©Genus Homo (ISSN 2457-0028)
Dept of Anthropology
West Bengal State University

Genus *Homo*, Vol. 5, 2021
Parvin and Biswas p 55-68
Accepted on 29th November 2021
Published on 21st December 2021

Original article

Mother and Child Health Awareness among the Birhor Women of Purulia District, West Bengal, India: A Mixed Method Approach

Nagma Parvin[1]* and Subir Biswas[2]

ABSTRACT

Background of the study: Maternal and neonatal mortality and morbidity continue to be high in tribal areas despite the existence of various national programmes in India especially due to lack of awareness about MCH services among tribal women. This study intends to evaluate awareness about mother and child health care practices among Birhor women of Purulia district, West Bengal.
Methods: The present study is a cross-sectional study conducted in 3 blocks namely Baghmundi, Jhalda and Balarampur of Purulia district among married women aged between 15 to 49 years. A pre-tested semi structured schedule was used to collect the information on existing maternal and child health services. Case study was also included to find out the detailed information about antenatal care, delivery care and post-delivery care.
Results and Discussion: In the present study it is found that about 43% deliveries were done by untrained *dai*. Vaccinations of the children were completed among recent new born baby but most of child (45.07%) did not complete all the vaccination as reported by the mother and worker of the health center. On the other hand, many of the mothers had knowledge about antenatal services, home delivery by trained person, complete immunization process and feeding practices. Health workers and family members were the major source of information. It is revealed from the study that the pregnant mothers even for the first few months did not get sufficient nutritious food.
Conclusion: Awareness about MCH services among Birhor women was observed to be inadequate. One of the ways to improve the situation is to aware the mothers as well as fathers also, specially mother's education plays a key role in better utilization of mother and child health care services.

Key words: PVTGs, Mother and Child Health, Birhor

[1] Assistant Professor, Department of Anthropology, Sree Chaitanya College, Habra, West Bengal, India
[2] Professor, Department of Anthropology, West Bengal State University, West Bengal, India
*Corresponding author: nagmaparvin25@gmail.com

Genus Homo 5(2021)

INTRODUCTION

In India, the general health condition of the tribal populations is very poor. The extensive poverty, non-literacy, malnutrition, absence of safe drinking water and poor sanitary and living condition, poor maternal and child health services have been traced out in several studies as possible contributing factors for miserable health conditions prevailing among tribal populations. Information regarding the health status of tribal societies, especially among tribal women from West Bengal state of India is scarce. Ghosh and Malik (2008) suggest that although majority of the tribal women took doctor's advice during pregnancy, negligence and ill behavior of the staff of government hospitals are important causes deterring these women from availing pre-natal and post-natal facilities.

Tribal mothers are generally aware of the immunization programme for children administered by rural sub-centers or primary health centers. Keeping these objectives in mind, the present study has been conducted on Birhor tribes of Purulia district of West Bengal, India, to examine socio-economic profile, health status of Birhor females, focusing on reproductive health fitness of Birhor women and availability and quality of different health care services accessible to them. Even though social work perspective emphasizes the influences of multiple factors on client systems at micro, mezzo, or macro level, reproductive health has not been examined from an ecological point of view (Salehin, 2012).

In 1997, Reproductive and Child Health Programme was launched in India with the intention of better ante-natal care, having institutional deliveries with the trained health workers and also the postnatal care for both mother and the child. Later on, the National Population Policy (2000) had also attempted a further strategy for the purpose of safe motherhood as well as empowering the women for better health and nutrition. Community-based studies conducted in various regions in India have all shown that the prevalence of reproductive and maternal morbidity among women is very high (Bhatia *et a1*.1996).

The timely use of reproductive health services for both maternal complications and reproductive tract infections is essential in preventing the escalation of conditions which can result in death or permanent disability (Wasserheit, 1989; Thaddeus and Maine, 1994).

Sinha, in 1986 stated that religious cultural views become very often a determination for the marriage of girls. The age of girls at marriage in Northern region is comparatively

higher than the age of girls at marriage in the central region. It was further observed from research investigations that the frequency of abortions, miscarriages, and still-births were found to be much higher in younger mothers below the age of 19 years. The major life-threatening complications for very young mothers were pregnancy induced high blood pressure, anemia and difficulty in delivery due to disproportion between the pelvic-size and the head of the baby.

Birhors are identified as one of the smallest Particularly Vulnerable Tribal Groups (PVTG) of India. Their mother tongue is belonging to "Austro-Asiatic" language group. The *Birhors* are classified into two groups, *Uthlu Birhor* and *Jaghis Birhor*; both groups have their own distinct life style. The *Uthlu Birhor* has wandering style of life and their economy is an example of moving economy even today. The *Jaghi Birhor* has settled style of life and their economy is based on agricultural economy. The name *Birhor* is derived from two words, *Bir* meaning 'Jungle' and *hor* meaning 'man' thus it means the 'man living in Jungle or people of Jungle'. The *Birhors* belong to the *Mundari* group of tribes and are mainly resides in Bihar, Jharkhand, Orissa, West Bengal and Chhattisgarh states of India. 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).In West Bengal, they are mainly residing in the Purulia district.The objective of the present study was to evaluate the Mother and child health awareness among the of the adult Birhor women of Purulia, West Bengal.

MATERIALS AND METHODS:

Study Settings: A cross-sectional study was conducted during March 2018 and data was collected among the Birhor of Purulia district in West Bengal. Birhor community mainly builds up colony at Baghmundi, Balarampur, and Jhalda-1 block under Purulia district. The villages are Bhupatipally, Barrherria, Baredi under Baghmundi Block, Bersa under Balarampur Block and Chhotobakat under Jhalda-1 Block. In West Bengal Birhors have the surname, *Sikari*. Approximately 78 Birhor families are present in Purulia district. The present study was tried to cover those number of families.

Genus Homo 5(2021)

Sampling and data collection: In the present study, two stage simple random sampling method have been adopted. At the first stage, one large residential area of Birhor tribe, Purulia district was selected through clustered sampling method. At second stage to collect data among 94 adult female individuals were selected.

Schedule was used to collect data on antenatal care that is care during pregnancy, during delivery and after delivery of a child. Antenatal care data including urine test, T.T injection, IFA tablet, blood test, abdominal checkup(Abdominal check-up during pregnancy is very much needed, because a) to observe the signs of pregnancy b) to estimation of gestation c) to assess of fetal growth (pubic height should not be measured until 24 weeks of gestation) d) to auscultation of fetal heart e) to locate fetal position, lie, engagement and presentation f) at last to detect any deviation from the normal] and ultra sound were collected from mother and ASHA from primary health center. Data on delivery care including place of delivery, service provider, were obtained from mother of the child and in case of delivery in house older members present during the delivery. Information on post-delivery care including immunization was collected from mother and ASHA from primary health center, in this purpose immunization card was checked whenever available. Apart from schedule method in depth case studies on health care practices during pregnancy, during delivery and after delivery were also obtained from mother and as well as from knowledgeable aged persons of the villages.

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. For statistical analysis MS Excel and SPSS trail version-21 software were used.

Ethical considerations: In the present study a verbal informed consent was obtained in their own language prior to each interview. As most of the subjects were non-literate so the relevant authorities and local community leaders were also informed about the objective of the field work. Ethical approval was obtained from the appropriate ethical committees of the West Bengal State University.

Genus Homo 5(2021)

RESULTS:

In this study health care system includes mainly reproductive health care system of the female. This matter divided into three parts firstly before birth practice, second at the time of birth practice and third after birth practice.

Table-1: Own place of birth

Types	Frequency	Percentage
Home	86	91.5
Hospital	8	8.5
Total	94	100

Table-2: Own health care / disease treatment practices

Types	Frequency	Percentage
Bio-medicine	82	87.20
Ethno medicine	10	10.60
Supernatural power	2	2.10
Total	94	100

Table-1 represents own place of birth of the studied females. In this table most of the females are born at home i.e. more than 90 percent. On the other hand, **table-2** shows the own health care practices. This health care activity depends on various factors such as their awareness, financial condition, their belief, traditional knowledge, influence of dominant society etc. Now most of the females go to hospital for their treatment, they are also practicing ethno-medicine and sometime believe on supernatural power.

Table- 3: General description of Pregnancy Care

i. Antenatal Care(N=71)		
Types	Frequency	Percentage
No	28	39.44
Yes	43	60.56
ii. Abdominal Checkup (N=71)		
No	28	39.44
Yes	43	60.56
iii. Blood Test(N=71)		
No	28	39.44
Yes	43	60.56

Genus Homo 5(2021)

iv. Urine Test (N=71)		
No	30	42.25
Yes	41	57.75
v. Ultra-Sound test(N=71)		
No	65	91.55
Yes	6	8.45
vi. IFA Tablet (N=71)		
No	30	42.25
Yes	41	57.75
vii. Tetanus Toxoid Injection(N=71)		
No	23	32.39
Yes	48	67.61

Genus Homo 5(2021)

Table-3 shows an over view of general description of Pregnancy care of the studied participants. Prior to the birth of a healthy baby, his or her mother has to follow many rules. Some types of rules are discussed here.

Mother should be cared before a baby is born. Different society has different types of traditional practices for the pregnant mother. But some pregnant mothers are not conscious about it. The table showing almost 40 percent mother does not take Antenatal Care.

Abdominal check-up during pregnancy is very much needed for observe the signs of pregnancy, assess of fetal growth, auscultation of fetal heart etc. at last to detect any deviation from the normal. Here it is found that 61 percent female have done abdominal checkup and 39 percent did not checkup their abdomen during pregnancy.

Hemoglobin measurement is very important before birth, low hemoglobin or low level of red blood cell are known as Anemia. Anemia can cause to feel very tired and sometime affects the baby, because, the baby does not get sufficient oxygen from the mother. Different hormonal tests are also included in blood test, abnormal levels of hormone secretion has high risk of chromosomal abnormalities. The table showing almost 60.56 percent mother does not measure hemoglobin level.

In pregnancy an ultra-sound scan can be used to look at the developing baby, the uterus and the placenta. An ultra-sound is safe for both mother and baby; it does not use ionizing

radiation like x-ray. But unfortunately, more than 91.55 percent pregnant mother cannot take such kind of facilities because of their financial condition.

WHO recommended for pregnant women to take daily iron and folic acid supplement. Iron 30 to 60 mg and folic acid 0.4 mg for prevent maternal anemia, low birth weight, and preterm birth (WHO, 2012). But unfortunately, more than 42 percent pregnant mother cannot take such kind of facilities because of their financial condition and due to lack of knowledge.

Tetanus Toxoid Injection prevents the Tetanus infection of both mother and her baby. When a mother takes T-T injection, then her body makes antibodies and it passed on to the growing baby. Almost 32 percent pregnant mother cannot take such kind of facilities.

Table- 4: General description of Delivery-care practices:

i. Delivery Care(N=71)		
Types	Frequency	Percentage
No	20	28.17
Yes	51	71.83
ii. Delivery place (N=71)		
Home	30	42.25
Health Centre	41	57.75
iii. Service provider(N=71)		
Untrained Dai	30	42.25
Nurse	27	38.03
Doctor	14	19.72

Table-4 shows an over view of general description of at the time of birth practices of the studied participants. Proper delivery of a baby can reduce the risk of maternal and child death, prior to the birth of a healthy baby, some birth related factors discussed here.

It has no doubt that delivering baby in a birth center or hospital is still the safest way for both mother and the child. But unfortunately, more than 42 percent delivery occurs at the house. After birth they contact with hospital in case of emergency.

Delivery care is very much important for giving birth to a healthy child without any

Genus Homo 5(2021)

complications and also to keep mother healthy. In this present study in case of Delivery care, 28.17 percent female did not care during deliver their children.

During the time of child delivery service provider take a vital role. Trained Service Provider gives comparatively better service, but in case of the studied population 42.25 percent deliveries were done by untrained Dai, followed by 38.03 percent by nurse and only 19.72 percent deliveries were done by doctor.

Table -5: General description of post-delivery practices of the studied participants

i. Post- natal Care(N=71)		
Types	Frequency	Percentage
No	25	35.22
Yes	46	64.78
ii. Immunization (N=71)		
Partially Completed	32	45.07
Fully Completed	39	54.93
	iii. Breast feeding(N=71)	
Immediate	43	60.56
Discarding colostrums	28	39.44
iv. Supplementary feedings(N=71)		
4-6 months	24	33.80
After 1 year	22	30.99
Until breast milk last	25	35.21
v.Family planning education (N=71)		
ANM	28	35.00
Husband	19	23.75
Elders	23	28.75
Others	10	12.50

Genus Homo 5(2022)

General description of Post- Delivery Practices:

Table-5 shows an over view of general description of after birth practices of the studied participants. After birth of a baby first six week is considered to be a very important stage of a mother's and her Childs life, some factors are discussed here.

In case of post-natal care, 64.78 percent female have done proper care after deliver their children, 35.22 percent female did not take care after delivery. To get protect from certain disease new born babies need several vaccinations. Such as at the time of birth babies get BCG, OPV and Hepatitis B etc, in present study almost 55 percent of children have fully completed their vaccinations.

Breast feeding after birth is very important as breast milk of the mother contains antibodies that helps baby fight off viruses and bacteria. Breastfeeding lowers baby's risk of having asthma or allergies. In this case WHO in 2013, reported that breastfeeding is necessary for child survival, nutrition, development and also for mother health, especially for the first 6 months of life. Provision of mother's breast feeding within one hour is referred to as 'early initiation of breastfeeding' especially colostrums or 'first milk', which is a sticky yellow-white substance yielded by the mother's breast. However in many, due to misconception or lack of knowledge about its health benefits they ignore it. Here in this study, it is found that 60.56 percent females have breastfeed to their child immediately after birth and 39.44 percent females discarded colostrums after they breast feed to their child.

Supplementary food is an additional fluid that is provided to a breastfed infant before 6 month, these fluids may include infant formula or other breast milk substitute. Supplementary food is sometime needed when sufficient breast milk is not produced due to several reasons among the mothers. Here in this present study it is noticed that 33.80 percent female have started supplementary food during 4-5 months of infants, 30.90 percent have started after 1 year age of infant, and, 35.21 percent have started supplements until breast milk is finished.

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

Genus Homo 5(2021)

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 (friends or neighbors).

DISCUSSION:

In the case of ante natal care, delivery care, post- delivery care, the differences that are found are not very vast, because of the awareness that given by health centre in rural area. May be differences are not found due to small sample size. Ganguly and Roy in 2020 find out the utilization of ante natal care services among Lodha and Borhor women of West Bengal. It was found from their study that 76.7 percent participants both Lodha and Birhor received ante natal care services, 77.1 percent participants received TT injection. Here they also found that 72.6 Percent females received iron tablets but only 20.9 percent completed the course of this medicine. Kanrar and Goswami in 2020 studied on Juangs PVTG of Odisha on Maternal and child health care services and revealed that 29.9 percent women have taken IFA tablets and 23.1 percent women have taken at least one TT injection, 75.9 percent delivery was done by elderly women, in case of child immunization 66.2 percent mother had immunized their children partially. In this present study 57.75 percent Birhor women took iron tablets and completed the course as well as 67.61 percent women received Tetanus toxoid injections, in most of the cases in rural area in previous time, medical services were poor, and when there will be no options to the hospital then delivery have to be done in the houses so in that cases, present study reveal that 42.25 percentage delivery was done by untrained *dai*. Vaccinations of the children are complete in recent new born baby but 45.07 percent children did not complete all the vaccination as reported by the mother and worker of the health centre.

Now, maternal and infant mortality rate which has been decreased drastically due to better post natal care in urban area as well as rural area but in this present study among Birhor though still birth , infant mortality were found. The proportion of males to females in a given population, usually expressed as the number of females per 1000 males. Here in the present study sex ratio is calculated according to this present data and that is 1060.24. In the present study miscarriages were reported from 5 married Birhor females, number of still birth was 4,

Genus Homo 5(2021)

total number of infants death was 5, number of neonatal death is maximum that was 17, and 1 maternal death was reported during this present study

CASE STUDIES:

As reproductive health is a major contribution to overall health status of women, so detailed information about menstrual-hygienic practices, care and attention during pregnancy, after pregnancy was collected from mother and elderly women of the village at the time of present research study.

Ante natal care: One of the most popular elderly woman, she is so called 'goratin' (Dai) in Bhupatipalli village. Her family has been living in this village for more than 100 years. During conversation, when asked her about practices during pregnancy she said - 'I have delivered 5 children, neither have I needed any medicines nor injections for myself not for my children , but time has changed now we need them because we suffer from diseases more than previous'. However during pregnancy they do not eat enough nutritious food for health, when asked about any prohibited food during this time she said that at this time rice of the previous days, mango, tamarind , papaya are prohibited . In first two months the mothers are allowed to eat rice only with 'kurthidal' (a special kind of pulse which is locally available), 'raidal' and fried garlic 'rasun pora', after that they can eat everything mostly in a boiled form or with mild spices. During pregnancy at the month of three or four co –habitation with husband is totally restricted. Pregnant mother do not involve in any hard work, she also said that pregnant woman is not supposed to step out of her house during evening and not allowed to collect leaves of tree, and crossing of river is also not permitted. She said that ICDS workers are very much helpful they used to come every alternative day and meet with pregnant mother they give iron tablets, though every pregnant woman take this tablet but do not consume it properly. Nowadays pregnant women get checkup in every month from Baghmundi hospital. Local ethno medicine practitioner give 'kudri' fruit or its roots with honey or 'thankuni' leaves paste to pregnant women to consume it for iron deficiency during the time of pregnancy.

Genus Homo 5(2021)

Delivery care and post delivery care: Another elderly woman was popular as *Dai* of Bhupattipally village. She assisted elderly *dai* during delivery time. She said, everyone is trying to go to hospital during delivery time but when it is too late then they prepare for home delivery. In delivery time when first labour pain starts, the woman lies down in one corner of the room, one of them rubs luke warm mustard oil on her abdomen to facilitate smooth delivery, after delivery the umbilical cord is cut with the help of a new blade and placenta is buried outside, in previous time they used bamboo stick instead of new blade. New born baby is cleaned by a clean cloth soaked with luke warm water, mother is not allowed to given bath on that day. Mother along with her child remains confined with living room for nine days, this lustration period is called 'Naththaghar' after that period mother and child is given bath, but not every day. She also said that during any kind of emergency at this time they prefer doctor near *Madla.*

After one hour of delivery the child gets breastfed, when asked about any kind of food restrictions immediately after giving birth to a child, then she said that, after delivery a few hours later a glass of warm water is given to drink and on that day she is not allowed to eat anything, twenty four hours after delivery, 'kutthidal'(lentil) and warm rice are given to mother to eat ; after delivery mother is not permitted to eat fish and meat for two months**.** She is allowed to eat only once in a day which is continued up-to two months. On ninth day after delivery, soaked bark of '*Rohora tree*' is given to mother to drink for quick recovery and if any pain starts mother gets massage on her whole abdomen with the mixture of warm mustard oil and garlic.

CONCLUSION:

Finally, bear in mind that entering pregnancy before 18 years old is a step which can cause different problems, both for the mother and for the child. Moreover, once a mother has given birth, she is advised to wait for at least 2 years before becoming for next pregnancy. If she go through abortion or a miscarriage, she is advised to wait for at least 6 months before entering pregnancy again. The factors which are directly or indirectly responsible for so called poor maternal and child health care may be lack of awareness due to low literacy rate, poverty, early marriage and consequently early age at first conception, insufficient nutrition, heavy

Genus Homo 5(2021)

workload etc. Again in many areas of this location transport gap, communication gap also prevails and such obstacles are mainly responsible for non-availability of proper medical facilities in proper time.

Due to the short time study and small sample size, in this study sufficient amount of socio-economic variables and their dietary habits are not included. In the present study an attempt has been made to examine the mother-child health care practices among the Birhor female. It is well known fact that the utilization of health care services is still low in those villages of Purulia district. Despite various special programmes of development and for easy accessibility of primary health care, analysis indicates poor coverage- be it ante natal care, safe delivery, immunization or family planning.

Recommendations: This present study indicates that a good number of Birhor female participants have knowledge of maternal health care services during pregnancy but many of them still unaware of the value of those services. As education plays an important role in enhancing knowledge so they still need maternal and child health care awareness programme through different NGOs and other government facilities.

Acknowledgements: The authors would like to pay special thanks to all the research participants for their co-operation during study.

Genus Homo 5(2021)

REFERENCES:

Bhatia, J., Bhargva, L., & Rao, N. S. (1996). Prevalence of Gynecological Morbidity in India: Results of Four Communities Based Studies. *Report present to the Ford Foundation.* New Delhi

Census of India. (2011). *A- 11 state primary census abstract for individual scheduled tribe – 2011.* Retrieved on 24/8/2021 from http://cencusindia.gov.in

Ganguly, N., & Roy, S. (2020) Utilization of Antenatal Care Services and Associated Factors: A Study on Lodha and Birhor Women of West Bengal, India. *International Journal of Arts Humanities and Social Sciences Studies, 5(5*), 9-18.

Ghosh, S &Malik, S(2008). Assessment and administration of health in a tribal community of India. *The Internet Journal of Biological Anthropology,*3(2).

Kanrar, P. & Goswami, M. (2020). Sociodemographic Profile, Reproductive Health and Nutritional Status Among the Juangs—A Particularly Vulnerable Tribal Group of Odisha, India. *The Oriental Anthropologist*, *20*(1), 135–149.

National Health Policy Document (2002). Govt.of India. Ministry of Health and Family Welfare. New Delhi.

Salehin, M. A. (2012). *Reproductive health of tribal populations in India: A sustainability Approach.* Unpublished Ph.D, thesis, The University of Texas. Arlington

Sinha, U. P. (1986). *Ethno demographic study of tribal population in India.* International Institute for Population Studies, Bombay.

Thaddeus, S., & Maine, D. (1994). Too far to walk: maternal mortality in context. *Social Science and Medicine, 38* (8), 1091-1110.

Wasserheit, J., Harris, J.R., Chakraborty, J., Kay, B.A., & Mason, K.J. (1989). Reproductive tract infections in a family planning population in rural Bangladesh. *Studies in Family Planning*. 20, 69-80.

World Health Organization (2012). *Guideline: Daily Iron and Folic Acid Supplementation in Pregnant Women.* Geneva.

World Health Organization (2013). *WHO recommendations on postnatal care of the mother and newborn.* Geneva

Genus Homo 5(2021)