

Original Research Article

Newborn care practices in a tribal community in tamilnadu: a qualitative study

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ABSTRACT

Background: Neonatal mortality is high in tribal areas. Cultural practices influence the newborn health outcomes in tribal communities. Each tribe has its own unique practices on newborn rearing. Little scientific information is available on the beliefs and practices related to essential newborn care among tribes in Tamilnadu. An understanding of the tribe specific newborn care practices by health workers could facilitate them to provide effective newborn care.

Methods: A qualitative study was conducted in Sittilingi tribal area in Dharmapuri district of Tamilnadu during the period August and September 2016. The data was collected by In-Depth interviews of 10 mothers with infants, selected by Snow ball sampling method. Local newborn care beliefs and practices were explored and analysis of their beneficial or harmful effects was carried out.

Results: The findings show that beneficial practices like utilizing antenatal services, institutional deliveries, delayed bathing and measures to prevent infection were adopted. Harmful practices being followed included late initiation of breastfeeding, denying colostrum, feeding prelacteals, improper thermal care and application of indigenous substances on umbilical cord stump.

Conclusions: In spite of utilization of health services, traditional beliefs still play a crucial role in influencing neonatal care practices in the study area. The findings necessitate a need for accessing the prevalence of cultural practices by quantitative studies. Midwives being a vital source of information should be aware of local cultural practices in their work place, to plan for effective behavior change among the mothers to preserve safe practices and avoid harmful practices.

Keywords: Breastfeeding, Colostrums, Cord care, Prelacteals, Thermal care

INTRODUCTION

Newborn infants are unique in their physiology. The newborn period (first 28 days of life) is characterized by transition from intrauterine to extrauterine life, rapid growth and development. This phase in life has the greatest risk of mortality.¹ India accounts for 25% of global neonatal deaths. Even though the mortality rate

has come down over the recent years, the decline has been slower. Studies have reported that health outcomes of newborns (neonates) are determined not just by their biological factors but also by the socio-cultural environment of a community.² Neonatal mortality is higher (40/1000 live births) in tribal areas than the national statistics. The tribes live in geographical conditions ranging from plains and forests to hills.

Their socio-cultural, economic and educational backgrounds differ from the urban and rural communities. Issues such as ignorance, illiteracy, strong adherence to beliefs, geographic locations, lack of accessibility and non availability or utilization of health services contribute to poor neonatal health outcomes.³⁻⁵

Each tribe has its own newborn care rearing practices. Available studies on newborn care practices of tribes have reported beneficial and harmful customs. Very little information is available in this issue among the tribes in Tamilnadu, which habitats about 1% of the 10.42 crores tribal population of India.³⁻⁷ In this context, an attempt was made to understand the neonatal care practices prevailing in a selected tribal region of Tamilnadu, India.

METHODS

After obtaining institutional ethical committee clearance, a qualitative study was carried out in Sittilingi tribal area in Dharmapuri district of Tamilnadu during August and September 2016. The Sittilingi panchayat comprises a population of 6303 (Census 2011) scheduled tribes residing in Sittilingi and adjacent villages.⁸ Maternal and child care services are being provided by a Non Government Organization Hospital at Sittilingi and a Government Primary Health Centre (PHC) located at about 10 kms distance from the villages.

Snowball sampling method was followed to identify mothers with infants in the villages. Those who volunteered to take part in the study were enrolled. In-Depth interview technique was adopted to explore the cultural practices pertaining to essential newborn care. Essential newborn care includes clean cord care, thermal care, initiating breastfeeding within the very first hour after birth, cleanliness and prevention of infection.^{9,10}

The interview was held in local language (tamil). In the beginning, there was no fixed number for sample size, but data collection was continued until the interviewer felt saturation of information on the objective of the study. The final study sample reached was 10 mothers. The interview was in held in the mothers' home settings or their work place (field). Each interview lasted around 45 minutes. The information was voice-recorded, transcribed in tamil and later translated to English. Analysis was done using theme analysis method. Meaningful information was coded and categorized into themes. The main themes analyzed were feeding of colostrum, prelacteal feeds, breast feeding, thermal protection, cord care, bathing and other common traditional practices.

RESULTS

The mean age of the respondents was 26.2±4.04 years. All of them were Hindus. Three mothers were illiterate, five had studied up to secondary level and two of them had completed higher secondary education. All were

either coolie workers or involved in cattle rearing. Five mothers had one child, three mothers had two children and rest had more than two children. Seven children were males and three were females. All the mothers had more than three antenatal visits and had delivered in the PHC. The findings related to the themes are described in Table 1.

I Theme: feeding of colostrum

Two mothers had fed colostrum. Four had initiated breastfeeding after discarding the first colostrum. Four mothers had discarded colostrum and given prelacteals. Those who fed colostrum, said: "The nurse who conducted delivery told me to give breastfeed to my baby immediately after delivery"

"My mother told me to express the first milk, discard it and then to give breast feeding, but sister advised me not to do that." The sister had said, "The first milk is good for the baby." "Hence I gave it to the baby."

Those who did not feed colostrums either complete or partial had different responses. "It has to be discarded, otherwise, "vairukattikum" (the milk hardens inside the stomach). "I did it for my first baby also."

"Every time I feed, I express out the first milk, because the milk is stored in the breast for long time, it is curdy milk, so baby will not be able to digest."

II Theme: prelacteal feeding

Four mothers had given prelacteal feeds to the baby and all of them had given sugar water. The reasons quoted were: "Colostrum is hard for my baby to digest, so I gave prelacteal feeds", "I did not have milk secretion, so I gave sugar water", "Sister told me to give breast feeding, but my mother gave sugar water first. After that I gave breast feeding."

"Our family practice is that we give honey or sugar water for first 5 days." "After that only we give breast milk. Even my sister in law followed the same."

"For all my four babies, sugar water was given along with breast milk for four days." "As my mother said that breast milk alone is not enough for the baby, I gave sugar water also."

III Theme: breastfeeding

Two mothers initiated breastfeeding within half hour after delivery.

One of them said, "This was my third delivery. It was not difficult." "As soon as I reached the hospital, I delivered my baby and everything was over within few minutes, baby also cried well, so I gave breastfeeding."

For the delay, the mothers said “I was waiting for my baby to cry to give breast milk. No one told me to give breastfeeding within half an hour.”

“I thought my baby was not ready for breast feeding.” “At that time, “Naakkuthuvattikum” (tongue becomes dry). “Hence to avoid it, little sugar water was given and waited for him to get up. Then I gave breast feeding.” Only one mother had initiated breastfeeding after five days. She said, “I did not have breast milk. Hence I had to depend on sugar water and powder milk for five days.” “Sister told me to drink more water and eat well, but mother told me not to drink more water because “neerkothukkum” (more water will get into uterus). Less amount of water only was given to me.”

Frequency of breastfeeding

Eight mothers had fed more than 8 times a day and two had given 5-6 times a day. Six mothers gave demand

feeding to the baby and rest of them said: “Whenever I felt like giving only, I gave breastfeeding.”, “I did not fix time, whenever I was free, I gave feeding”.

Exclusive breastfeeding

One mother gave exclusive breastfeeding for six months. Two mothers had given exclusive breastfeeding for two months. They said, “We are coolie workers, it is not possible to sit at home for six months to give breastfeeding.” Another mother said, “I take the cattle to forest in the morning and come back in the evening. Till that time, my mother in-law is taking care of the baby. So I had started cow’s milk from second month onwards.” Another mother asked, “How come breast milk alone will be enough for six months? The baby needs food for normal growth after two months. It is better to add cow’s milk. Even a calf depends on mother’s milk for few weeks only. Then it learns to eat grass and leaves. Like that only we must grow our children.”

Table 1: Beliefs and practices of mothers in relation to newborn care.

Theme	Findings	Remarks
Colostrum feeding	Mixed response (Feeding / Discarding) was observed. Beliefs to discard were that it is not digestible; it is old milk; hardens inside the stomach Midwives’ advice to feed colostrum compulsorily was followed by three fifth mothers.	Elders influence the practice of discarding colostrum. Reflects limited insight among mothers regarding importance of colostrum.
Prelacteal feeding	Reported as a common practice. Sugar water or honey was given. Belief is that milk is not sufficient.	Being followed as a family practice. Elders influence this practice.
Breastfeeding	Delayed initiation was noted. Exclusive breastfeeding was not practiced. Belief is that breast milk alone not sufficient.	Provides a necessity to educate mothers, the benefits of early initiation and exclusive breastfeeding.
Thermal care	Swaddling or Mummifying was not practiced. The belief was that it would restrict the movement and growth of the baby.	Reflects lack of awareness about thermal care.
Cord care	Substances application (vasambu) was being practiced	Such practices increase the risk of umbilical sepsis.
Bathing	One fifth mothers reported bathing the baby before the end of first week to remove vernix with a belief that it is unclean. Oil massage was commonly practiced to keep the skin soft. A common practice of instillation of oil drops into ear and nose was reported	The concept of beneficial effect of vernix in preventing hypothermia has to be enforced to mothers. It is a beneficial practice. Mothers need to be advised to avoid this practice.
Infection prevention	The newborn was not allowed to be handled by many persons. Baby’s clothes were dried inside the house.	This hygienic practice adopted is beneficial to newborn. Mothers have to be educated about drying clothes under sunlight.

IV Theme: thermal care

As all the mothers had delivered in the PHC, the newborns had been received by the nurses, wiped and

covered with the cloth given by the relatives. At home, none of them reported proper covering of the baby. During day time, the babies were put to sleep in the cradle tied to the roof using old sari cloth. All of them

had used mat on the floor for mother and baby to lie. Swaddling or Mummifying was not practiced as the mothers felt that it would restrict the movement and growth of the baby.

One response was “I did not cover the baby, but my elder son’s old dress was put for the baby”. All the mothers said that they put only old clothes for the baby during the first few days. After performing special pooja, new dress is worn.

V Theme: cord care

In the PHC, nothing was applied on the cord of four babies. For six babies, antiseptic was applied. After discharge, five mothers had applied vasambu, two had applied borax powder and talcum powder. One of them said, “It is our family practice to apply Vasambu over the cord.” “No one told us to apply or not to apply anything on the cord.” Eight mothers had buried the fallen umbilical cord near to their house. The belief was, “Animals should not eat the cord. Otherwise baby would become sick.” Another belief was that the cord should not be taken by a witch who might use it to pacify evil spirits through mantras. That evil spirits would cause harm to the baby. One of them said that it was swallowed by her sister who had infertility.

VI Theme: bathing the newborn

None of the babies were given bath for two days. Five babies were given bath after seven days. Three babies were bathed after the umbilical cord fell down. None of the babies had sponge bath. Meconium and stool were cleaned using wet cloth soaked in hot water. The vernix was removed using oil. Neem leaves were soaked in hot water before bathing. The newborns were massaged with warm castor oil before bath.

“During delivery, baby undergoes lot of pressure, hence it may have body pain. Massaging will decrease the pain and baby will sleep for longer period.” After bath, a drop of castor oil was instilled into the nose, eyes and ears to reduce the heat.

VII Theme: prevention of infection

One mother said that she did not allow everyone to carry the baby. Usual practices were visitors were asked to wash their feet and then allowed to enter the house; Neem leaves were kept under the bed; Domestic animals like cat and dog were not allowed to enter the house.

Other common practices

To protect from evil spirits, three mothers had exposed the baby to smoke emanating from burning incense powder in a container. Three mothers said that they performed special pooja and sacrificed animals on seventh day. There is a belief that evil spirit affects the

growth of baby. Tying ‘erukkan (calotropis) thread’ or ‘garlic thread’ around hip or performing ‘thristi’ rituals every day evening were other customs practiced. Iron, charcoal, chilly and broom are kept at the door step of the house so that the bad spirit would not enter the house. The newborn clothes are not dried in the sun, because birds should not fly over the clothes. The mothers said that they would not go out of the house with the baby for three months. If they go out, they carry neem leaves with them.

DISCUSSION

In this study, it was encouraging to note that majority were literates, all had >3 antenatal visits and all deliveries were institutional. In institutional deliveries, till the time of discharge, which is usually 48 hours, the newborn may receive essential newborn care services. But later the care takes place at home where there is a risk for more than 50% of infant deaths to occur till the fourth week of life.² Deep rooted traditional practices play a significant role during this period.¹⁰ A variety of practices with misconceptions have been documented in the study area.

In spite of all deliveries being institutional, withholding colostrum, starting prelacteals and delayed initiation of breastfeeding were recorded in the study. Similar practices were reported among mothers in other tribal areas.^{7,10,11} Apart from sugar water given in our study, honey, cow’s milk, milk mixed with jaggery etc., are fed as prelacteals in other places. The prelacteals delay the onset of stimulation of lactation. Further, a delay in breastfeeding adversely affects the quantity of breast milk produced.¹²⁻¹⁴

Denial of breastfeeding and feeding prelacteals put the neonates to increased risk of infections and deaths.¹⁵ The Infant and Young Child Feeding Guidelines recommend that no prelacteal feeds to be given to newborns.¹⁶⁻¹⁸ UNICEF recommends breastfeeding to be initiated within half-hour of birth. Although there is little milk at that time, it helps to establish feeding and bonding between the mother and baby.¹³ Efforts are needed to make mothers aware of the facts that breastfeeding is vital for survival, colostrum is easily digestible and protects the baby against respiratory and diarrheal infections.¹⁹ The mothers seem to have lack of proper knowledge about demand feeding and exclusive breastfeeding. Nisha et al. and Dakshyani et al have reported similar findings among the Hakkipikkis tribes of Karnataka.^{6,20} Infants are prone to develop malnutrition, if exclusive breastfeeding is not practiced.^{6,21,22} The mothers could be sensitized about feeding of expressed breast milk so that infants would not be devoid of breast milk even if they go out for work.

As all the babies were born in PHC, sterile cord care had been done at the time of birth. A skilled attendance at delivery is significantly associated with clean cord care at birth.^{11,23} At home, an unhealthy practice of application of substances like vasambu or powder was noted in the

study. Such application increases the risk for umbilical sepsis.⁹ The hospital based study in Orissa by Goel et al had recorded omphalitis and sepsis in 63% of 167 neonates with unhygienic cord care at home.¹⁵ Infertile married women swallow the fallen cord with a belief that they would conceive in future.

A newborn is delicate and at risk of hypothermia. Keeping the baby's head and body wrapped (mummification) or skin to skin care prevents hypothermia. However, the practice of maintaining warmth at home was not appropriate from the descriptions of the mothers. The newborn was picked up if it cried and for feeding, but was not generally held up. The mothers had reported dressing their babies with old clothes. This practice is common in other tribal communities. After a bath, many choose to dress their babies in old clothes for the first 40 days. This is done to keep the evil spirits away. New clothes are put to baby after some rituals. Till then they are left without clothes, wrapped with old pieces of multilayered cloth.²⁴

Non bathing the newborn upto a week was reported by eight mothers. Giving baby bath by experienced elderly women was reported. The elders at home take over this responsibility after the first month. Concerns about baby looking dirty with vernix motivate for early bathing and removal of vernix. There is a belief that vernix are remains of food stuffs eaten by the mother during delivery.²⁵ It is important that mothers understand, 'vernix' is not unclean. Recommending delayed bathing can appear contradictory to general messages about hygiene. Hence to avoid early bathing, the midwives can advice the mothers to wait for a traditionally auspicious day after a week for bathing thereby delaying the bath.²⁵ Massaging is a good practice and reported in the study. It is part of the daily bathing ritual. Oil massage has been accepted as a universal practice in many communities in Asia. It is believed to help in the physical development of a baby. It is usually done in the first 40 days of life.^{9,26}

In most of the communities, after a bath, the baby is slowly moved back and forth over aromatic smoke by burning incense powder on coal. This is done to dry any damp parts on the baby's body, keep him smelling fragrant and prevent developing cold. It is also believed that this helps the baby sleep better.²⁶ Here, it has been practiced to protect the newborn from evil spirits. The mothers have to be advised not to bring the smoke too near the babies, as it will make them cough. Harmful practice of instilling oil into orifices noted in the study have also been documented in other tribes.^{24,27,28} A few other customs with uncertain effects (like carrying neem leaves), similar to those adopted in the study, to protect from 'evil eyes' are commonly practiced in most of the Indian communities.²⁸

CONCLUSION

It was observed that harmful practices were more common than beneficial practices among the mothers in the study. Adoption of beneficial practices could be due to influence of advices received from midwives during the antenatal period. Elders at home are found to be instrumental in adoption of most of the practices. The findings of the study provide an insight into the existing practices and necessitate a need for quantitative studies in the study area to access prevalence of cultural practices. To conclude, a midwife should be aware of locally existing traditional practices in her workplace. As a major source of information, she could promote newborn health by behavior change communication of mothers in preserving safe practices and avoid harmful practices.

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