

Child and Mother Health Among Baiga: A Particularly Vulnerable Tribal Group of Chhattisgarh

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Abstract

The study provides a glimpse of the maternal- child health profile of Baiga living in Bilaspur district of Chhattisgarh by highlighting the socio-economic and cultural variables of health. Community-based information always requires to comprehensive planning of health care strategy. The study has therefore conducted among the Baiga identified as one of the Particularly Vulnerable Tribal Groups (PVTGs) of Chhattisgarh. Under 5 mortality rate is one of the important health indicators of Sustainable Development Goals index score. In this indicator, tribe is lagging far behind the national level. Under 5 mortality rate and Infant mortality rate in studied Baiga population is more as compared to state's and country's tribal population. The study shows that it is because of their isolated living in remote areas, poor economic condition of the family, lowest educational achievement of the mother and their ignorance about mother and child health care services. Therefore there is a need of educational empowerment of women, improvement in the economic condition of the family through income generated programme based on local resources and proper implementation of existing government programme, directly and indirectly, related to health such as Janani Suraksha Yojna, Janani Shishu Suraksha Karyakaram, Jan Aroga Yojna, Poshan Abhiyan, Sacha Bharat and Beti Bacho Beti Pado.

Keywords: Economy; Education; Knowledge System; Health Culture; Health Care; Sustainable Development.

Introduction

Baiga has identified as one of the Particularly Vulnerable Tribal Group (PVTG) of Madhya Pradesh as well as Chhattisgarh because of their isolated living, forest dependency livelihood, pre-agricultural level of existence, subsistence-based economy, low literacy, high mortality and stagnant or declining population. They are in the stage of pre-agrarian economy because of their less skill in agricultural operation, small and infertile landholding and maximum dependency on forest resources. Debnath (2014) reported that nearly one-

third of their earning comes from the collection, processing and selling of forest product. Their economic dependency is mainly on forest produce collection and daily wage labour. They have been the forest-dwelling aboriginals inhabiting in forest and hilly region of Central India. A large number of Baiga inhabit on Achanakmar-Amarkantak Biosphere Reserve having a total area of 3,835.51sq. km. The central part of the reserve lies in Bilaspur district of Chhattisgarh and remaining part falls into Dindori and Shahdol district of Madhya Pradesh. Chhattisgarh has 7.50 percent of the country's scheduled tribe population. Tribal groups with a

total population of 78,22,902 constitute 30.62 percent of the state's population. However one of the important observations is that Chhattisgarh state recorded a decrease in scheduled tribe population to the total population of the state from 31.76 percent in 2001 to 30.62 percent in 2011. Madhya Pradesh is having the tribal population of 1,53,16,784 stands top with the highest population of the scheduled tribe in the country. Tribal population in M.P. contributes 21.09 percent of the total population of the state and 14.68 percent of the country's total scheduled tribe population (2011 Census). Sharma and Roy (2016) have pointed out that the decadal growth rate among Baiga in M.P. 'declined consistency in concurrence with the growth rate' of scheduled tribe population. It dropped from 28.0 percent in 1981- 91 to 26.5 percent in 1991- 2001 and 24.5 percent in 2001- 11. However the share of Baiga population in the total scheduled tribe population of M.P. is almost unchanged. It was 2.8 in 1981, declined to 2.7 in 1991 and continues at 2.7 in 2001 and 2011. Chhattisgarh state was formed in 2000 by the partition of Madhya Pradesh state. The Baiga population in Chhattisgarh is 89,744 in 2011. An attempt has now made to understand the Child and Mother Health of Baiga by highlighting the socio-cultural aspect of health and their knowledge system about health care services.

Material and Method

Area of the study:

The population of Baiga in the country estimates 5,52,495 (2011 Census), out of which Baiga population in Madhya Pradesh is 4,14,526 and in Chhattisgarh, it is 89,744. The largest grouping of Baiga inhabits in Shahdol, Umaria, Mandla and Dindhori district of Madhya Pradesh. The second group concentrates in Kabir Dham District of Durg division, Bilaspur district of Bilaspur division and Koriya district of Surguja division in Chhattisgarh state. A total of 41,601 Baiga populations were estimated in Kabir Dham district, followed by Bilaspur (21,817), Koriya (19,769), Rajnadaon (4115) and Korba district (866). Baiga tribe residing in Bilaspur district of Chhattisgarh has selected for the study as the core area of Achanakmar-Amarkantak Biosphere Reserve mainly falls in Bilaspur district of the state. Based on the records of Baiga Vikas Pradhikaran, Mollick et al. (2013) indicated a total of 5201 Baiga families with a total population of 24,218 inhabited in 62 villages of Bilaspur district on or before 2009, out of which 2828 families with a population of 13,226 lived in Kota block, 1284

families with a population of 5680 in Gourela block and 1089 families with a population of 5312 in Lormi block of the district. It has observed that the district has recorded a decrease in Baiga population from 24218 to 13223 after 2009. It is due to the declaration of Achanakmar Wild life Sanctuary as Achanakmar Tiger Reserve in 2009 in the name of wildlife conservation after passing the Recognition of Forest Right Act, 2006. Subsequently, it has decided to relocate the 8339 families of 25 villages from the critical wild life habitat (core area) of the Achanakmar tiger reserve. The affected families were tribals mainly Baiga, Bhaina, Sawta, Gond and Dhanwar.

Selection of the village

The study has carried out in two villages located in Kota Tehsil of Bilaspur district. The criteria adopted for the selection of the village as a sample village were villages having the significant number of Baiga Population, the geographical location of the village, nearest to the Achanakmar Tiger Reserve and distance of the village from a health centre. Villages, namely Umaria and Beheramuda adjacent to Achanakmar Tiger Reserve and dominated by the tribals, were randomly selected. A total of 144 Baiga families with a population of 625 reside in two villages, out of which 82 families live in Umaria and 62 families in Beheramuda. The studied 139 families have 611 individuals, out of which 305 are female. The number of female in the reproductive age group is 282. The child population is 230, out of which 78 are in the age under five.

Result and Discussion

Socio- economic Profile of Baiga Women:

Female literacy among Baiga in Chhattisgarh is only 30.8 percent according to the Census 2011, while literacy in total Baiga population of the state is 40.06 percent, 59.1 percent in state-tribal population and 70.28 percentages in total state population. On the other literacy rate among Baiga female in Madhya Pradesh is 37.9 percent as compared to the literacy rate of the total Baiga population in the state (47.2 percent) and state-tribal population (50.6 percent). The above figure shows that Baiga female literacy (30.8 percent) and literacy of the total Baiga population (40.06) in Chhattisgarh is lower than female literacy (37.9 percent) and literacy of the total population (47.2) among Baiga in Madhya Pradesh. The Baiga females (62.1 percent) are mostly illiterate in the studied village. The illiteracy

rate among women is more than eighty percent in the age group above 25. Only 6.7 percentages of women have completed primary level of education, and 1.7 percentages of women have come up to high school level. The highest percentage (38.1 percent) of women attended middle school is in the age group 11- 15. On the other, no women in the age group above 25 have come up to middle school. So it clearly shows that Baiga women are mostly illiterate or least educated. Low literacy level is one of the criteria for identification of Baiga as Particularly Vulnerable Tribal Groups (PVTGs). Other characteristics adopted for identification of PVTG are forest-dependent livelihood, pre-agricultural level of existence and subsistence-based economy.

The economy of Baiga tribe living in and around Achanakmar forest is mainly dependent on the forest as the source of their economy such as collection, consumption and selling of forest produce like flower and seed of Mohua, leaves of Tendu and Mohline and making bamboo basket and broom provides a good source of their family income. The economy of the families in studied village is based on agriculture, working as daily wage, making bamboo basket and collection of minor forest produce for their day to day need. Women contribute a very significant role in the local economy by making bamboo baskets and collection of Mahua flower, Tendu and Mohline leaves, which provides the primary source of their family income during the lean period of agriculture. A good number of families are involved in earning their income from selling of bamboo baskets known as "Jhaua" locally consumed for allied agricultural activities and small-sized bamboo brooms used for household activities. Making bamboo basket and broom are their traditional occupation based on local forest resources. After the declaration of Achanakmar sanctuary as Achanakmar tiger reserve, restriction has been imposed on the entry of tribal people into the reserve. As a result of which they have lost their forest-based livelihood, as it is not permissible to enter the tiger reserve area for the collection of minor forest product. The people have found no livelihood option. The only option is to go outside the area and work as wage labour. The livelihood of the tribal living in and around Achanakmar tiger reserve is at stake. Mollick and Mukherjee (2014) have pointed out that there is a need for recognition the tribals symbiotic relation with the forest before the starvation to death of the Particularly Vulnerable Tribal Group. Srivastava (2018) has mentioned that "Episodes of starvation are not unknown in tribal areas". "Zero hunger"

and "No Poverty" are the essential goals of Sustainable Development. As per the report of Niti Aayog on SDGs India Index 2019, the performance of the states on this index is not uniform. Tribal populated state Jharkhand is one of the worst performer states for "poverty" with a score of 28 and "Hunger" having the score of only 22.

Cultural Context of Mother and Child Health:

The belief in the interference of supernatural and human agency are more strong particularly in mother and child health of Baiga, as most of the disease of mother and children are believed to be caused by the indignation of deities, spirit and ghost intrusion, breach of the taboo and evil eye. They believe in the wrath of Sokhan Bir Mata and breach of taboo responsible for miscarriage, barrenness and irregularities in menstruation cycle. Excessive crying of the children without reason, suffering from high fever, dysentery and diarrhea are caused by evil eye and wrath of Burimata; vomiting and dysentery due to wrath of Dulha Dev and diarrhea, fever, pox and respiratory problem due to indignation of Thakur Dev and Gaon Ghasain (Mollick and Mukherjee, 2014). Kumar et al. (2016) are of the opinion, their "dependency on supernatural power is responsible for the non-acceptance of modern medicine".

As per their belief system miscarriage and barrenness are caused to be the result of a breach of taboo. They believe in that menstruation may get disturbed if the women during menstruation go to the sacred places such as places of worship and places where drinking water is kept, and food is cooked. In order to protect from the evil eye, pregnant women are advised to wear black bangles, not to go to places outside the villages and market. As a preventive device to protect the children from the evil eye, it is customary to wear black thread and Taviz made of the coin (paisa) gifted at the time of Chhatti (naming ceremony celebrated at the sixth day of birth) and a black mark on the forehead of the child. They also believe in that barrenness of women is due to intruding of the ghost known as Partein (the unnatural death of the small girl become Partein). Premi and Mitra (2017) observed that Barrenness was thought to be caused by Magic and Witchcraft (25.5 percent), Breach of taboo (12.5 percent) and wrath of deities (4.5 percent) as per the belief of male respondent among Baiga. A ghost named as Karuwa Baal is thought to be cause for headache, body pain and weakness. Asthma is due to intrusion of Mata mai and diarrhea, skin disease and waterborne disease due to invoking of Ghat

bahrin mata by the magical power of Tonhi. They believe in women dying during pregnancy become Churail, a spirit responsible for anaemia and high fever. Mollick and Mukherjee (2014) observed that the Magico religious specialist diagnose the causes of disease whether it is due to wrath of deities or spirit and ghost intrusion or sorcery by the various indigenous method such as Supa bati method, counting the stick and pulse through mantras (spells). Magico religious specialist known as Dewar performs the ritual activities to appease concerned deities as it is thought to be caused for the disease.

Health Profile of Baiga Women and Children

Let us understand mother and child health by the help of some important health statistics like Perinatal mortality rate (PNMR), Infant mortality rate (IMR), Under 5 mortality rate (U5MR), Child mortality rate (CMR) and utilization of mother and child health care services. PNMR considers as an important indicator of obstetric care relating to care and treatment of the mother during the pregnancy period and postpartum period by a trained health care provider. Lower utilization of maternal and child health care services such as antenatal care, institutional deliveries, deliveries under the supervision of trained health worker is underlying to be the reason for perinatal mortality. Mollick et al. (2013) noticed a high level of PNMR (127) in the Baiga population. In his another study (2014), it observed that PNMR was 126.76. As per present study, it (PNMR-133.33) is almost similar to earlier studies, whereas PNMR in Chhattisgarh is 48.2 as compared to the national average (36) as per NFHS-4. It indicates that PNMR in the population of Baiga is higher than the state and national average. Mollick et al. (2013) observed high-level IMR (113) in Baiga population of Bilaspur district in Chhattisgarh. The present study also indicates the high level of IMR (133.33) in the Baiga population than state (54) and national (40.7) level. The infant mortality rate of tribal population in Chhattisgarh is 65.8, while in national level it is 44.4 (NFHS-4). Infant mortality is more among the infant of those mothers who receive no medical aids during the pregnancy and after the delivery periods. The study also states high level of U5MR (333) in the Baiga population than the tribal population in the state (80) and national (57) average. It also indicates that only 45.5 percent of women have received antenatal care for their recent live birth. More than 50 percent of mothers in all age group receive no ANC. Lower utilization of ANC is more among

those mothers who has delivered more than three children. 45 percent of mothers did not feel the necessity to avail such services, and 17 percent of mothers mentioned their lack of knowledge of such kind of services. The study reports that institutional deliveries (only 9 percent) are not popular among them, as they do not feel the necessity to deliver in a health institution and death. Most of the mothers (90 percent) deliver at home thereby increasing the susceptibility to various infections and death, while Janani Suraksha Yojna has the objective of reducing maternal and neonatal mortality by promoting institutional delivery among poor pregnant women. The study also indicated that members of close kin attended most of the home deliveries (about 50 percent), followed by the traditional birth attendant known as Dai (about 25 percent). A good number of mothers (about 64 percent) reported at least one symptoms of post-delivery complication for their recent live birth, out of which 52 percent of mothers received no treatment for post delivery complication. Mothers who sought treatment for post-delivery complication are mostly from traditional healer knowing healing properties of medicinal plants. Concerning the medicinal knowledge of delivery care, it has observed that the root of Chirchira is given for normal delivery, the bark of Chirchita (*acanthous accepra*) for relief of pain at the time of delivery. Concerning the knowledge system about the family planning, it has observed that most of women are aware of "Telaiphool" used as a preventive measure of conception. The pregnant women are advised not to take liquor to avoid miscarriage. Debnath and Upadhyay has highlighted the medicinal importance of plants used in delivery care by the Gond and Baiga tribe of Madhya Pradesh. As per their study, Apamarg (*achyranthes aspera*) is given at the time of delivery and also used in urinary infection. Saphed Musli (*chlorothyum sp*) is used after delivery, Nirdundi (*vitex negundo*) for post-delivery cleaning, Satawar (*asperagus recimosus*) and Ghrit Kumari (*aloe vera*) for post-delivery care.

Ecological Context of Mother and Child Health

Baiga continues to hold ethnomedicinal plants as the indigenous medicine, by which root, bark, leaf, flower, seed and fruit of several plants are used for good health and treatment of different kind of diseases. Mollick and Mukherjee (2014) observed that bark of *mangifera indica* is used in jaundice, the root of *erythrina indica*, *suertia chirayata* and *solanum xanthocarpum* in leucorrhoea, fever and asthma, respectively. The bark of Mahua

(*madhuca indica*) is used for stomach pain, Latka (*bacura accepra*) for curing skin disease, Chirayata (*andrographis paniculata*) in dysentery and fever; the bark of Dhawaiphool (*woodfordia fruticosa*) is chewed in cough. The root of Mokra Kanta (*pengulana clemia*), Bhuineem (*swertia chirata*) and Braseem (*flemegia mana*) is used in diarrhea and dysentery. The root of Bach (*acolas cailonus*) is used in stomach pain; Bhatkatiya (*solanum xanthocarpum*) for curing asthma, Bhuineem (*swertia chirata*) in fever and root of Pangara (*erythrina variegata*) with water is given to drink in leucorrhoea. The root of Akphool (*calotropis procera*) and stem of Chironji (*buchanania lanzen*) is taken to cure toothache. Fruits of Harra (*terminalia chebula*) and Bahera (*terminalia bellerica*) are chewed in cough. The seed oil of Bhelwa (*semecarpus anacardium*) is used in skin disease locally known as Bemchi and oil of Ratanjot in burning. Oil extracted from the seed of Orandi is used to cure wound caused by burns. The above discussion shows that they are more dependent on indigenous medicine of ethnomedicinal plants as it is well known and more accessible and affordable as primary health care.

Conclusion

The health-related indicator in India has shown that the tribe, as well as tribal populated state, is lagging far behind the national level. "People continue to die in large numbers in the absence of quality health care in tribal areas" (Joshi, 2014). According to evidence in Public Health Policy, 2016, Jharkhand, Chhattisgarh and Odisha have reported very high maternal mortality rate. A survey is known as Jaccha Baccha survey conducted in June 2019 in six states (Uttar Pradesh, Chhattisgarh, Jharkhand, Madhya Pradesh, Odisha and Himachal Pradesh) has found that "a high proportion of women do not eat enough during pregnancy". It has also mentioned that "The poor health of pregnant and nursing women, as well as inadequate health care infrastructure, lie at the heart of India's child nutrition crisis". It is underlying to be the reason for high infant mortality rate in a tribal populated state like Chhattisgarh (54), Madhya Pradesh (51.2), Jharkhand (43.8) and, Odisha (39.6). Chhattisgarh has recorded high level of IMR (65.8) and U5MR (80) in tribal population also. Ghosh (2020) quoted that "in 2017 UNICEF estimated 8,02,000 babies had died in India". As per the report of NFHS-4, IMR among the tribal population (65.8) in Chhattisgarh is significantly higher than the state (54) and national

(40.7) average, whereas U5MR among the tribal population in Chhattisgarh is 80 as compared to the state (64.2) and national (50) level. Chhattisgarh is one of the states having the highest proportion of such death with 71.6% in 2017. Malaria is one of the important reasons of death of children under the age of five years. The second highest of Malaria case in the country was in Chhattisgarh having the cases of 78,717 in 2018 and 1,40,727 in 2017. Joshi (2014) has suggested "the need of health bureaucracy in Chhattisgarh to look into the aspect of health care and health education quite seriously".

The study has made at a micro level to examine mother and child health of Baiga residing in two villages of Bilaspur district in Chhattisgarh. The studied village shows that Crude Birth Rate in Baiga population (14.72) is lower than the state (20.7 as per NFHS-4) and national level (19.0 as per NFHS-4), While crude Death Rate in Baiga population is 16.36. It is quite high as compared to Bilaspur district (7.5) and state (7.6) level as per the Annual Health Survey, 2010-11. The study has indicated a high level of Child mortality rate (CMR) in Baiga population (43.47), whereas CMR in state's tribal population is 15.1 and 13.4 in country's tribal population (NFHS-4). The death rate due to Diarrhea was estimated 4.90. Women mortality in the reproductive age group of 15-44 estimates at 14.28. The study has also shown a high level of PNMR (133.33), IMR (133.33) and U5MR (333.33) in Baiga population than the state and national level. The persistence of high PNMR, IMR and U5MR are because of lower utilization of antenatal care (ANC), absence of quality health care services, their marriage and pregnancy at an early age, successive pregnancy, lowest educational achievement of mothers and poor economic condition of the family. It has observed that a good number of women (more than fifty percent) married before crossing the age of 18. The mean age at marriage for women is 17.22. The study has also indicated the higher proportion of women becoming a mother at an early age and became pregnant more than three times (about 28 percent of married women). Therefore awareness program about the hazards of early marriage, childbearing at an early age and successive pregnancies needs to be arranged so that pre and postnatal problem can be avoided. Baiga living in and around the Achanakmar tiger reserve depends on the forest as it plays a key role in their socio-economic life. After the declaration of Achanakmar Sanctuary as Achanakmar tiger reserve, their women-centered forest based economic life has been badly affected. The availability of forest resources has reduced as restriction has imposed

on their entry into the forest. Therefore there is a need for recognition in their relationship with the forest. Srivastava (2018) has stressed on the need of protecting the land and forest rights and offering the benefits of development to build up the confidence among the tribal people. It has found that most of the women are illiterate (more than sixty percent) or little educated (about ten percent). A negligible percentage of women (below five percent) have completed eight years of schooling. Lowest educational achievement of the mother, ignorance of the mother about the importance of health care services and their living in isolation is the reason for the lower utilization of ANC (only 45.5 percent of mothers). Kumar et. al. (2016) has noticed, "Mothers were not accepted antenatal care during their pregnancy due to their misperception on 'not necessary and customary'". The utilization of antenatal care and institutional births vary by the wealth status of the household and mothers schooling (Ram et al, 2017). The study has indicated the high percentage of home delivery (about ninety percent) practices assisted by a close kin member of the family (about 50 percent) and somewhere by Dai (about 25 percent), as they feel no necessity to deliver in a health institution. A good percentage of mothers (more than sixty percent) have reported at least one symptom of post-delivery complication for their most recent live birth, out of which more than 50 percent of mothers received no treatment. Therefore there is a need for urgent attention towards educational and economic empowerment of women as well as raise the awareness about the importance of antenatal care services and institutional delivery. Development programmes such as Janani Suraksha Yojna, Jan Aroga Yojna, Janani Shishu Suraksha Karyam Karam, Poshan Abhiyan, Sacha Bharat and Beti Bacho Beti Padao need to implement quite seriously in tribal areas in keeping with Sustainable Development Goals.

Sustainable Development Goals (SDGs) follow and expand on the Millennium Development Goals (MDGs), which was ended in 2015. In 2015 a new index known as SDG had developed by the United Nations to assess the achievement of each country. Health is at the core of Sustainable Development Goals (SDGs). On the basis of the study at the international collaboration the progress of 188 countries in between 1990 to 2015 towards achieving health-related indicators was measured by SDG index score. It has observed that India ranks 143 in a list of 188 countries. "Zero hunger" is one of the goals of sustainable development. As per the latest Global Hunger Index, India ranks 102 among the 117 countries with a score of 30 (Mishra,

2019). U5MR is one of the indicators of health in the Index of Sustainable Development Goals. Roy (2019) has pointed out that country "has the highest burden of death among children" (in 1000s) under 5 years of age "with over 8 lakh (882) death in 2018". Malnutrition, Pneumonia and Malaria are the risk factors of death of children under the age of five years. Malnutrition attributed 68.2 percent of such death across the country in 2017. Forecasts model developed by the researcher of John Hopkins University has indicated that more than 17 lakhs Under 5 age of children in India are likely to die due to Pneumonia by 2030. More global malaria death in 2018 was found in African regions and India. The cases of Malaria in India recorded 4,29,928 in 2018 and 8,44,558 in 2017. According to the World Malaria Report, 2019 released by the World Health Organization, about 90 percentages of burdens of Malaria cases in India are in Chhattisgarh, Odisha, Jharkhand, Uttar Pradesh, West Bengal, Madhya Pradesh and Gujarat. Malaria, Safe hygiene practices and Under 5 mortality rate are the crucial indicators of child health. It used in assessing each country's health performance on Sustainable Development Goal in 2015. The first global analysis has revealed that on the scale of 0-100 India has scored only 10 points on Malaria, 08 points on safe hygiene practices and 39 points on Under 5 mortality. Prof. Vikram Patel, London school of Hygiene and Tropical Medicine has commented on the reason, Why India is one of the worst performing countries in health? It "is because its political and medical classes have persistently ignored public health principles which ultimately improve a nation health, such as addressing social determinants of disease and ensuring high quality, accountable and universal health care for people" (Mascarenhas,2016).

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