

Role of Dhai Maas in Reducing Maternal and Infant Mortality through Ethnomedicines among Indigenous Community in Mayurbhanj District, Odisha

¹Ms. Yagyaseni Naik, ²Dr. Babita Das

Ph.D. Research Scholar, Dept of Sociology, KISS Deemed to be University, Bhubaneswar, Odisha, India
Assistant Professor, Dept of Sociology, KISS Deemed to be University, Bhubaneswar, Odisha, India

Abstract

Many tribal communities in Odisha hold traditional beliefs and practices regarding pregnancy and childbirth. The influence and popularity of traditional birth attendants (TBAs) and ancestral beliefs were identified as barriers to accessing Maternal and Child Health (MCH) services during pregnancy and delivery within these communities. Unhygienic umbilical cord care practices, delays in initiating breastfeeding, and the withholding of colostrum were also prevalent. Consequently, there is a need for culturally sensitive interventions to transform these traditional practices related to maternal and child health. Demographic information was collected from the dhai maas, Pregnancy women, mothers by using a structured interview schedule, dealing with 40 respondents (all respondents are females are taken) through simple random sampling. The objectives of the study are to determine the traditional practices and knowledge of dhaimaas that contribute to reducing maternal and infant mortality, to assess the role of dhaimaas in reducing maternal mortality in tribal areas and to determine the factors that will enhance the knowledge of dhaimas. This study is an empirical analysis of role of dhadmaas reducing maternal and infant mortality tribal area in the Mayurbhanj district. According to above studies, it can be concluded that the role of dhaimaas in reducing maternal and infant mortality in Tribal areas of Mayurbhanj District, Odisha are satisfied.

Keywords: Antenatal care, home delivery, dhaimaas, Tribal women, Mayurbhanj District

Introduction

The human resource described here specifically engaged by women during childbirth is the traditional birth attendant. Currently, they assist in the majority of deliveries taking place in rural areas of developing countries; however, their roles vary depending on culture and changing times. There is little question that they play a vital part in providing cultural competency, comfort, empathy, and psychosocial support at birth, which benefits both the mother and the newborn. TBAs have been a key part of plans to enhance maternal and neonatal outcomes in several nations. Recent investigations, however, have concluded that there is little effect of TBA training on maternal mortality (Bergström. & Goodbur, 2001). Antenatal care is the "care before birth" that aims to reduce prenatal mortality, low birth weight, and promote the health of the mother and fetus. Nonetheless, the effectiveness of prenatal treatment depends on its availability, quality, and content. The overall goal of prenatal care is to ensure that the mother and unborn child are healthy at the end of the pregnancy. It offers significant chances for delivering several interventions to expectant mothers that could be essential for their unborn child. Additionally, the prenatal care phase offers a platform for information sharing that could improve outcomes for both mothers and children. Therefore, it has been proposed that prenatal care could help lower the maternal death rate and guarantee that a pregnant woman gives birth with the help of a of an experienced attendant. Good prenatal, natal, and postnatal care can avert the majority of mother deaths and pregnancy complications. It was shown that many indigenous communities largely neglected maternal and child health care procedures. Numerous tribal tribes, like

the Kutia Kondhos of Odisha, the Santals, the Juansaris, the Kharias, and others, were found to have largely disregarded maternal and child health care practices. A significant portion of expectant moms were not vaccinated against tetanus (Hansdah & Rath, 2021). Lakhwinder Singh and Gupta (2000) attempted to investigate health seeking behavior and health care services in Rajasthan. Study findings indicate that people in tribal communities do not attach much importance to common issues arising during the pre-natal, delivery, and post-natal periods. This is because they initially treat reproductive and general health issues at home, or first seek advice from local faith healers followed by traditional healers or herbalists. This has in turn driven research on the effect of interventions that specifically trained traditional birth attendants to improve pregnancy outcomes and reduce adverse events. The aim of this SRMA was to quantitatively synthesize all existing evidence on training traditional birth attendants and adverse pregnancy outcomes from both historical and modern studies. It proves as an expedient tool to assess the costs, benefits and risks related to training. It helps establish if these interventions reduce maternal and neonatal mortality, labour complications or other unintended side effects of care in a significant way. The need for further research can be identified through a revised SRMA. (Dwivedi & Shamim etc. 2014). Pregnant women who underfed themselves are more likely to have a tiny baby, have an easier birth, and experience fewer labor difficulties. Tribes prohibited pregnant women from eating certain foods because they were thought to generate heat and endanger the fetus. They were masurdal, papaya, and banana. Tribal women thought that issues during pregnancy and childbirth were caused by either past wrongdoing or the influence of bad spirits that lived in forests and waterways. Generally speaking, pregnant women were protected from evil spirits by wearing metallic clothing, hooks, chiles, lemons (Begum, S. & Sebastian, A. 2017). Researchers and policymakers are very concerned about the persistently poor mother and child health in developing nations, particularly in Sub-Saharan Africa and South Asia (Bangladesh, India, and Pakistan). Asia has the highest percentage of births helped by traditional birth attendants (TBAs) (41%), according to a demographic and health survey (Berer, 2003). In addition to helping with delivery, TBAs offer ongoing community health care services. There is proof that some home delivery techniques, along with a delay in identifying and reporting difficulties, can seriously injure both mothers and infants (Guha, 1998, Guha, 2005, OHCHR, 2006, WHO, 1999).

Objectives

- To determine the traditional practices and knowledge of dhaimaas that contribute to reducing maternal and infant mortality.
- To assess the role of dhaimaas in reducing maternal mortality in tribal areas.
- To determine the factors that will enhance the knowledge of dhaimas

Materials and Methods

The Mayurbhanj district has selected as the study area as predominantly populated by scheduled tribes (Bathudi, Santal, Bhuyan, Kolho, Khadia, Gond, Bhumij). Mayurbhanj district is located on the north side of Odisha. This study was conducted from the Dhaimaas who had traditional birth attendants who had conducted at least one delivery were the study participants. 40 respondents of eight village each village 5 respondents such as: Siromanipur, Sannai, from Jashipur block. Nuabeda, Talanga from Sukruli Block, Goudagan, Sarada from Karanjia Block and Simudiha, and Boring from Thakurmunda block constitute as our sample.

Data Collection Tools

Both qualitative and quantitative methods were employed for data collection. Interview guides, based on specific themes related to prenatal and postnatal care, were developed and pre-tested to gather information from mothers and traditional birth attendants. These questionnaires covered various aspects of the study, such as the place of

delivery, the birth attendant, the type of delivery, pregnancy-related issues, and complications experienced by tribal mothers. In addition to the aforementioned measures, demographic details of the respondents were also collected as part of the study.

Result and Discussion

The demographic characteristic of all participants of the study (in-depth interviews and key informative interviews) is presented in table 1.

Table No. - 1 distribution of dhais according to age, education and occupation, types of family, annual income, main source of income.

Variable	Frequency	Percentage
Age		
40-50	15	38%
50-60	20	50%
60- above	5	12%
Education		
Illiterates	22	55%
1-5 th	14	35%
6 th -10 th	4	10%
Occupation		
Primary occupation	37	92.5%
Secondary occupation	3	7.5%
Types of family		
Nuclear	12	30%
Joint	28	70%
Extended family	0	0%
Annual income		
Ten thousand one to Twenty thousand	25	62.5%
Twenty thousand one to Thirty thousand	15	37%
Thirty thousand to above	0	0%
Main source of income		
Agriculture	22	55%
Business	0	0%
Labourer	18	45%

A total of 40 'Dhaimas' (traditional birth attendants) participated in this study; among them, 15 were aged between 40 and 50 years, 20 were between 50 and 60 years, and 5 were over 60 years old. It is deeply distressing that the burden of marriage pushes girls into a precarious situation at a time when their physical and mental development is not yet complete. Such adolescent girls become mothers, yet most are physically unprepared for motherhood; consequently, their newborns fall victim to malnutrition. In tribal areas, women generally marry between the ages of 15 and 17. According to the data, the majority of women are either illiterate (55%) or have received education up to the primary level (Classes 1–5) (35%), whereas only 10% have studied up to the secondary level (Classes 6–10). As tribal communities inhabit forest areas, they rely primarily on the forest and forest-based food sources for

their livelihood. They live in joint families to facilitate the smooth management of daily activities; it is observed that 70% of the women live in joint families, while 30% live in nuclear families. The table also reveals that 62.5% of the participants have an annual income ranging from ₹10,000 to ₹20,000, while 37% have an annual income between ₹20,000 and ₹30,000. 55% of the households depend primarily on agriculture, while 45% earn their livelihood by working as laborers. Analysis of data from all study participants (conducted through in-depth interviews and key informant interviews).

To determine the traditional practices and knowledge of dhaimaas that contribute to reducing maternal and infant mortality.

1. Providing Prenatal Care and Guidance: - Traditional midwives (Dhai Maa) provide guidance to pregnant women regarding proper nutrition, rest, and healthy daily habits during pregnancy. They often recommend the consumption of traditional foods and remedies that help boost the strength and health of both the mother and the baby. By offering regular guidance throughout the pregnancy, they help minimize health-related complications.

2. Emotional and Psychological Support: - Midwives (Dhai maa) provide emotional support and reassurance to pregnant women and their families; consequently, their presence during pregnancy and childbirth helps alleviate fear, stress, and anxiety. This emotional support has a positive impact on the health and well-being of both the mother and the baby.

3. Assistance during childbirth: - Traditional birth attendants play a vital role in assisting women during childbirth. They employ both physical techniques and medicines to facilitate the delivery process. Their support is particularly crucial in rural areas of the country that lack access to hospitals or trained medical professionals.

4. Maintaining hygiene: - For example, most birth attendants follow hygienic practices during childbirth; they clean the delivery area with water and wash their hands before coming into contact with the newborn or handling contaminated clothing and instruments. These hygienic measures reduce the risk of infection for both the mother and the baby, thereby curbing the spread of disease.

5. Postpartum care for the mother and newborn: - Traditional birth attendants provide comprehensive postpartum care to the family, attending to the needs of both the mother and the infant. In addition to assisting with baby care, bathing, and traditional therapeutic massages, they support breastfeeding and offer dietary advice to the mother. This postpartum care helps protect the mother and child from various illnesses and contributes to their physical well-being.

6. Knowledge of medicinal remedies and indigenous medicine: - The practices of traditional midwives often encompass traditional knowledge regarding medicinal remedies and treatments for pregnancy-related issues, pain relief, or postpartum recovery. The community continues to value this knowledge, which has been passed down through generations.

7. Recognizing danger signs and seeking assistance: - With this training, 'Dhai Mas' (traditional birth attendants) can identify danger signs such as excessive bleeding during pregnancy and childbirth, prolonged labor, fever, or extreme weakness. When faced with complications, they can advise families to seek care at a hospital or from a health worker, thereby helping to reduce maternal and infant mortality rates.

To assess the role of dhaimaas in reducing maternal mortality in tribal areas.

In certain tribal areas where modern healthcare facilities are not immediately accessible, the role of 'Dhai Mas' is crucial in preventing maternal mortality. Most tribal communities reside in remote, inaccessible areas far from hospitals or health centers, where transportation facilities are also inadequate; consequently, families adhere to traditional practices regarding prenatal and postnatal care that have been passed down through generations. Amidst these adverse conditions, mental stress, and emotional challenges, traditional midwives ('Dhai Mas') serve as vital sources of support for pregnant women throughout the entire journey of pregnancy and childbirth. They are highly respected within the community and, drawing on the experience of generations, they know "what needs to be done": they instill confidence and trust among local families facing pregnancy.

A significant part of their work involves prenatal care; they advise expectant mothers on nutrition, rest, the use of traditional medicines, and safety measures. In tribal areas where awareness regarding maternal health is limited, these birth attendants educate women on the importance of self-care during pregnancy. They also provide emotional support to women and help them remain calm and positive. This type of emotional care improves the mothers' health and helps reduce stress during pregnancy.

Traditional birth attendants (Dhai Maa) assist during childbirth, drawing upon age-old techniques they have used for years to help women deliver babies. They provide physical support and companionship to the mother, guide her on breathing techniques during labor, perform massages, and deliver the baby. These caregivers are often the only source of assistance for childbirth in remote villages where medical facilities such as doctors or nurses are unavailable or located far away. They have been trained to ensure hygiene standards, such as handwashing and the use of clean clothing. These are some practices aimed at preventing infections in both mothers and newborns. For instance, another study focuses on training birth attendants in highly developed areas to help reduce maternal and infant mortality rates. These birth attendants encourage women to breastfeed and educate new mothers on nutrition and health; they also provide care for mothers and newborns including monitoring for danger signs while emphasizing the importance of medical treatment. Families facing complications consult trained midwives during emergencies and, if necessary, are referred to health centers or hospitals. Rapid diagnosis of health issues is saving lives in tribal nations.

Health experts believe that traditional birth attendants who often lack formal professional training should receive some training to blend their inherited knowledge with medically safe practices. Such training could assist them in maintaining hygiene, identifying complications, and referring patients to hospitals when necessary. Maternal healthcare in tribal areas could improve if effective, tradition-based tribal practices were integrated with modern healthcare services. UBTAs have been trained to ensure the delivery of affordable and culturally acceptable services to tribal women at the Gram Panchayat level. These practitioners leverage traditional knowledge and emotional support, serving as trusted sources of information within the community a role that fosters trust and is crucial for maternal and child healthcare. With adequate training and support, they can safely assist mothers in remote tribal areas and help improve health outcomes.

To determine the factors that will enhance the knowledge of dhaimas

Appropriate social, educational, and health-related measures need to be undertaken to enhance the knowledge regarding maternal healthcare among 'Dhais' (traditional birth attendants) working in the Mayurbhanj district of Odisha. Formal training programs organized by the Health Department or voluntary organizations (NGOs) play a crucial role in this regard. These birth attendants provide vital guidance on safe prenatal care, the delivery process, postnatal care, hygiene and sanitation during childbirth, as well as the identification and management of danger

signs in newborns. Research-based information is available, which they can integrate with their indigenous knowledge through appropriate training. It helps them understand the challenges of childbirth, reduce the risk of complications (such as the need for hygienic umbilical cord cutting), apply turmeric and rice bran to their babies before bathing them, and initiate breastfeeding immediately.

A crucial component of this aspect is the cycle of refresher training and learning. Since health-related practices and knowledge require updating, the impact of a one-time training session cannot be sustained. For traditional birth attendants, refresher training sessions integral to their profession help correct unscientific practices, enhance skills, and provide information. Demonstration and practice build confidence, which aids in retaining the information learned. Interaction with health workers, ASHA workers, ANMs, or nurses forms a vital part of this process. These individuals have long-standing experience and possess extensive knowledge regarding every aspect of the work. In a changing landscape, we can enhance the traditional skills of Dhai Maa (traditional birth attendants) to ensure better care delivery in the less-educated villages of Mayurbhanj. This can be achieved through training (focusing on key elements), refresher sessions for health workers, community awareness that blends modern and traditional knowledge (going beyond just hand hygiene), field demonstrations, and a shift towards the use of safe delivery kits. Strengthening these skills assists them in providing safe care, with the aim of preventing maternal and infant deaths among rural tribal communities.

Conclusion

A study reveals that traditional birth attendants play a pivotal role in reducing maternal and infant mortality rates in the tribal region of Mayurbhanj, Odisha. Traditional beliefs and practices associated with childbirth within the local tribal community have negatively impacted antenatal care, institutional deliveries, and breastfeeding practices. Tribal women perceive many of these beliefs and customs as integral to their culture; therefore, culturally acceptable interventions targeting the tribal population are essential to achieving better Maternal and Child Health (MCH) outcomes. Pregnancy and childbirth are major events in a woman's life, impacting her physical, mental, emotional, and socio-economic well-being. Working with partner organizations, the CDC conducts health research to answer questions on how to optimize women's health before, during, and after pregnancy, as well as how to reduce both short-term and long-term complications. Women's health solutions should be maintained for everyone.

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