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Original Research Article

Perspectives of women and community workers regarding maternal and newborn care among tribal areas of Maharashtra, India: a qualitative study

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ABSTRACT

Background: Tribal populations are vulnerable; have lower health and social indicators as compared to the general population. The objectives of this paper were to know the awareness and perceptions about maternal and newborn care, treatment-seeking behaviour, constraints faced by reproductive age group women while accessing services and by the auxiliary nurse midwives (ANMs) and accredited social health activists (ASHAs), while providing the services.
Methods: A qualitative study was conducted in two blocks of Palghar district (Dahanu and Jawhar) in Maharashtra, India from February 2021 to September 2021.Twenty-four focus group discussions (FGDs) were conducted among three groups: Reproductive age group women (18-45 years), ASHAs and ANMs in the study area. A textual and contextual analysis was done manually with the help of the prepared FGD guide.
Results: Majority of the women were aware of early registration and danger signs of pregnancy. They had certain misconceptions about diet in the postnatal period and consumption of iron and folic acid tablets. Prelacteal feeding was not practiced; exclusive breastfeeding and weaning practices were reported to be satisfactory. All three delays were reported by the women and the health care workers.
Conclusions: Misconceptions related to MCH care and nutrition among tribal women can be addressed through health education messages. Infrastructure, facilities, manpower, and transport facilities need to be strengthened in tribal areas, especially below the subdistrict level. The study findings indicate the need to address three delays by the health authorities in the study areas to reduce maternal and perinatal mortality and morbidity.

Keywords: Maternal, Newborn, Qualitative, Services, Tribal, Women

INTRODUCTION

Maternal and perinatal mortality reflects the quality of health care during pregnancy and early neonatal period. International studies provide evidence that tribal populations have poorer health and social outcomes than non-tribal populations.[1] The tribal population in India constitutes a total population of 104 million, i.e., 8.6 per cent of the Indian population, which makes it the world's largest population of indigenous people.[2] They are vulnerable; have lower health and social indicators as compared to the general population. They experience challenges in accessing MCH services due to difficulties in transportation. Maternal and perinatal mortality in tribal areas is higher as compared to other areas. Health care for tribal people remains subsumed in the rural health system.[3] Quantitative studies suggest that even with the remarkable achievements of modern medicine, healthcare delivery services in tribal communities still need improvement.[3-5]

The tribal population either delays seeking treatment or usually seeks services from the traditional healers first and then approaches the health care personnel if not cured. The awareness about danger signals during pregnancy and for the newborn is low among the tribal population, which results in delay in seeking treatment.[6] The Three Delays Model, originally developed in the context of maternal mortality in low-income settings is influenced by socioeconomic factors, such as wealth and female education, cultural factors such as beliefs and customs, structural factors such as accessibility of care, and health system level factors such as quality of care.[7,8]

The objective of the present paper was to know the awareness and perceptions about maternal and newborn care and treatment-seeking behaviour among reproductive age group women and community workers perspectives in two tribal blocks of Palghar district in Maharashtra. The paper also explores how these may contribute to the three delays in maternal and newborn care.

METHODS

The present qualitative study was conducted in two tribal blocks of Palghar district (Dahanu and Jawhar) in Maharashtra, India from February 2021 to September 2021 (Figure 1).

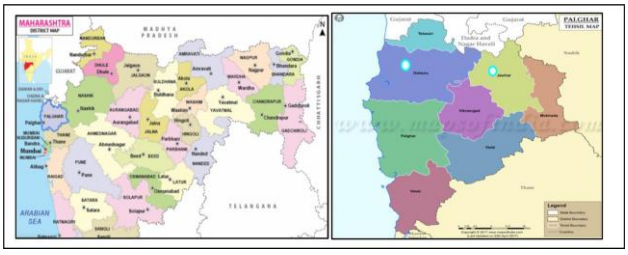

Figure 1: Study area in Palghar district, Maharashtra, India.

The main tribes are Kathodi, Katkari, Kokana, Koli Mahadeo, Koli Malhar, Warli, Vanjari, Thakar, Thakur, Dubala, Dhor Koli, and Tokre Koli.

The study was planned with a conceptual framework mainly exploratory in nature. A total of 33 focus group discussions (FGDs) were planned among three groups, reproductive age group women (age 18-45 years), ASHAs and ANMs. However, a total of 24 FGDs were conducted as saturation of responses was achieved. (Table 1). Consolidated criteria for reporting qualitative research checklist were used. Inductive content analysis was planned; themes were identified and FGD guide was prepared prior to conduction of FGDs for each group. The approach used was emergent-systematic focus group design, in which, emergent would refer to reproductive age group women which were planned to be used for eliciting responses related to awareness, perceptions, and treatment-seeking behaviour of women. Systematic would refer to FGDs among health care workers which were planned to be used for verification of the above-mentioned themes in women's FGDs. The additional themes in FGDs of health workers were related to their training status and needs, infrastructure, and facilities for the provision of maternal and newborn care in the study areas. Emergent model was used which referred to some of the issues which were elicited during conduction of FGDs which were not predetermined.

One-day training was imparted to the staff by the principal investigator (PI) having public health expertise and the co-principal investigator (Co-PI), a pediatrician for conduction of FGDs. For FGDs among reproductive age group women, inclusion criteria were resident of the area for last one year either pregnant or at least had one child and willing to participate in the study. The ASHAs approached the women meeting eligibility criteria and requested them to come to subcentres/Anganwadi which was close to their residence and FGDs were conducted in these subcentres/Anganwadi. It was ensured that there was no one besides the participants and the research team. For FGDs among ASHAs and ANMs, purposive sampling was done for the selection of the participants; they were selected from the PHCs in the two study blocks. Initial one-two FGDs in each group were conducted by female researchers (PI and Co-PI), who were full time scientists in research organization with training in qualitative research. Subsequent FGDs were conducted by a trained and qualified female project scientist with social science background with training in qualitative research. Before commencing each FGD, the participants were explained about the study details such as purpose of the study, how privacy and confidentiality would be maintained. Thus, a rapport was established with the participants before commencement of the FGDs. The investigators were from urban area and with medical background, had experience of working in tribal areas, and hence tried to address introspective reflexivity to maintain research focus by bracketing biases and attitudes

towards tribal population to minimize, if not prevent, their influence on the research process.

To address reflexivity and positionality, investigators shared their background with participants at initiation point to build trust. The questions were non leading and open ended so that views and perspectives of participants are expressed well. FGD team comprised of two investigators so that one conducted FGD and other investigator provided additional perspectives to reduce bias. Further, participants were allowed to express their views without any interruption or any comments.

A written informed consent was then taken from each participant. Illiterate participants in FGDs among reproductive age group women were explained about the study in the presence of an impartial witness and their thumb impression was taken. No refusals were noted among all the three groups. Privacy and confidentiality were maintained during the FGDs and were also assured post FGDs. Each FGD was conducted for approximately one to two hours. Field notes were made during the FGD and audio recording was also done. Written informed consent was taken for audio recording of the discussion during the FGD. Anonymity was maintained by the investigators during data collection, reporting and analysis.

The FGD transcripts from field notes and audio recordings in the local language (Marathi) were translated into English and were coded. Coding was done independently by four data coders; findings of each FGD were reviewed and there was agreement amongst them. A textual and contextual analysis was done manually with the help of the prepared FGD guide as per the themes identified separately for each group while subthemes were derived from the collected data. For each theme in the FGD guide, responses from each group were compiled separately.

RESULTS

Socio-demographic background of the participants

Each FGD comprised of 8-10 participants; thus, a total of 224 participants attended the FGDs. (reproductive age group women- 61, ASHAs-120 and ANMs- 43). The details of FGD participants are provided in Table 1.

Table 1: Details of FGDs conducted in Dahanu and Jawhar blocks of Palghar district.

Name of the block	Name of the group	No. of FGDs targeted	No. of FGDs conducted
Dahanu	Women of reproductive age group (18-45 years)	9	5
	Accredited social health activist (ASHA)	9	9
	Auxiliary nurse midwife (ANM)	5	3
Jawhar	Women of reproductive age group (18-45 years)	4	2
	ASHA	4	3
	ANM	2	2
		33	24

Table 2: Socio-demographic details of FGD participants in Dahanu and Jawhar blocks of Palghar district.

Details	Reproductive age group women (n=61) N (%)	ASHAs (n=120) N (%)	ANMs (n=43) N (%)
Education			
Illiterate	10 (16.4)	-	-
Primary	06 (9.9)	4 (3.4)	-
Secondary	24 (39.4)	67 (55.8)	-
Completed high school	7 (11.4)	40 (33.4)	21 (48.9)
Completed higher secondary	12 (19.7)	8 (6.6)	19 (44.2)
Graduate	2 (3.3)	1 (0.8)	3 (7.0)
Occupation			
Homemaker	44 (72.1)	Incentive based service	Service
Farming	13 (21.3)		
Daily wage worker	1 (1.6)		
Working in company/other occupation	3 (4.9)		

Sociodemographic details of the FGD participants are provided in Table 2. Among reproductive age group women, the average age was 24.3 years (SD ±5.4). All of them belonged to the scheduled tribe category among

which 42 (68.9%) were from the Warli tribe, eight (13.1%) from the Malhar Koli tribe, seven (11.5%) from Thakur tribe, two (3.3%) from Hindu Mahadev Koli tribe and two (3.3%) from Hindu Konkani tribe. The average age of ASHA was 34.29 years (SD: ±9.0) and ANMs' average age was 44.09 years (SD: ±6.7) respectively.

The findings interpret social aspects from emic perspective i.e. from ASHA's and ANM's point of view and experience as they belonged to local communities. The salient findings of the FGDs among reproductive age group women, ANMs and ASHAs as per the identified themes are given below:

Awareness and perceptions about ante-natal care

Regarding antenatal care, majority of the women were aware that registration of pregnancy should be done in the first three months of pregnancy and they usually registered in the second or third month of pregnancy. One of them mentioned that-

"We go to ASHA worker when we stop washing our hair ("Doka dhuvayicha thambla") for two months in a row (when we miss our periods twice)". Pregnant woman (Warli tribe, Dahanu block)

They reported that ASHA workers conduct their pregnancy test and if they are pregnant, they are sent to the Primary health centre (PHC). This was also confirmed by the ANMs and ASHAs. However, they mentioned that teenage pregnant women, women who migrate for work, and grand multipara neither register early in pregnancy nor have regular ANC check-ups. Most of the women reported that they completed at least three ANC visits and also got sonography done twice or thrice during their pregnancy. ANMs and ASHAs confirmed this and mentioned that it is facilitated due to a tie-up with state health officials and private radiologists. Majority of the women were aware of danger signs during pregnancy such as oedema feet, abdominal pain, vaginal bleeding and decreased foetal movements. ANMs and ASHAs endorsed these observations, however they opined that there is delay in seeking services by some women. One of them reported-

"We do not consume foods such as papaya, drumsticks and watermelon during pregnancy as they considered these foods as hot (garam) foods". Women of reproductive age (Warli tribe, Jawhar block)

This was also reported by the ANMs and ASHAs. Most of the women were aware about need of consuming iron supplements during pregnancy and mentioned that they took all the tablets given to them. However, ANMs mentioned that there were compliance issues among some women due to misconceptions that these tablets increase the weight of the baby, which would lead to a difficult delivery. Majority of the women said that pregnant women in their area consumed tobacco. Some women reported that pregnant and post-natal women drank alcohol and they hid this from the ASHAs. Majority of the ASHAs reported that pregnant and post-natal women consumed tobacco and alcohol.

Awareness and perceptions about intranatal and post-natal care

Majority of the women said that institutional deliveries were preferred and were conducted by skilled health personnel. Majority of them were aware about the government schemes for the pregnant women. Similar responses were obtained from majority of the ASHAs and ANMs. Almost all women mentioned that post-natal women were given only rice porridge ('pej') for about one month after delivery. One of them said-

"There is a belief in the community that if a mother eats anything else other than rice porridge, it might lead to abdominal bloating ("pot phugne") of the baby." Woman of reproductive age (Thakar tribe, Jawhar block)

This practice was also confirmed by ANMs and ASHAs.

Feeding practices

Most of the women said that colostrum was given to the baby; however, very few reported that it was given after one day of birth. One of the women said-

"Colostrum is not good hence we throw it." Woman of reproductive age (Malhar Koli tribe, Dahanu block)

ASHAs endorsed this, they said some older people in families still believed that colostrum is not good; they felt as it is the first secretion, it is bad, *so* they should remove and throw it. Majority of the women said that prelacteal feeds were not given, while exclusive breastfeeding was given to the babies until six months of age and weaning was started at six months which was endorsed by ANMs and ASHAs. They reported that Anganwadi Centres arrange weaning ceremonies for the children after completion of six months of age ("ardhvarshik vadhdivs").

Care of low birth weight (LBW) babies

Women were aware of extra care that has to be taken for a LBW baby like making a warm room for the baby, keeping the baby in sunlight daily, not bathing the baby, and not giving massage and dhuri (Coal burnt below the bed of mother to produce smoke to prevent infections) to the baby till the weight of the baby increases. Though the women denied giving baths to LBW babies, this was refuted by ANMs who said that only educated people follow this while illiterate women still gave baths to these babies. Many women were aware of Kangaroo mother care (KMC) and its benefits that it helps in maintaining body temperature and improving breastfeeding for the baby. Majority of the women said that they got their

babies completely vaccinated which was confirmed by ANMs and ASHAs.

Treatment-seeking behaviour of the community

Majority of the women said that many people prefer to go to the doctor or health workers for medicine but some people still go to the traditional healers ('bhagat') when they fall ill. They said people go to 'bhagat' with rice, money, coconut, incense stick and a black rooster ('ultya pisacha kala kombada') and in return, he gives them rice, a rooster, a string to wear on the neck and ash ("vibhuti/ angara") as treatment. Similar responses were obtained from ASHAs. They mentioned that when a woman in their family starts to have labour pains, they take her to their *bhagat,* who removes all the clothes of that woman in front of her family members, gives water in her mouth, applies oil to her abdomen and ties strings. ASHAs and ANMs expressed that as women and their families visit traditional healers or 'bhagats' for their child's ailments, it leads to delay in their or their baby's care.

Majority of the women said that good quality health care was provided at the subdistrict Hospital. They did not visit the PHCs, due to unavailability of specialists and lesser facilities being available at these centres. Some of the ASHAs also reported the same.

Transport facilities

Women were aware of the free ambulance service by dialling the toll-free number '108' when women in labour had to reach the government health facilities. However, majority of the women said that women in labour used an autorickshaw to reach the facility for delivery as the free ambulance service was unavailable on call. They said that in most villages, ASHAs called the rickshaw and accompanied these women along with their family members to the hospital. Another issue was the network issue in some areas which caused difficulty in placing a call to the ambulance service. Few women mentioned that some villages and hamlets (Padas) are in hilly areas (cut off villages) where it is difficult for a vehicle to reach and the roads are also bad hence the option is only walking. Similar responses were elicited from ANNs and ASHAs.

Causes of maternal deaths, stillbirths and early neonatal deaths

Majority of women were not aware of the causes of maternal deaths and stillbirths; Very few mentioned early or late age of mother and repeated pregnancies. Very few women reported causes of stillbirths such as fits, delay in delivery, lifting heavy weights during pregnancy. They mentioned about causes of neonatal deaths as diarrhoea, respiratory problems and improper breastfeeding. ANMs and ASHAs mentioned some factors, for neonatal deaths such as hypothermia and not practising burping after breastfeeding the baby. Also, they reported the reluctance of mothers to higher facilities due to a lack of finances. ANMs and ASHAs reported causes for stillbirths such as delayed labour, lifting of heavy weights, accidents and malnutrition.

Training, infrastructure and staffing of facilities (ANMs and ASHAs)

Majority of ASHAs mentioned that they had received training on home based newborn care (HBNC) and birth defects. All the ASHAs said that they received induction training in which they were trained to identify the high-risk mother and danger signs in mother and child. Most of the ANMs from both the blocks had received training such as skilled birth attendant (SBA) training, training to deal with obstetric emergencies and maternal and newborn care. ANMs reported that deliveries were not being conducted at all sub-centres due to lack of delivery room in the sub-centre. Most first referral units also did not have an obstetrician and pediatrician.

DISCUSSION

The findings of the present qualitative study provide the perspectives of women in the reproductive age group, ANMs and ASHAs about the awareness and perceptions about maternal and newborn care in the community in the selected blocks. It highlights the treatment-seeking behaviour of the community, constraints faced by the women while accessing the MCH services (beneficiaries side) and by the ANMs and ASHAs while providing the services (service provider's side). Data source triangulation was done as responses were obtained from women of reproductive age group and the community workers (ANMs and ASHAs). The responses obtained were similar from both the groups. The responses related to antenatal, intranatal and postnatal care are quite encouraging due to the implementation of various MCH programmes. However, level one delay as reported by the ANMs and ASHAs emphasizes the need to educate the pregnant women for seeking early care. Pregnant women avoided certain foods considering them as hot foods. Similar findings were noted in a qualitative study in rural areas of Karnataka.[9] In the present study, certain misconceptions about the consumption of iron and folic acid tablets resulted in low compliance. Similar findings were noted in a In depth interviews of women conducted in Assam in which pregnant women did not take tablets as they thought it will increase the weight of the baby.[10] In a study conducted in tribal areas of Melghat, it was reported that many mothers didn't take Iron and folic acid tablets at all throughout the pregnancy, though they were being regularly told about the importance of consumption of these tablets by the ASHA/ANM, who also ensured regular supply of the same.[11]

The practice of tobacco and alcohol consumption among pregnant and post-natal women was still prevalent in some pockets of the tribal areas and needs to be addressed. In a study conducted in Odisha, it was reported

that alcohol consumption was deeply embedded in the daily rituals of indigenous tribal women.[12]

Exclusive breastfeeding practices for six months were found to be satisfactory except for discarding colostrum in some areas as reported in the present study. However, giving colostrum was common as reported in a study conducted among Dhangar tribe of western Maharashtra, India.[13]

Traditional healers were the first preferred choice for treatment in some areas. Several studies conducted in India concluded that the tribals seek services from the traditional healers before seeking treatment from health care providers.[14-16]

Level two delay i.e. difficulties in transportation of women for delivery to the health centres were reported in the present study due to poor accessibility for vehicles due to bad roads in tribal areas or no roads in hilly areas. Poor cell phone networks have also been reported in other studies in Rajasthan and Assam.[10,17] The study highlights level three delay at the health facilities as infrastructure and manpower related issues were reported by the ANMs and ASHAs. Unavailability of specialists such as pediatrician and gynecologists at the first referral unit was reported by the ANMs. Patient friendly behaviour by health staff towards women needs consideration to improve inclination of availing health facilities in tribal population. The responses from the women and the health workers related to the three-delay model indicate that there is a need to address these delays by the health authorities for reduction of maternal and perinatal morbidity and mortality in the study areas.

The study was conducted in only two blocks of Palghar district (Dahanu and Jawhar), out of the total eight blocks in Palghar district. Hence it may not represent the data in the entire district.

CONCLUSION

Misconceptions related to MCH care and nutrition among tribal women can be addressed through health education messages. Infrastructure, facilities, manpower, and transport facilities need to be strengthened in tribal areas, especially below the subdistrict level. The study findings indicate the need to address three delays by the health authorities in the study areas to reduce maternal and perinatal mortality and morbidity.

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