79	20.00	13.95	37.50	0.00	12.50	14.25
Prefer Home Atmosphere	47.59	48.28	28.57	39.53	50.00	80.95	37.50	46.65
Total	187	145	35	43	8	21	24	463

Source: Field Survey, 2017-2018

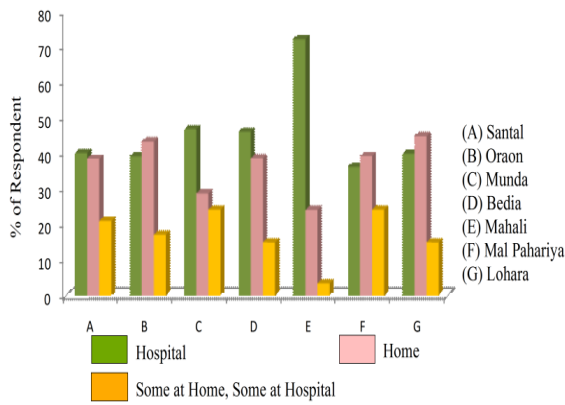


Figure 6.7 Place of Child Delivery

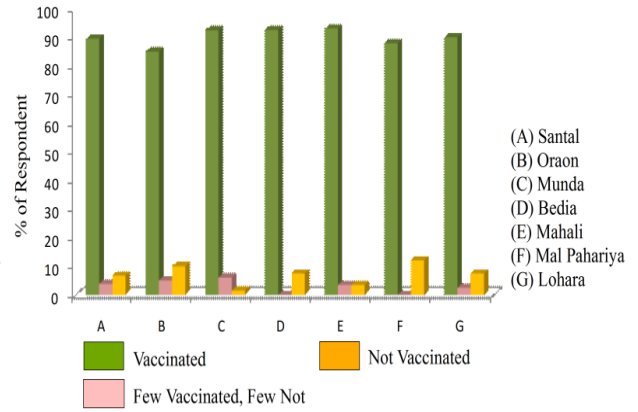


Figure 6.8 Vaccination of Children

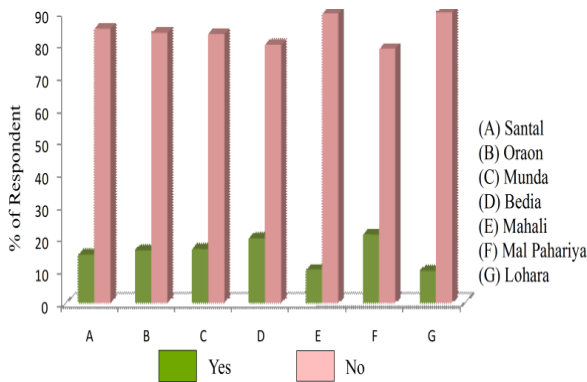


Figure 6.9 Incidents of Abortion

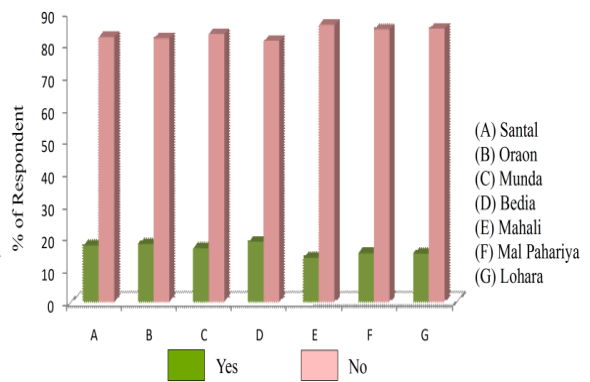


Figure 6.10 Incidents of Child Death

6.5.8 Incidents of Abortion

The pregnancy may end in non-live birth due to miscarriage or abortion. Miscarriage and abortion may occur due to the complications in pregnancy, but if these occurrences are found to be more in a group or community, it indicates the poor maternal health condition of that group or community. In the study area (Table 6.13), it is observed that out of the total respondents within the age-group of 15-49 who have at least one child, 15.88% respondents have experienced miscarriage or abortion.

The figure 6.9 compares the situation of the seven tribal groups and reveals that incidents of abortion are the highest among the Mal Pahariyas. To find out the inter-tribal disparity in the incidents of abortion, the Chi-Square is applied. The result of Chi-Square shows that there is no significant difference among the selected tribal groups regarding the incidents of abortion (**Pearson Chi-Square =3.660, Degree of Freedom=6, p= .723 i.e. >0.05**).

Table 6.13 Incidents of Abortion

Tribal Groups	Percentage Distribution		Total
	Yes	No	
Santal	15.02	84.98	313
Oraon	16.32	83.68	239
Munda	16.67	83.33	66
Bedia	20.00	80.00	80
Mahali	10.34	89.66	29
Mal Pahariya	21.21	78.79	33
Lohara	10.00	90.00	40
Total	15.88	84.13	800

Pearson Chi-Square =3.660, Degree of Freedom=6, p= .723 i.e. >0.05. Hence, it is statistically not significant.

Source: Field Survey, 2017-2018

6.5.9 Incidents of Child Death

Incidents of child death rightly express the maternal and child health situation of a community. The mortality among the child may be discussed by dividing it in different categories. The neonatal mortality (probability of dying within first month of life), postneonatal mortality (probability of dying between the first month of life and first birthday), infant mortality (probability of dying between birth and first birthday), child mortality (probability of dying between first and fifth birthday), under-five mortality (probability of dying between birth and fifth birthday).¹⁹

However, the present work has studied the incidents of child death separately. Here, the respondents of childbearing age who have at least one child are considered. The table 6.14 reveals that 17.38% respondents have gone through the trauma of the death of their children below 5 years age at least one time. It is observed that some of respondents have lost their child two or three or more than three times also.

It is evident from figure 6.10 that the situation of seven tribes is more or less similar as far as the incident of child death is concerned. To find out the inter-tribal disparity in the incident of child death, the Pearson Chi-Square statistic is done. The result shows that there is no significant difference among the selected tribal communities in the severity of child death (**Chi-Square statistic= .730, Degree of Freedom= 6, p= .994 i.e. >0.05**).

Table 6.14 Incidents of Child Death among Respondents

Tribal Groups	Percentage Distribution		Total
	Yes	No	
Santal	17.57	82.43	313
Oraon	17.99	82.01	239
Munda	16.67	83.33	66
Bedia	18.75	81.25	80
Mahali	13.79	86.21	29
Mal Pahariya	15.15	84.85	33
Lohara	15.00	85.00	40
Total	17.38	82.63	800

Chi-Square statistic= .730, Degree of Freedom= 6, p= .994 i.e. >0.05. Hence, it is statistically not significant.

Source: Field Survey, 2017-2018

6.5.10 Vaccination of Children

Vaccination is one of the vital part of child health care. After birth, to protect the child from different diseases, the child is given several vaccines at some specific ages. For example, the first dose of Hepatitis B vaccine is given within twenty four hours of birth; the second dose is given within 1-2 months after birth. There are so many other vaccines like BCG (Bacille Calmette Guerin), DTaP (Diphtheria, tetanus and acellular pertussis vaccine), OPV (Oral Poliovirus vaccine), Rotavirus vaccine, Measles, mumps and rubella vaccine etc. In the study area (Table 6.15), in case of 88.75% respondents, all the children are given those vaccines like BCG, OPV etc. which are distributed at free of cost by the government and in case of 7.50% respondents, the children are not immunized. Among the seven tribal communities, the Mundas are more conscious (Figure 6.8) about the immunization of their child. Here, the study mainly considers those vaccines which are provided by the Government at free of cost as the study finds that majority of the tribal people are not much conscious about other vaccines.

Table 6.15 Vaccination of Children

Tribal Groups	Percentage Distribution			Total
	Vaccinated	Few Vaccinated, Few Not	Not Vaccinated	
Santal	89.46	3.83	6.71	313
Oraon	84.94	5.02	10.04	239
Munda	92.42	6.06	1.52	66
Bedia	92.50	0.00	7.50	80
Mahali	93.10	3.45	3.45	29
Mal Pahariya	87.88	0.00	12.12	33
Lohara	90.00	2.50	7.50	40
Total	88.75	3.75	7.50	800

Source: Field Survey, 2017-2018

6.5.11 Reasons of Not Accepting Vaccination

There are different reasons (Table 6.16) of not accepting vaccination for their children by the respondents. It is observed that 3.51% respondents were unaware about the importance of immunization while 5.88% respondents stated that previously, the programme of vaccination through Government initiatives at free of cost was not available. Besides, 1.88% respondents did not give vaccines to their children because of the distant location of medical institutes.

Table 6.16 Reasons of not Accepting Child Immunization

Reasons	Percentage Distribution							Total
	Santal	Oraon	Munda	Bedia	Mahali	Mal Pahariya	Lohara	
Unaware	1.60	5.86	3.03	3.75	3.45	6.06	2.50	3.51
Distant Location of Health Centre	3.19	2.09	0.00	0.00	0.00	0.00	0.00	1.88
Not Available Before	5.75	7.11	4.55	3.75	3.45	6.06	7.50	5.88
Not Applicable	89.46	84.94	92.42	92.50	93.10	87.88	90.00	88.75
Total	313	239	66	80	29	33	40	800

Source: Field Survey, 2017-2018

6.5.12 Family Planning

Through family planning a couple can decide the desired number of children and the gap between their children have to be planned at the beginning of their journey. The couple has to adopt either temporary or permanent birth-control methods for family planning. The temporary methods are actually the spacing method which helps in deciding the birth of first child and the gap between two children. The permanent method like tubectomy or vasectomy is accepted to give a final size to the family. But, the acceptance of permanent contraceptive method results in the loss of fertility permanently which discourages some people to accept family planning. The temporary methods are the best substitute for them. The adoption of family planning is encouraged because it improves the maternal and child health through reducing the risk of maternal death by controlling the number of pregnancies as different complexities are associated with pregnancies which may be life threatening too.²⁰ However, the wider objective of promoting the family planning program in India is to control its population which presently takes the form of an explosion. The goal of the programme is to stabilize the population growth by promoting small family norms. A

country's growth and development is directly related to its population. Currently, the population of India seems to be a burden which hinders the country's progress. To popularize the family planning program, different means of contraception are made available at free of cost. Moreover, monetary incentives are also provided with the adoption of permanent methods.

The growth and development of a family is also related to the family size, especially for the poor families and it is true for the tribal families also. Generally, the poor families consider the larger families as a source of high income because of the presence of large number of earning members, higher number of ration cards and also higher subsidies. However, the reality differs and large family does not improve the living standard at all. But now the tribal people have started to be aware of the utilities of small family as well as the responsibilities of the parents. They want to provide a better living i.e. good food, health, education and of course more care and attention to their children which is only possible when the family size is small. Instead of considering their child as earning members, attention is paid to give them a better childhood. Actually, the small families are easy to manage. Hence, it is required to restrict the family size and adopt the several methods of family planning.

6.5.12.1 Preference for Number of Children

Before discussing about the adoption of family planning, it is better to know the preference of the respondents about the expected number of child. It provides an idea of those respondents who are more eager to adopt family planning methods.

Table 6.17 shows that 63.38% respondents prefer two children while 5.25% prefer single child which implies that in the study area a large number of respondents prefer small families. These are mainly the young couples who prefer small families. About 24.63% respondents prefer three or more children which shows their unawareness about the utility of small families. It should be better not to describe the tribal people always as aware or unaware. Sometimes, it is observed that their social norms resist them to adopt the family planning. Hence, it is observed that 6.75% respondents have expressed no such preference regarding the number of children they want to have. Among the seven tribal communities (Figure 6.11), the Santals are the highest to prefer three and more children though majority of the respondents of all the tribal groups prefer two children.

Table 6.17 Preference for Number of Children

Tribal Groups	Number of Children (in %)				Total
	1	2	3 & More	No Preference	
Santal	5.11	53.35	31.95	9.58	313
Oraon	3.77	71.55	17.57	7.11	239
Munda	0.00	74.24	19.70	6.06	66
Bedia	5.00	68.75	23.75	2.50	80
Mahali	10.34	72.41	17.24	0.00	29
Mal Pahariya	15.15	60.61	21.21	3.03	33
Lohara	12.50	60.00	27.50	0.00	40
Total	5.25	63.38	24.63	6.75	800

Source: Field Survey, 2017-2018

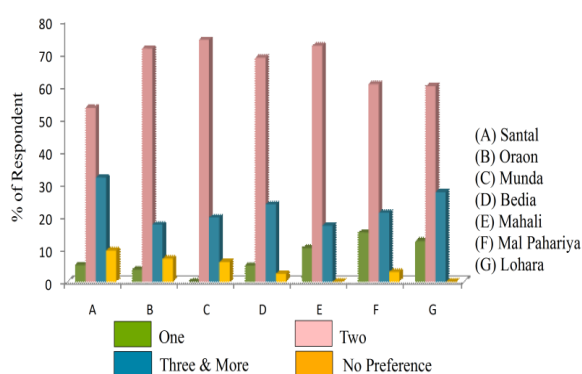


Figure 6.11 Preference for Number of Children

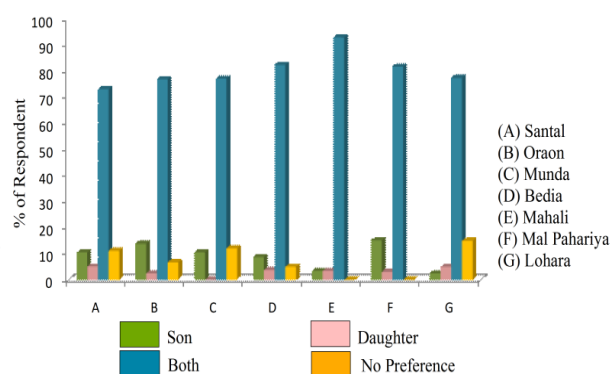


Figure 6.12 Preference for Son

6.5.12.2 Number of Children Ever Born

The study further focuses on the fertility situation of seven selected tribal communities which helps to find out the gap between their preference regarding the number of children and actual number of children, they have. The fertility situation among the tribal people of Dakshin Dinajpur is studied in terms of mean children ever born to ever married tribal woman. The table 6.18 shows that half of the respondents have two children and 23.25% respondents have one child while the rest of the respondents have three or more children. The mean children ever born by the respondents are 2.11 children per women. It is highest among the Santals and lowest among the Mahalis though there is very little variation among the seven selected tribal communities regarding mean children ever born. Comparing their preference with their actual number of children, it can be stated that less number of respondents have expressed their preference for small families. So, it can be concluded that some couples will give birth to children in future.

Table 6.18 Number of Children among Respondents

Tribal Groups	Number of Children (in %)				Mean Children Ever Born
	1	2	3	More	
Santal	20.45	45.05	26.84	7.67	2.23
Oraon	25.10	54.39	14.64	5.86	2.03
Munda	25.76	53.03	19.70	1.52	1.97
Bedia	21.25	58.75	16.25	3.75	2.04
Mahali	24.14	62.07	10.34	3.45	1.93
Mal Pahariya	30.30	39.39	30.30	0.00	2.00
Lohara	27.50	40.00	22.50	10.00	2.20
Total	23.25	50.00	20.88	5.88	2.11

Source: Field Survey, 2017-2018

6.5.12.3 Preference for Son

Sex preference has direct bearing on the maternal health as well as the decision of accepting family planning. It is also regarded as the cause of high fertility in developing countries.²¹ The society where the son preference is more, the incidents of pregnancy is also higher and consequently, the acceptance of family planning is less. But from the very beginning, the tribal society was free from such type of evil practices. Daughters were not burden rather the practice of bride price turned them to valuable assets. The present work attempts to study the preference of the respondents for son or daughter (Table 6.19). It is observed that the son preference is observed among 10.88% of the respondents and it is of course a recent addition to tribal society as they are influenced by people of other castes. Majority of the respondents desire to have both son and daughter. About 8.63% respondents have no such preferences regarding their children. They consider the child as the gift of god and do not discriminate between boy and girl child.

The inter-tribal comparison (Figure 6.12) regarding their preference for male child reveals that the Mal Pahariyas are more to prefer male child while it is less among the Loharas and Mahalis. It is observed that majority of the Mal Pahariyas declare them as Hindu. So, it can be stated that they might be influenced by the non-tribe and have started to prefer male child.

Table 6.19 Preference for Son

Tribal Groups	Percentage Distribution				Total
	Son	Daughter	Both	No Preference	
Santal	10.54	5.11	73.16	11.18	313
Oraon	13.81	2.51	76.99	6.69	239
Munda	10.61	0.00	77.27	12.12	66
Bedia	8.75	3.75	82.50	5.00	80
Mahali	3.45	3.45	93.10	0.00	29
Mal Pahariya	15.15	3.03	81.82	0.00	33
Lohara	2.50	5.00	77.50	15.00	40
Total	10.88	3.63	76.88	8.63	800

Source: Field Survey, 2017-2018

6.5.12.4 Adoption of Family Planning

In primitive society, there is no existence of practice of family planning yet they also tried to restrict the high fertility by following certain norms. Mamoria has mentioned that **“Fertility in primitive society is checked by celibacy, by restrictions of the age of marriage, by long periods during which mothers nurse their young and by various restrictions about sexual intercourse”**.²² At present, the perspective of the tribal people has changed a little and they intend to adopt family planning methods. In most cases, this adoption is the result of the persuasion by the health workers and to some extent imitation of the non-tribal people, of course, understanding the utilities of small families which is endorsed by accepting birth-control methods.

The present study reveals (Table 6.20) that 70.13% respondents have adopted the family planning methods and the adoption is highest among the Bedias and lowest among the Loharas. About 45% Loharas do not accept any method of family planning. The less use of contraceptive methods among the Santals of Medinipur is also noticed because of their religious restriction and better financial condition.²³ However, in this district, the adoption of family planning is comparatively higher among the Santals (Figure 6.13).

To find out whether there is significant difference among the selected tribal communities in their acceptance of family planning, the Pearson Chi-Square method is applied which shows that there is significant difference among the selected tribal groups in terms of adoption of family planning methods (**Pearson Chi-Square = 12.792, Degree of Freedom= 6, p= .046 i.e. <0.05**).

Table 6.20 Adoption of Family Planning

Tribal Groups	Percentage Distribution		Total
	Yes	No	
Santal	74.12	25.88	313
Oraon	64.85	35.15	239
Munda	69.70	30.30	66
Bedia	78.75	21.25	80
Mahali	68.97	31.03	29
Mal Pahariya	69.70	30.30	33
Lohara	55.00	45.00	40
Total	70.13	29.88	800

Pearson Chi-Square = 12.792, Degree of Freedom= 6, p= .046 i.e. <0.05. Hence, it is statistically significant.

Source: Field Survey, 2017-2018

6.5.12.5 Methods Chosen for Birth-Control

In this district, the acceptance of family planning is higher among the tribal people. The tribal people of this district are aware of the different methods (Table 6.21) of family planning, both permanent and temporary or spacing methods. Those who have adopted birth-control methods, 71.12% of them have adopted the tubectomy while vasectomy is accepted by the husbands of only 0.18% respondents who belong to the Oraon community. Among temporary methods, oral pill is most popular among the respondents as it is easy to use and it has very little side effects. Moreover, if anyone wants to conceive, has to stop taking pills only. The highest use of contraceptive pills is observed among the Loharas. About 6.06% respondents have used the Intrauterine Contraceptive Device (IUDC). The main advantage of this method is that the users get rid of daily use. IUDC provides long term protection and when they want to conceive, the device is to be removed which can be done even by the paramedical staffs. Though IUDC is the most widely used family planning method in the world yet it is not widely accepted by the respondents. There is some misconception among the respondents regarding IUDC. They get scared of the insertion of the device and also think that it may harm their fertility permanently. Currently, 6.43% couples are using condom also. The easy availability of contraceptive pills and condom through ASHA and from Sub-Centre has increased the use of these two methods among the tribal people of this district.

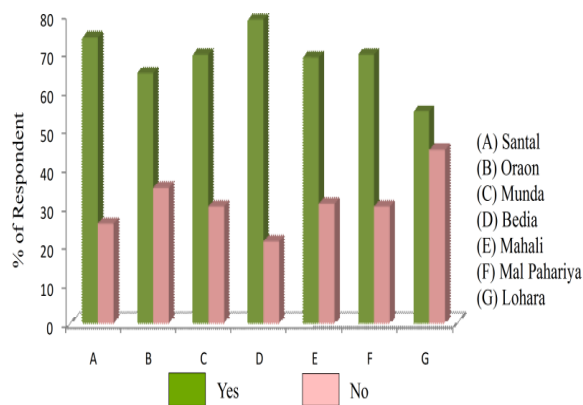


Figure 6.13 Adoption of Family Planning

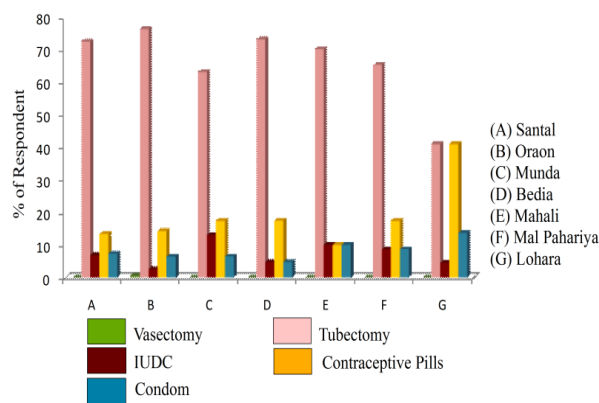


Figure 6.14 Methods Chosen for Birth-Control

The figure 6.14 also makes it clear that the birth control methods are mostly adopted by the female and it is true for all the seven tribal communities. Sometimes, it is observed that because of the low status of the female in their respective society, they are forced to accept sterilization, not the men.²⁴ However, in the study area, it is not the sole reason. Rather, the women are taking more responsibilities of the family and are more concerned about the future of their children. Hence, it is observed that about 25.13% respondents have taken the decision of family planning herself.

Table 6.21 Distribution of Respondents on the basis of Methods of Birth Control

Tribal Groups	Percentage Distribution					Total
	Vasectomy	Tubectomy	IUDC	Contraceptive Pills	Condom	
Santal	0.00	72.41	6.90	13.36	7.33	232
Oraon	0.65	76.13	2.58	14.19	6.45	155
Munda	0.00	63.04	13.04	17.39	6.52	46
Bedia	0.00	73.02	4.76	17.46	4.76	63
Mahali	0.00	70.00	10.00	10.00	10.00	20
Mal Pahariya	0.00	65.22	8.70	17.39	8.70	23
Lohara	0.00	40.91	4.55	40.91	13.64	22
Total	0.18	71.12	6.06	15.51	7.13	561

Source: Field Survey, 2017-2018

6.5.12.6 Reasons of Not Accepting Family Planning

There are various reasons (Table 6.22) of not accepting family planning methods. In the study area, about 30% respondents have not accepted any method of family planning. Out of them, 24.69% respondents have not accepted owing to the unawareness about the advantages of adopting family planning while the same percentage does not accept it

because they desire to have more offspring. It does not mean that they all want to conceive at present. They are actually unaware of the utility of spacing method. Hence, they do not accept even the temporary method of family planning. Very few (4.18%) have shown the reason of financial crisis. Today most of the methods of birth control can be accessed at free of cost. But, previously the situation was far different. Now, in most cases, the nearest health centre is located within 5 km. Hence, it can be stated that the real cause is not financial crisis rather the unawareness or negligence of the respondents which discourages them to adopt family planning. About 2.51% respondents have not adopted any method because of their community restrictions. Such type of community restrictions are observed among the Santals, Oraons, Mundas and Loharas while the rest are free from such restriction.

Table 6.22 Reasons of not Accepting Family Planning

Reasons	Percentage Distribution							Total
	Santal	Oraon	Munda	Bedia	Mahali	Mal Pahariya	Lohara	
Lack of awareness	19.75	30.95	40.00	5.88	33.33	0.00	27.78	24.69
Community restriction	0.00	3.57	5.00	0.00	0.00	0.00	11.11	2.51
Misconception about methods	20.99	29.76	15.00	35.29	11.11	10.00	33.33	24.69
Desire for offspring	43.21	21.43	35.00	35.29	22.22	40.00	11.11	30.96
Financial crisis	4.94	4.76	0.00	5.88	0.00	10.00	0.00	4.18
Death of spouse	11.11	9.52	5.00	17.65	33.33	40.00	16.67	12.97
Total	81	84	20	17	9	10	18	239

Source: Field Survey, 2017-2018

6.5.12.7 Person Responsible for Adopting Family Planning

The decision of accepting family planning should be taken by the couple together. However, the study reveals (Table 6.23) that in case of 43.85% respondents, the health workers motivate them to accept family planning while 9.45% respondents are motivated by the family members. In case of 12.83% families, it is the joint decision of the couple while 8.73% respondents have adopted because their husband instructed them. Surprisingly, there are 25.13% respondents who have accepted the family planning method at their own will. It also illuminates an important aspect of tribal society where the tribal women can alone take such an important decision.

Table 6.23 Person responsible for Adopting Family Planning

Tribal Groups	Percentage Distribution					Total
	Self	Spouse	Husband & Wife	Relatives	Health Personnel	
Santal	14.22	6.03	20.26	8.62	50.86	232
Oraon	31.61	9.68	0.65	12.26	45.81	155
Munda	26.09	6.52	2.17	10.87	54.35	46
Bedia	49.21	11.11	7.94	7.94	23.81	63
Mahali	5.00	10.00	70.00	10.00	5.00	20
Mal Pahariya	52.17	26.09	0.00	0.00	21.74	23
Lohara	13.64	9.09	18.18	9.09	50.00	22
Total	25.13	8.73	12.83	9.45	43.85	561

Source: Field Survey, 2017-2018

In this chapter, the health condition of the tribal people is discussed by emphasising on two main aspects i.e. the general health status and maternal & child health care. It is observed that the tribal people of this area are suffering from different diseases. For treatment, they mostly rely on allopathy. However, they do not visit the Government registered doctors all the time except in critical cases or chronic illness. But, in case of maternal health, it can be stated that a considerable number of respondents are presently availing the maternal health care facilities and go for institutional delivery. Actually, it is observed that the tribes of this district are very much willing to adopt the modern health care facilities but sometimes their unaffordability resists them to accept such facility. Hence, those facilities which are provided from Government at free of cost, they accept all those but if they have to pay for availing those facilities, the rate of availing the facilities is lower. It actually happens due to their abject poverty.

References

1. State Bureau of Health Intelligence, Health on March 2011-12, West Bengal. https://www.wbhealth.gov.in/other_files/Health%20on%20March%20Book%202012.pdf
2. WHO Recommendation on Antenatal Care for a Positive Pregnancy Experience (2016), World Health Organisation, p-ix, <https://apps.who.int/iris/bitstream/handle/10665/250796/9789241549912-eng.pdf;jsessionid=D5A2B8B7A001E4E3BDE5313C25C3DA6C?sequence=1>
3. Ministry of Health and Family Welfare, Guidelines for Antenatal Care and Skilled Attendance at Birth by ANMs/ LHV/SNs (2010), Government of India, p-1, https://www.nhp.gov.in/sites/default/files/anm_guidelines.pdf
4. Boruah, P.: Sustainable Tribal Development : A Case Study in Nagaland, The Eastern Anthropologist, Vol.64(2-3), 2011, p-212

5. WHO Recommendation on Antenatal Care for a Positive Pregnancy Experience (2016), World Health Organisation, p-xi,
<https://apps.who.int/iris/bitstream/handle/10665/250796/9789241549912-eng.pdf;jsessionid=D5A2B8B7A001E4E3BDE5313C25C3DA6C?sequence=1>
6. Srivastava, A., Bhattacharyya, S., Clar, C. and Avan, B.I.: Evolution of quality in maternal health in India: Lessons and Priorities, International Journal of Medicine and Public Health, Jan-Mar 2014, vol.-4, Issue-1, p-35-36,
https://ijmedph.org/sites/default/files/IntJMedPublicHealth_2014_4_1_33_127120.pdf
7. WHO Recommendation on Antenatal Care for a Positive Pregnancy Experience (2016), World Health Organisation, p-1,
<https://apps.who.int/iris/bitstream/handle/10665/250796/9789241549912-eng.pdf;jsessionid=D5A2B8B7A001E4E3BDE5313C25C3DA6C?sequence=1>
8. Ministry of Health and Family Welfare, Guidelines for Antenatal Care and Skilled Attendance at Birth by ANMs/ LHV/SNs (2010), Government of India, p-7,
https://www.nhp.gov.in/sites/default/files/anm_guidelines.pdf
9. Ministry of Health and Family Welfare, Guidelines for Antenatal Care and Skilled Attendance at Birth by ANMs/ LHV/SNs (2010), Government of India, p-10,
https://www.nhp.gov.in/sites/default/files/anm_guidelines.pdf
10. WHO Recommendation on Postnatal Care of the Mother and Newborn (2013), World Health Organisation, P-1-3,
https://apps.who.int/iris/bitstream/handle/10665/97603/9789241506649_eng.pdf?sequence=1
11. Nath, P.: Uttarbanger Adibasi Parichai, N.E. Publishers, Kolkata, p-52-94
12. Ministry of Health and Family Welfare, National Family Health Survey (NFHS-4),2015-16, Government of India, p-238, <https://dhsprogram.com/pubs/pdf/FR339/FR339.pdf>
13. WHO Recommendation on Antenatal Care for a Positive Pregnancy Experience (2016), World Health Organisation, p-xi,
<https://apps.who.int/iris/bitstream/handle/10665/250796/9789241549912-eng.pdf;jsessionid=D5A2B8B7A001E4E3BDE5313C25C3DA6C?sequence=1>
14. Ministry of Health and Family Welfare, Guidelines for Antenatal Care and Skilled Attendance at Birth by ANMs/ LHV/SNs (2010), Government of India, p-8,
https://www.nhp.gov.in/sites/default/files/anm_guidelines.pdf
15. Ministry of Health and Family Welfare, National Family Health Survey (NFHS-4),2015-16, Government of India, p-219, <https://dhsprogram.com/pubs/pdf/FR339/FR339.pdf>
16. WHO Recommendation on Antenatal Care for a Positive Pregnancy Experience (2016), World Health Organisation, p-30-31,
<https://apps.who.int/iris/bitstream/handle/10665/250796/9789241549912-eng.pdf;jsessionid=D5A2B8B7A001E4E3BDE5313C25C3DA6C?sequence=1>

17. Ministry of Health and Family Welfare, National Family Health Survey (NFHS-4),2015-16, Government of India, p-228, <https://dhsprogram.com/pubs/pdf/FR339/FR339.pdf>
18. Jose, J.A., Sarkar, S., Kumar, S.G. and Kar, S,S.: Utilization of Maternal Health-care by Tribal Women in Kerala, *Journal of Natural Science, Biology and Medicine*, Jan-June 2014, Vol.-5 (1), p-144-147, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3961920/>
19. Ministry of Health and Family Welfare, National Family Health Survey (NFHS-4),2015-16, Government of India, p-186, <https://dhsprogram.com/pubs/pdf/FR339/FR339.pdf>
20. Biswas, R.K. and Kapoor, A.K.: Family Planning Practices among Saharia Primitive Tribe of Madhya Pradesh, *Indian Journal of Social Research*, April-June 2011, Vol.-52 (2), p-211
21. Biswas, R.K. and Kapoor, A.K.: Family Planning Practices among Saharia Primitive Tribe of Madhya Pradesh, *Indian Journal of Social Research*, April-June 2011, Vol.-52 (2), p-214
22. Mamoria, C.B. (1957): *Tribal Demography in India*, Kitab Mahal, Allahabad, p-112
23. Basu, S., Kapoor, A.K. & Basu, S.K.: Knowledge, Attitude and Practices of Family Planning among Tribals, *The Journal of Family Welfare*, Vol.50, No.1, June, 2004, p-28
24. Biswas, R.K. and Kapoor, A.K.: Family Planning Practices among Saharia Primitive Tribe of Madhya Pradesh, *Indian Journal of Social Research*, April-June 2011, Vol.-52 (2), p-215-216