

Reproductive Health Problems and Awareness among the Birhor Females of Purulia District, West Bengal, India

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ABSTRACT

Objective: The present study tries to find out the reproductive health related problems and awareness about reproductive health and hygiene among the Birhor females of West Bengal.

Materials and Methods: A cross-sectional study has been carried out among 94 female participants. The present study was conducted in 3 blocks namely Baghmundi, Jhalda and Balarampur of Purulia district among Birhor married females aged between 15 to 50 years. To collect the data on Reproductive health and awareness a pre-tested semi structured schedule was used and in-depth investigations were carried out among the research participants after verbal consent.

Results: In the present study 22.67 percent female have the problem of menstrual irregularities and 54.67 percent female have painful menstruation. In this present study 49.33 percent females have reported that their menstruation blood flow is very scanty. The present study also shows that 58.5 percent Birhor females are non-literate and in case of hygiene related issues, 84 percent Birhor females use cloth (both old and new cloth) during their menstrual periods. In case of family planning methods 36.67 percent females have reported that they did not use any contraceptives, 28.33 percent prefers oral pill as contraceptive method.

Conclusion: Among the Birhor females awareness on reproductive health and hygiene is poor. However, to bring changes in their reproductive health condition specially in health seeking behavior of the females, initiatives of improved health services and its proper way of executions is necessary, as women are the strong pillar of any vibrant society.

Key words: Birhor, Reproductive health, Health awareness, Menstruation, Hygiene

INTRODUCTION

Women's status reflects the type of society and cultural they live in, this is evaluated in terms of the level of their health, education, income, employment, right as well as the role played by the family, community and in the society, as they constitute an essential proportion of population of a given society. The health status of the women which includes their physical, mental and social conditions in addition to their biological and physiological problem is also affected by the popular norms and attitude of society (Park and Park, 1991).

Reproductive health is a universal concern, and especially important for every women particularly during the reproductive years. As most of the reproductive health problems arise during the reproductive years, in old age general health continues to reflect earlier reproductive life events. World Health Organization (WHO) in 2008 defined reproductive health as "it refers to a spectrum of conditions, events and processes throughout life, ranging from healthy sexual development, physical comfort and closeness and joys of child bearing to avert disease and death. Profoundly life affirming and life threatening conditions make up reproductive health. Perhaps more than with any other health conditions, the social, psychological and physiological factors are inter-related in reproductive health, which WHO views as crucial to overall health" (WHO, 2008).

Biological factors alone do not explain women's disparate burden. Their social, economic and political disadvantages have a vast impact on their reproductive health. Young people of both sexes are also particularly vulnerable to reproductive health problems because of a lack of information and access to services.

In India, the health status of the tribal population is very poor, indicating lack of knowledge in sanitary conditions, personal hygiene, and health education. In rural area, high rate of anemia is reported among tribal mothers, and girl children receive less than the desired nutritional intake. The expanse of knowledge and practice of family planning was also found to be low among the Scheduled Tribes especially among tribal women from West Bengal state of India is scarce (Bhardwaj *et al.*, 2010). Tribal women are lacking the health care availability, accessibility and they are unaware about available health care facilities (Reddy 2008).

Some related studies: A research was held among the women of aged 13-49 years of age in Tamil Nadu (India) with a purpose of examining their level of awareness towards different reproductive health issues. Their studies reported that lack of knowledge and also hesitations of women to take treatment. However, the influence of age-group, place of residence, and standard of living on the adoption of family planning methods and reproductive tract infections were also highly noticed in their study (Vinitha *et al.*, 2007).

A study among the married women of age group 18-45 years on the occurrence of menstruation disorders, sanitary napkin usage during period reported that prevalence of menstruation disorders was common who have poor knowledge and awareness level regarding the usage of sanitary napkins during menstruation period (Ahmed *et al.*, 2015).

A study was conducted among the reproductive age group women residing in the Hoogly district of West Bengal (India). It was noticed that the presence of one or more symptoms of RTI among more than 60% of the total respondents (Dawn and Biswas, 2005).

Birhor of West Bengal, India: Birhors are identified as one of the smallest Particularly Vulnerable Tribal Groups (PVTG) of India. Their mother tongue is considered to be an *Austro-Asiatic* language group. In Purulia district they speak in *Sandri* and *Bengali* language for their inter group communication (Mukherji, 1991). The name Birhor means the *Jungle Man*. Traditionally Birhors are nomadic and hunting gathering tribal group, but now most of them are settled down. India consists of only 17,241 the Birhor tribal populations, now Particularly Vulnerable Tribal Group this community has pointed out as the most endangered tribal group as they hold only 0.01% of the total Tribal population in India (Census of India, 2011) They are mainly distributed in different states of India, such as Bihar, Madhya Pradesh, Chhattisgarh, Jharkhand, Orissa and West Bengal. In West Bengal, they are mainly concentrated in the Purulia district. They were migrated in Purulia from Ranchi, Gumla and Hazaribagh area of the Chotonagpur plateau (Singh, 2010).

Kaur in 2019 studied among the Birhor tribes of Jharkhand on cultural aspect of reproductive health practices and roles of modern medicines to decrease morbidity and mortality. He has stated that as Birhors are ready to accept modern medical support and also they are willing to join mainstream society wanted to preserve their traditional practices. He also suggested that as per the census Birhors are declining population so it was important to take strong measures for their survival.

Health and nutrition problems exist all over the world and are particularly noticeable among the Birhor tribe in West Bengal. In most of the cases Birhor are more affected because of their unfavorable social and economical conditions. An initial attempt has been made in this present research to study the reproductive health problems and awareness related issues of Birhor women living within Purulia district of West Bengal.

Birhors are the smallest group among the three PVTGs in West Bengal. As the reproductive health awareness is poor among the tribal communities especially among the Primitive Vulnerable Tribal Groups. So based on the background the present study tries to find out general reproductive health problems and awareness about reproductive health among the married Birhor female of West Bengal.

MATERIALS AND METHODS:

Study setting: The data used in this cross-sectional study was collected during March 2018. In West Bengal, Birhor community mainly colonized at district Purulia. Here they build up colony at Baghmundi, Balarampur, and Jhalda-1 block. The villages are Bhupatipally, Barrherria, Baredi under Baghmundi Block, Bersa under Balarampur Block and Chhotobakat under Jhalda-1 Block. The people of Purulia are mainly emigrated in Purulia from Hazaribug, Jharkhand. However, they carry on a keen relationship with that population. The Birhors in West Bengal are given the surname, *Sikari*. Data was collected by the author NP, RNK and DC. Position of the camp selected at Baghmundi, near the village Bhupatipally as largest village of Birhors in Purulia district. Approximately 78 Birhor families are present in Purulia district. The present study was tried to cover total number of families.

Study subjects and Data collection: The data were collected from Birhor females, they belongs to reproductive age, ranges from 15 to 50 years. Both qualitative and quantitative data was collected for the determination of reproductive health of this community. Detailed data on hygiene related practices during menstruation was collected through case study. In this regards one case study has been taken for the present study on menstruation hygiene practices. Pre tested schedule was used to collect data on Hygiene related issues (like use of sanitary napkin during menstruation) menstruation problems related questions were asked (e.g. painful or not, regularity, menstruation flow during period) and reproductive history of women (e.g. age at menarche, age at first conception and age at menopause). Some socio-

economic data (e.g. education, income, marital status) were also collected. Age estimation was very difficult, as there is no written document except in few households. However in some cases due to births in the house, there is no hospital registration system. Local events and information from elderly people were used for the age estimation.

Data analysis: Qualitative data was assessed as per researcher impression, in case of quantitative data; Descriptive statistics were applied such as Simple percentage, mean, median, standard deviation and quartile. In the present study per-capita income categorized on the basis of quartile distribution, lower than 1st quartile considered as low income category, 1st to 3rd quartile considered as middle income category and more than 3rd quartile considered as upper income category.

Ethical considerations: The relevant authorities and local community leaders were informed about the objective of the field work. Verbal informed consent was obtained in their own language prior to each interview and measurement, in the presence of the traditional village headman, because most of the subjects were non-literate. Ethical approval was obtained from the appropriate ethical committees of the West Bengal State University.

RESULTS

The study includes mainly reproductive health care system of Birhor females of West Bengal. Here total Birhor females are 176. Present study was done on 94 Birhor females among them number of participants within reproductive age group (12-45) are 75 and the number of females who attained at menopausal age are 19. Below 18 years are 14, above 18 years are 80.

This study divided into four parts, a) Socio-economic status b) reproductive health related problems and awareness, c) reproductive health hygiene related case study among the studied population. Now most of the females go to the hospital or nearest health care center for their treatment, they practice traditional medicine and sometimes they also believe on supernatural power.

a) Socio-Economic status:

Socio-economic condition directly affects on human health as well as reproductive health. There are so many types of parameter are used for the determination of socio-economic condition. But in this study some of the parameter are used which directly affects on

reproductive health on females, such as occupation, monthly per-capita income, education, marital status and age at marriage.

Table 1: Frequency distribution of the per-capita income and Educational status (N=94)

i. Per-capita income	Frequency	Percentage
Rs. <900 (Lower income)	25	26.6
Rs. 900-1300 (Middle income)	47	50.0
Rs. >1300 (Upper income)	22	23.4

ii. Educational Status	Frequency	Percentage
Non literate	55	58.5
Can sign	9	9.6
Primary	8	8.5
Upper Primary	18	19.1
Secondary	3	3.2
HS	1	1.1

Table 1 shows the frequency distributions of the per-capita Income category of the studied participants. In this study per-capita income consider for their occupational activities. Most of the females are working as home maker, for this reason they do not earn money. They depend on their total family income and more specifically per-capita income. As observed from the table, that 50 percent of the people have their per-capita income is between the incomes Rs. 900 to 1300 and the per-capita income lower than Rs. 900 is 26.6 percent and higher than Rs. 1300 is 23.4 percent respectively. Median value of the per-capita income is 1205.16 which indicates 50 percent of the participants are earn more than Rs. 1205.16 and rest of the participants earn less than Rs. 1205.16.

Above table also depicts the frequency distributions of the education category of the studied participants. It was noticed that 58.5 percent Birhor females are non-literate. Only 19.1 percent females are educated up to the upper primary level.

Reproductive health related problems and awareness:

Reproductive health concerns the disease, disorder and conditions that affects the functioning of the reproductive system during all stages of life. Reproductive health system plays a vital role in women's health. Some problematic conditions have discussed among the studied participants.

Table 2: Reproductive Health Problems and awareness among the studied Participants

i. Symptoms during menstruation (N=75)			
Types	Frequency	Percentage	
Abdominal Pain	45	60.00	
Body Pain	7	9.33	
Tiredness & Irritability	23	30.67	
ii. Painful or not painful period(N=75)			
Not Painful	34	45.33	
Painful	41	54.67	
iii. Menstrual flow (N=75)			
Scanty	37	49.33	
Excessive	18	24.00	
Medium	19	25.33	
Pregnant	1	1.33	
iv. Gynecological Problem (N=94)			
White Discharge	60	63.80	
Itching	16	17.00	
Bad Odour	4	4.30	
Lower Abdominal Pain	10	10.60	
Painful Intercourse	4	4.30	
v. Regular/Irregular menstruation (N=75)			
Regular	58	77.33	
Irregular	17	22.67	
vi. Menstruation duration (N=75)			
2 to 3	23	30.67	
4 to 5	34	45.33	
6 and above	18	24.00	
vii. Contraceptives used (N=60)			
No	37	61.67	
Yes	23	38.33	
viii. Types of Contraceptives (N=60)			
No	22	36.67	
Copper T	6	10.00	
Condom	6	10.00	
Pill	17	28.33	
Tubal ligation	9	15.00	
ix. Type of sanitary napkin (N=75)			
Old cloth	52	69.33	
Pad	12	16.00	
New cloth	11	14.67	
x. Disposal after use (N=75)			
Throw in open	12	16.00	
Wash(cloth)	63	84.00	
xi. Family planning education (N=80)			
ANM	28	35.00	
Husband	19	23.75	
Elders	23	28.75	
Others	10	12.50	
xii. Frequency distribution of the age at marriage (N=80)			Mean & Median
Below 18 years	33	41.25	18.20 (\pm 3.20) & 17.5 years
18 to 23years	41	51.25	
24 years & above	6	7.50	
xiii. Frequency distribution of the age at first conception (N=71)			Mean & Median
Below 18 years	23	32.4	19.84(\pm 3.90) & 20 years
18 to 23 years	35	49.3	
24 years and above	13	18.3	
xiv. Percentage distribution of the age at menopause (N=19)			
46	1	5.27	49 (\pm .1.172) & 49 years
47	3	15.79	
48	4	21.05	
49	7	36.84	
50	4	21.05	

Table 2 shows reproductive health problems as well as sexual and reproductive health awareness among the Birhor females.

- i. Symptoms during menstruation: At the time of periods female have face many problems like nausea, lower abdominal pain, tiredness and irritability, whole body pain etc. some of these symptoms are also noticed among the Birhor female, in this present study it has been found that 60.00 percent female have faced lower abdominal pain at the time of menstruation period, 9.33 percent female have experience body pain and tiredness, irritability have reported among 30.67 percent female during the time of menstruation.
- ii. Painful or not painful during menstruation (Dysmenorrhea): ‘Dysmenorrhea’ is the term sometime used for painful period. In this present study it was reported that 54.67 percent have experience painful periods during menstruation.
- iii. Menstrual flow: Birhor female have faced mainly scanty type of periods, which is also termed as ‘hypomenorrhea’ during that time blood flow is very low; on the other hand excessive period condition that is ‘hypermenorrhea’ or ‘menorrhagia’ blood flow is high. In the present study, 49.33 percent female have experience scanty type of periods, and 24.00 percent female have excessive type of period during menstruation.
- iv. Gynecological Problem: Birhor female have faced many gynecological problems, 63.80 percent female have problem of leucorrhea that is white discharge from vagina and 17.00 percent female have itching problem, 4.30 percent female have bad odour in their genital area and experience painful intercourse.
- v. Regular/Irregular menstruation: Among them 22.67 percent female have irregular period. In case of irregular periods, menstruation does not occur in every month. On the other hand, 77.33 percent female have regular menstruation.
- vi. Menstruation duration: This table stated the frequency distribution of menstruation duration during the time of menstrual periods among the Birhor females. Menstruation duration means the duration of menstrual bleeding that is occur in every month among the female. Here in this present study among 30.67 percent female’s menstruation bleeding duration stay for 2 to 3 days because during that time menstrual flow is very scanty and 45.33 percent female have 4 to 5 days of period duration and 24.00 percent female’s menstrual bleeding lasts for 6 days and above this.

To know about reproductive health awareness, it is important that we have knowledge about different matters, such as contraceptives used, types of contraceptives, type of sanitary napkin and so on. **Table 2** also shows some Sexual and Reproductive health awareness of the studied participants. Sexual and Reproductive awareness is very important for health, it prevents so many disease, some factors are discussed here.

- vii. Contraceptives used: In case of family planning contraceptives play a vital role. Contraceptives specifically condom use can reduce sexually transmitted disease as well as control the birth. Here it was found that only 38.3 percent female use contraceptives.
- viii. Types of Contraceptives: Different Contraceptives are available now some of them are permanent like ligation and some are temporary. In the studied population 10.00 percent female's husband use condom and 28.33 percent female use oral pill, 15.00 percent female have done tubal ligation.
- ix. Type of sanitary napkin: In the studied participants most of the women used old cloth. It was found that about almost 69 percent female use sanitary napkin during their menstruation, only 16 percent female use sanitary pad and almost 15 percent female use new cloth.
- x. Disposal after use: It is found from the present study that who have using old clothes as well as new cloth they wash those cloths and re using them, here 84 percent female wash their cloth and 16 percent who have using sanitary pad they throw in open generally in garbage.
- xi. Family planning education: Family education is necessary to gain knowledge about family planning method like use of contraceptives. It is found from present study that, Birhor females get family planning education mostly from Auxiliary Nurse Midwifery (ANM) that is 35.00 percent, 28.75 percent get education from their elderly members (from mother-in-law or elder brother's wife or elder sisters of their husband) of the family and 23.75 percent get family planning knowledge from their husbands, only 12.50 percent females get this education from others i.e. friends or neighbors.
- xii. Age at Marriage: Age at marriage is a very important factor that determines fertility and age at onset of child bearing, here the lowest age at marriage is 12 years and highest age is 25 years. Median value showing here 50 percent studied participants married before 17.5 years of age. Mode value showing total 13 participants married in

the age of 20 years and then 11 participants married in the age of 18 years. Here the frequency of age at marriage is high in 17 to 20 years of age group and then 12 to 16 years of age group respectively, mean age at marriage 18.20 (± 3.20) years.

- xiii. **Age at First Conception:** Generally marriage precedes childbearing and the age at the birth of the first child is primarily linked with the age at marriage. In the table 6, it is found that 36.6 percentages Birhor female's age at first conception were below 18 years of age group. Within 18 to 23 years age group 45.1 percentage females have experienced their first conception. 18.3 percentage female have their experienced their first pregnancy at the age of 24 years and above. In case of age at first conception, mean is 19.84 (± 3.90) years.
- xiv. **Age at Menopause:** Menopause is the end of reproductive period, for this reason age of menopause also affects the fertility. In the table 5 it is found that 5.27 percent female's age at first conception was 46 years. 15.79 percent female said that their age at menopause was at the age of 47 years. 21.05 percent of them show their menopause was occurred at the age of 48 years and among them 36.84 percent said that their age at menopause was 49 years. 21.05 percent female of them said that their menstruation cycle was stopped at the age of 50 years.

b) Reproductive health related case study:

Menstrual Hygiene: A married woman (age 25 years), when asked about menstrual hygiene related issues, she said that during the menstruation period nowadays there is no more special performances they act like normal days. In previous days menstruant female was taboo to the whole community but nowadays this thinking has been changed. During menstruation co habitation with husband is prohibited, they may sleep together but they did not indulged in physical relations. During her period she uses cloth because of money problem. She clean those cloth and use them again she also told that when one girl experiences her menstrual period for the first time, her mother or elder sister or any other elder women of family tell her about girls first menstruation and give her cloth. During that time she is not permitted to go to the holy places and also do not allow to participate in any rituals of the villages she usually take bath but do not wet her hair. These taboos are removed on the eighth day when the women has become ceremonially clean by taking bath and wet her hair, she rarely get massage of mixture of *haldi* and turmeric powder and oil if available and having her clothes

boiled in water and wash them with cold water. After that she leads her normal day life until the menstruation blood reappear in next month.

DISCUSSION

Sinha in 1999 had worked on Birhor tribe of Madhya Pradesh and demonstrated almost every aspects of social life of Birhor. He stated that among the Birhor, menstruation cycle is the demarcation of girl's marriage age. During menstruation a Birhor woman has to follow some taboos like she does not cook or allow entering the places where paddy is stored or any religious places. Her clothes have to be kept on ground rather than hanging. Now a day's these taboos are somewhat maintained by Birhor women, in case of present study we also have noticed from the case study that during menstruation she has to follow some taboos.

Any menstrual dysfunction in adolescent stage may affect the normal life of adolescent as well as young adult women. It is also important to notice that during menstruation non-maintenance of hygienic practice is one of the primary causes of various kinds of gynecological problems (Krishnakumari and Arun, 2012). In the present study, we found menstruation duration stayed from 2-3 days in most of the cases among the female of that area. From the information as given by them that scanty type of period is mostly exist and that is painful. Most of them are anemic; their hemoglobin level is very low as revealed by their prescription provided by the doctor, which was one of the causes of the irregular period. About half of the female have scanty period during the menstruation, which is about 49.33%. Even most of them said that during period their menstruation blood is so scanty that they do not need any napkin or cloth.

Sarwade *et al* in 2019 had reported in his study that generally tribal women gets married at very early age, they have low knowledge and misconception about reproductive health which may leads to poor outcomes of the reproductive and sexual health. In this present study it has been seen that 41.25% Birhor females got married before 18 years. Half of the Birhor females are non literate. Due to early marriage they did not able to get education , as education is the main key factor of awareness. Consequently, poor economy and income is also an obstacle in the way of their education.

Knowledge on sexual and reproductive health awareness can reduce the transmission of Sexually Transmitted Infections (STIs). Sexual and reproductive health awareness concerns sexual health, sexual pleasure, eroticism, and sexual satisfaction, disease, violence, female

genital mutilation etc. It has been also noticed that most of them are unaware of the hygienic related knowledge; about 69 percent female used old cloth instead of sanitary napkin during menstruation. . Some of the members contested the idea of advocating for sanitary napkins as it is costly, not accepted everywhere, not re-usable and there are disposal issues. On the other hand, cloth is easily available, affordable, acceptable and re-usable.

CONCLUSION

Reproductive health status of Birhor women in interior regions is very poor due to lack of reproductive health awareness and non availability of health services. Whereas, health facility is far from satisfactory and it was observed that poverty, lack of awareness, poor road connectivity and communication still remains a constraint for improved health services among the Birhor tribe. It has been found that there is lack of reproductive health awareness among maximum number of Birhor women. The Birhor women should take care to maintain the hygienic reproductive health such as use of sanitary napkin to avoid any infections. Use of contraceptives specially condoms, which has resulted in a decrease in the rate of sexually transmitted infections (STI) and unwanted pregnancies but among Birhor, use of condoms as a contraceptives is very low. So, to avoid any STI, they should take care of this. Education plays a vital role in enhancing knowledge so they still need reproductive health awareness programme through different NGOs, health related campaigns and other government facilities.

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