Social Rituals and Infant Feeding Practices in Dhangar Tribe of Maharashtra: An Exploratory Study

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ABSTRACT The social rituals and infant feeding practices offer both opportunities and barriers to infant’s health. But infant feeding remains poor in a vulnerable population such as tribe because of their unique culture. The social rituals following the birth of an infant are explored in addition to practices of infant feeding in Dhangar tribe of Maharashtra in India. Seventeen mothers of 6-12 months old infant were interviewed in an in-depth interview, while 44 grandmothers were interviewed in seven focus group discussions. The thematic analysis of narratives emerged specific and distinct themes. The results revealed that the tribe follows prominent social rituals after the birth of an infant, the mother initiated late breastfeeding, fed prelacteals and neglected exclusive breastfeeding. However, they observed taboos on mother’s diet, but they offered colostrum and breastfed the infant during her sickness. Thus, the tribe follows their unique social rituals on the birth of an infant and continues with the slow change in infant feeding practices.

INTRODUCTION

In any social group or community, the infant care and social rituals apply to both the infant and its mother. In fact, infant feeding remain poor because mother’s low age, illiteracy, unemployment and low-income family (Khan et al. 2017), in developing countries fail to support it. Again, social rituals direct the infant care and feeding practices. The mother’s awareness and effective feeding practices, especially for vulnerable mothers like those in the tribes residing in rural areas, would initiate late breastfeeding (Exavery et al. 2015). And hence the understanding of family’s support and therein advice to a lactating mother would be essential to know infant feeding and social rituals (Abel et al. 2001).

In marginalised population (tribal, rural, or slum), infant feeding practices such as giving colostrum (Swetha et al. 2014), breastfeeding exclusively (Adugna et al. 2017; Velusamy et al. 2017), and adequate diet for lactating mothers (Kulakac et al. 2007) are established to be low. On the other hand, support of family and community members facilitate timely initiation of breastfeeding and continuation (Horii et al. 2017), which initiates from inherent social rituals and practices associated with infant care.

This paper is, thus, the qualitative exploration into social rituals and infant feeding practices on a tribe that can provide valuable information to local healthcare. The investigation will facilitate the improved health of a mother and her infant. Again, this understanding would make advancing among mothers to aware about health systems knowledge to ensure better care, support, and diet for them and infant. Therefore, this study was designed to answer two specific objectives.

Objectives

(a) To explore the social rituals following the birth of an infant in Dhangar tribe.
(b) To understand the common infant feeding practices among them.

METHODOLOGY

Design

This is an ethnographic primary study which employs a qualitative design with two sources of data collection to bring internal consistency
and quality for complete data itself. The in-depth interviews were used in addition to focus group discussions. As the primary focus is on understanding how and why infant feeding and social rituals are interrelated; thus, the study design provides scope for narratives and explanations in detail. This study is a part of the degree program for which data was collected in year 2013. Institutional Review Board approved ethical clearance and certified permission to conduct the research. Accordingly, the researchers obtained informed consent from the participants at the beginning of each interview.

Setting

The study area and Dhangar tribe are purposively selected for the study. The Jhosua Project (2017) reports that more than 28 million Dhangar people reside in India when they received data from different sources. However, a higher concentration of Dhangars is in Gujrat and Maharashtra. Thus, the selected participants belong to the villages of western Maharashtra. They are considered as the nomadic tribe in the state; where most of them are agrarian, and therefore lactating mothers usually continue to stay with the infant at all times. Their family members including grandmother offer care and advice to mother-infant duo. The maternal-child care practices receive support and advice mostly from community members rather than individuals of public healthcare. However, in that case, they consult local Anganwadi workers (AWW) and Accredited Social Health Activist (ASHA). The distant availability of primary healthcare and rural hospital, in addition to poor transportation, makes public health care inaccessible to them.

Sample

Researchers selected three westernmost sub-districts of Satara district for this study. Among them, Dhangar’s seven villages with similar population size and geographic characteristics were included in study. As mother and grandmothers mainly associate themselves with mother-infant care; thus, they were interviewed at their community. The participant’s inclusion criteria were: (1) The mother whose infant is 6-12 months old, and (2) The grandmother who is living in the same community and had experience of infant care and issues associated with them. The 17 mothers were interviewed in In-depth Interview (IDI) and 44 grandmothers in Focus Group Discussion (FGD). Altogether 61 participants were interviewed in seventeen IDI and seven FGD. A single FGD conducted for each village, in addition to 17 IDIs with all the available and eligible mothers in every village.

The influential community key persons and public healthcare workers (AWW and ASHA) were excluded from the interview. Furthermore, in this study, no participant avoided or denied the participation in research.

As Fusch and Ness (2015) demonstrated that once the additional information is no longer reported, and the number of interviews do not contribute anymore, then the number of interviews must be stopped. Thus, the count of FGDs was stopped when data saturation was observed in the response of grandmothers, but no eligible mother was left to participate in the study.

Data Collection

The study participants, mothers and grandmothers, were approached from Anganwadi worker. Mothers were interviewed in In-depth Interview (IDI) by a trained female researcher at their home premise. Likewise, grandmothers were interviewed in Focus Group Discussion (FGD) by the researchers at the local community hall. The IDI’s and FGD’s separate guide were prepared to collect data on broad themes of social rituals and infant feeding practices in the tribe. These themes covered questions for participant’s response on knowledge, practice and perceptions for breastfeeding and its initiation, frequency and cessation. They were also enquired about social rituals and support on a newborn’s arrival in the family till its end of infancy. Thus, the study participants were interviewed for an average 45-60 minutes each.

Data Analysis

This ethnographic study presents thematic analysis. The analysis used main transcribed text data. Although guide of IDI and FGD were piloted, that data is excluded from the analysis. All the interviews were conducted, transcribed and analyzed in Marathi. Later on, the quotations were translated into English. The language is also the researchers’ first language, which en-
RESULTS

Demographic Characteristics of Participants

Although, all the mothers are homemakers, amongst them almost three out of four are literate. Approximately, the same number of mothers, three out of four, visited antenatal care and had home delivery (Table 1). Again, on average, mothers had their youngest infant with balanced number of its sex.

All the grandmothers are dependent (on their children for survival) and illiterate (except two’s are educated for four years). Moreover, all grandmothers had delivery at home accounting to the higher number of children (M=3.40, SD=1.26) they had than the mothers of the study.

The mothers are young (mean age 24.2 years, SD=3.99) and on average they are 25 years younger than the grandmothers. They had (parent’s) replacement level (M=2.2, SD= 1.04) of their children, which shows they reduced their fertility by a child in current generation (Table 2).

Thematic Analysis

In this section, all the narratives from mothers and grandmothers are presented in a logical sequence to emerging themes. The supporting quotes are also derived from them.

Rituals after Delivery

The social rituals are the manifestation of socio-cultural beliefs, which prevails from birth of a human to end of life. In Dhangar tribe, especially first 12 days of infant’s arrival are crucial for care and celebration. The infant is never placed in skin-to-skin contact with the mother for early 2-3 days; instead, some distance is maintained between the mother-infant duo. It is believed that mother’s unaware touches and contacts in her sleep may trouble the infant, hence “keeping some distance” between the mother and infant is necessary. Nevertheless, an infant is held in breastfeeding time only; again, they are mostly secluded at home and rarely taken out for immunization facility or healthcare (when needed). Participants believed that in the first 12 days, the evil spirits in and around the community have a higher impact on the mother-infant duo.

The infant is never fed under the open sky or public places in any season from anyone. The underlying belief assumes that if this practice is done, it allows wicked spirits to affect either the mother or the infant.

Again, visitors are restricted to meet mother-infant duo and only allowed within the controlled space. Visitors are solicited to stay away from the contact of mother and infant at home. When they arrive or enter at home, again, they are required to wash their feet and wait for few minutes at the entrance of the house.

The Segadi ritual is observed for initial 12 days, where aromatic fumes of Segadi is exposed to pass for 2-3 minutes daily on mouth and nose of mother-infant duo following their bathing.
Following this practice, the infant is, thus, wrapped in cotton cloth pieces to be put on the bed. However, the method of mother’s mouth air blowing lasts for the initial month where she blows aromatic warm air to mouth and nose of the infant. They believe that since infants have smaller intestine, the air blowing method enhances its digestion.

These first 12 days are also considered as polluted period for the community, and thus worship of family/village deity is avoided by the family. Likewise, it is believed that, for others, the mother’s touch is impure and pollutes them when made either knowingly or unknowingly. A mother shared her belief, “within 12 days, physical contacts and hand touches from mother to warm cooking pots affects eyesight of an infant.”

The family of newborn infant celebrates three welcoming rituals in the home with more social gathering on arrival of an infant. The Pachavi is the fifth day’s celebration which accounts for its welcoming, Satavi is the seventh day’s celebration which allows a mother to restart her work at family, and Baravi is the twelfth day’s celebration which gives a name to infant and celebrates first putting in a cradle at home. Additionally, Baravi celebration includes first-ever hair cutting to the infant. In this ritual, the community is invited in larger participation and distributed Pedha sweets at boy’s birth and Jalebi at girl’s birth. When the infant takes birth in the rainy season or it has been an institutional delivery, some flexibility is observed in fixing a day for Baravi.

### Initiation of Breastfeeding and Giving Colostrum

The timely initiation of breastfeeding and giving colostrum is an essential healthy beginning for both mother and infant. The tribe observed a wide range (3 hours to 3 days) of start to breastfeeding. However, they were found to be initiated early because of information received from media and community level healthcare awareness. A mother shared, “The physician-assisted to put the infant on the breast when it was just delivered at a hospital.” While another one, had four children, supported her behavior change from media information, “…it [human milk] improves the health of an infant... instantly after birth [when given] ... received messages from TV [Television] channel, for previous deliveries I initiated breastfeeding after two days.”

However, giving colostrum was common in the tribe. The tribe was found aware of advantages of breastfeeding and providing colostrum. The participants mentioned that the colostrum is an excellent food for infants’ overall development; it boosts their immune system and protects them against any infection/disease. A mother expressed her choice as, “The colostrum boosts immunity and strengthens the joints [of infant]; therefore, it should be given for the infant.” Again, behavior change had been observed in grandmothers’ opinion also, where a grandmother said, “In earlier days, for first three days’ milk [colostrum] was used to be thrown out, but now we know, it is good for them [infant].”

### Prelacteal Feeds

Prelacteals are generally a liquefied form of food given to an infant before initiating to feed human milk. This practice is found to be universal among the participants of the study. Although, they claim no more prelacteals are practiced nowadays, they fed infants with cow-milk, formula milk, and plain or sugar water, which they do not consider as prelacteals. They believed that such feeds (prelacteals) have to be given if lactating mother produces low human milk, or crying infant goes uncontrolled, or even when an infant cannot wait for a longer time without any food. A mother said, “Our family believes that first-time mother fails to lactate within three days of delivery. Therefore, the infants should not be given anything to feed [infant’s hunger]. Instead, they would keep infant repeatedly in crying spells followed by quietness. Thus, the infant would have been fed on the third day.” In contrast, the grandmother condemned that, “No human milk was given to an infant for first three days in our time. Now, this is not the case.” But avoiding prelacteals is still unreachable to these tribal mothers.

### Advantages of Breastfeeding for Infant and Mother

The awareness of breastfeeding ensures a healthy relationship between mother-infant duo. On average, understandings of advantages for them is prevalent in the tribe. All the participants opined that generally breastfeeding is the best...
choice of food for an infant. Breastfeeding is a healthy, digestible, and nutrient-rich food that is readily available to meet hunger and avoids any infection or disease to an infant. Mothers mentioned at least one of the advantage among these.

However, few mothers were known to the advantages of breastfeeding for lactating mother. Those mothers shared that breastfeeding reduces the mother’s weight and improves her health (physical fitness). A mother mentioned, “…when the infant does not consume human milk, [consequently] accumulation of it develops breast pain. Therefore, the mother may suffer from fever and cold.” Again, the grandmothers expressed different views on the practice of breastfeeding for an infant. Some of them viewed that breastfeeding creates a bond between mother and her infant, and gives a feeling of joy and satisfaction to them. On the contrary, few grandmothers negated that breastfeeding deteriorates the health of the lactating mother.

Breastfeeding Practice

Breastfeeding is an essential practice for early survival and nutrition of an infant. Exclusive breastfeeding (EBF) occurs when the infants are given only human milk for first six months of their life. Participants showed negligible exclusive breastfeeding practice. Likewise, all the grandmothers were almost unaware of EBF practice; many mothers were also found unaware of it. The infants were fed mainly with human milk for first three to four months. Later on, they were given milk (derived from cow and buffalo) and complementary foods in addition to breastfeeding. A mother said, “Only human milk has to be given for first three months [of feeding] after that cow’s milk has to be supplemented.” The earlier disruption of exclusive breastfeeding, mothers accounted for low human milk, mother’s sickness and pressure to re-join family chores at home.

All the mothers were still breastfeeding their infants at the time of data collection. On average, mothers’ breastfed the infant for 3-5 times in a day. Again, they had a wider gap between two feedings in a day; the minimum difference was 2 hours while the maximum was 6. The reduced frequency for breastfeeding mothers is linked to their perception of infant’s cry and food demand through gestures.

The participants believed that breastfeeding is a practice of generally feeding the infant in addition to complementary feeding such as dal rice. They further mentioned that this practice is continued till recognizing feeding such as dal rice. These milestones were: till the infant’s demand or start teething, or a period of 1-2 years, and the time when mother re-conceives for next pregnancy. On the contrary, few participants suggested that one should not cease giving human milk till the time child refuses. A mother said her intention of breastfeeding as, “[Breastfeeding] might be done for 2-3 years. I don’t know how long breastfeeding should be continued. If elder women suggest ceasing after some time, then I will do it. They [elder women] know well [on it]. I do not know.”

Furthermore, a few mothers said, once the infant gets a year old, the breastfeeding has to be ceased and, thus, its feeding has to be replaced with enough foods like dal-rice. They believed that ceasing is required not to damage infant’s teeth; which otherwise will get damaged in prolonged breastfeeding. However, if the infant demands human milk and resists to discontinue, then the mother has to do it deliberately. She may create distance and aversion through different practices like keeping infant at relative’s home, or staying away from the infant, or applying several bitter substances (paste of fever, cold and cough tablets, bitter cucumber, bitter guard and kumkum) on the breast.

The bottle feeding was uncommon among the participants. Instead, they fed the infants using bowl and spoon. Again, they believed that bottle feeding damages teeth of an infant. A mother said, “Grandmothers would keep advising us, it [bottle feeding] is practised in a city dwelling [not here], [if you don’t breastfeed] then what would you do?”

Complementary Feeding

Complementary feeding is the feeding when a breastfed infant receives any other food (liquid or semi-solid), in addition to human milk. This complementary feeding provides additional nutrients for infant’s growth and development. Instead of practising Exclusive Breastfeeding (EBF), all the participants mentioned that they started complementary food within first six months of birth. The starting period for it varied from first to the eighth month of infant’s age.
Participants perceived that starting complementary feeding early overcomes the unmet need of infant’s hunger, low human milk supply, and results in earlier weight gain for both mother and infant. A mother said, “As I am not able to produce enough milk for my infant, again, to improve the health of the infant, the complementary feeding was initiated.”

They fed an infant with fruits and home cooked food items/recipes (liquid and semi-solid) from vegetables, grains and pluses. The eggs, meat and fishes in infant’s diet were not mentioned from them. They fed fruits encompassing banana, grapes, apples, chikku, and dry dates. The vegetables, grains, and pluses were given in the recipes of rice soup, ragi porridge, semolina, chapatti, and rice with milk or ghee. The milk and milk products like ghee were given to infant generally from milk of cow and buffalo. The food items were chosen with their perception and knowledge on infant’s ability to digest. Again, in advancing age of an infant, mothers kept adding feeding quantity of food for them. Most of the participants believed sustained complementary feeding is a relief in frequent breastfeeding and regains health for lactating mother. It also gives time for mother to family chores at home.

**Support during Breastfeeding**

The women’s work participation is low in India especially for a tribal woman, which allows them to be at home mostly and look for family chores and infant care herself. The support in breastfeeding is essential for the healthy well-being of mother-infant duo. Thus, rooming-in practice cultivates both care and support among them on priority. Mothers received most support generally from their mothers (when delivered at her parent’s home), while few mothers received support rarely from in-laws or not at all, which compromised their healthcare in addition to infant’s care. A mother with the joint family said, “When I was at my mother’s home [for delivery], I always used to be with my infant. Since the time, I have returned here [at in-law’s/ her home], there is no time to look after or to be with the infant. The workload is excess here. I also have little food. Therefore, milk [human milk] is too low [for breastfeeding].” Similarly, another mother from nuclear family expressed her suffering in the absence of support as, “None supported me in breastfeeding days. I expect, there should have been someone who could have helped me [with family chores and infant care]. As I was alone at home, required to care for my infant and cook for the family. Thus, when I used to cook, the infant would keep on crying.”

**Breastfeeding in Sickness**

Breastfeeding plays a decisive role in the health of both mother and infant. Mothers expressed their views on keeping breastfeeding in sickness as well as avoiding it. Some of them believed that breastfeeding in either normal or reduced quantity should be continued in their (minor) sickness. They perceived that reduced frequency and volume of breastfeeding avoids infection, of mother’s sickness, to the infant. A mother said, “[When] I suffered from a cough and cold, everyone suggested me that I should not breastfeed [my] infant; as my infection will [pass and] affect the health of the infant.”

Moreover, when infant falls sick (with a frequent cough and cold infections), many mothers strongly agreed that they should be breastfed as regular. However, they also mentioned that even in infant’s diarrhea, the normal breastfeeding should be continued; and complementary milk should not be given unless utmost required. In contrast, some of the mothers said that because of infant’s sickness breastfeeding frequencies may be reduced as and when infant avoids and rejects it.

**Nutrition for Lactating Mother**

The healthy nutrition is an essential component of lactating mother’s diet, which nourishes both mother and her infant. This tribe follows strict taboos in lactating mother’s diet. They perceived the choice or avoidance of specific food items/recipes depend upon its digesting effects (hot, cold, laxative and acidic), milk-producing effects, and throat paining impacts on mother. Simultaneously, these foods effect on infant’s ease of digestion and colic problem was also considered. The food items generally avoided were pungent, sour, and oily foods like curd, rice and spices. They also avoided fruits of similar properties, which includes cucumber, mango, banana, orange, tamarind, papaya, and jackfruit. Again, they avoided certain foods, for instance, potato, brinjal (eggplant), and black gram.
A grandmother said, “Papaya should not be consumed since [mother’s time of] conception, as it has the chances of abortion. Similarly, a kharwad recipe should not be consumed.” These taboo foods were supposed to be restarted once the infants’ start tasting it on their plate. However, they mentioned that salt gives cold to a newborn infant and hence it needs to be consumed with minimum quantity. On the other hand, the sweet foods consumption was perceived differently. Some said it creates stomach worms for an infant, therefore, it should be avoided. While few others said it does not form any problem, thus, can be consumed. Furthermore, all the participants believed that among infants, girls could digest any diet of a mother through human milk while boys do not.

All participants believed the lactating mother should eat foods cooked at home. Her diet includes staple foods (raggi, rice, barley, jowar, and pulses), fruits (apple, pomegranate, dry date and coconut), green leafy vegetables, eggs, fishes and meat. They expressed that these foods not only boost milk production but also are available and digestible.

The sources of information on the diet of a lactating mother were generally the senior women of the community and physicians of their contact. The senior informant women of the village include their mother, mother-in-law, and grandmother. Thus, many mothers mentioned that they avoided any special diet for lactation because of food taboos, eating confusion, reduced access and availability of food.

DISCUSSION

Researchers found that the tribe follows prominent social rituals after the delivery which includes bathing Segadi ritual, aroma air blowing and seclusion, a practice of social pollution for 12 days, protection from evil spirits, and celebration of the fifth, seventh, and twelfth day following an infant’s birth. The various social rituals on infant’s birth suggest that Dhangar tribe puts social concern and meaning for infant’s early time with them, rather than adapted infant care practices from public healthcare. However, the explanation for this is inadequate to point out the weak acceptance of public healthcare practices without exploring service side. Mother participants with low education had more access to formal healthcare in their antenatal care visits (65%) and few institutional (29%) deliveries. However, other potential explanation includes poor familial income, cultural attachment and a patriarchal system to which what extent does it allow any woman to follow her decisions independently.

The paper also demonstrated that participants, in particular mothers, initiated late breastfeeding and fed prelacteals, neglected exclusive breastfeeding and initiated earlier complementary feeding. Furthermore, they had a common perception of human milk feeding during sickness and strict taboos on lactating mother’s diet. No mother either discarded or completely avoided giving colostrum to their infant.

Most studies show that infant feeding practices are inadequate in marginalized communities (Exavery et al. 2015; Horii et al. 2017; Khan et al. 2017). These communities also initiate late breastfeeding (Alebel et al. 2017), and fed prelacteals (Chea and Asefa 2018; Jama et al. 2017; Thepha et al. 2018). In addition to these practices, similarly in other studies, mothers, showed that they neglected full exclusive breastfeeding and followed partial exclusive breastfeeding (Mohamed et al. 2018; Quinlivan et al. 2015). In Indian context also, the participants found different perceptions on human milk feeding during the sickness, where poor diet gives the poor development of an infant (Brennan et al. 2004). The taboos on mother’s diet are consistent with the findings reported in similar studies (Khan et al. 2017; Kulakac et al. 2007). However, the poor feeding practices are found in the tribe, and they seek better support from mother and family when they are in a joint family. Few mothers who had 2-3 previous children, exposure to television and formal healthcare showed better understanding of infant feeding.

The researchers’ study included all the available and eligible mother participants from the community, which better represents the sampled population. This study found that universal colostrum feeding, which researchers found deviated in similar Indian study which reports mother had discarded colostrum (Swetha et al. 2014). Furthermore, in general, mother participants continued regular breastfeeding pattern even in their or infant’s sickness.

CONCLUSION

Taken together, the researchers’ findings demonstrate that tribe follows prominent social
rituals after the delivery as a practice of infant feeding and care. The infant feeding practices have failed to follow essential requirements for breastfeeding, prelacteals, exclusive breastfeeding and complementary feeding. Besides, they had both opportunities and barriers for lactating mother's diet. However, they fed colostrum and kept giving breastfeed in the sickness of either mother or infant. These findings must be interpreted with caution, however, since the tribe is residing at a hilly area with distinct features like poor income and education, poor healthcare practices, and social mobility among them. Furthermore, as time proceeds the time gap in data collection and reporting will bear little effect on understanding to use the findings. Thus, the tribe follows their unique social rituals on the birth of the infant and continues with a slow change in their infant feeding practices. This study mostly shows consistent finding with similar other studies. Future research is needed to quantify the issues and plan for resolving those in community-specific approach before using these findings.

RECOMMENDATIONS

The Dhangar tribe’s infant feeding and social rituals should be discussed in pregnant women’s antenatal check-up visits at healthcare to advise specific practices to be sustained and others to be modified. Researchers would also recommend the need for a confirmatory study to quantify the findings of this study to develop a health education plan used for infant feeding, care, and practices within the context of specific community. Although there is the time gap between data collection and report findings, no longer it will lose its relevance as in case of the tribal community with their unique features.

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APPENDIX 1

_Segadi_

_Segadi_ is the procedure to give warm aroma vapors to both mother and her newborn infant after bathing. The mixture of certain dry herbs including _ajwain_, dry leaves of neem, cover of garlic is put on the hot iron pan to produce aroma. They consider it as immune booting for them.

_Pachvi/Satavi/Baravi_

These are the fifth, seventh and twelfth days after infant’s birth to celebrate and distribute some sweet foods to invitees’ those are generally female relatives and other girls/women from the community.

_Kharwas_

_Kharwas_ is the recipe made from cow’s colostrum with sugar or jaggary flavour.

_Kumkum_

_Kumkum_ is, water mixed, red iron oxide color generally used to apply on the forehead as a sign of custom to adore oneself especially for married women in India.