

Hidden and unaccounted for: understanding maternal health needs and practices of semi-nomadic shepherd women in Maharashtra, India

Gayatri Ganesh, Nitya Ghotge

ORIGINAL

Introduction

This paper looks at the so far undocumented maternal health needs and practices among women of semi-nomadic shepherd pastoral communities called Dhangars that migrate across the western Indian state of Maharashtra. The constant migration of these communities through remote areas where health services are scarce, poses particular challenges for women during pregnancy and childbirth. Semi-nomadic pastoral populations travel with their livestock in search of grazing pastures and their livelihood is derived from the sale, or exchange of, livestock for cash or other commodities. Exclusive pastoralists grow no crops of their own and depend on the exchange of livestock for food and grains or offer fertilisation of the farmer's fields with manure in exchange for food and essential household items (Hatfield & Davies 2006). While practitioners of pastoralism are often viewed as being socially, economically and politically marginalised, they have also been known to make significant contributions to national economies and to the maintenance of ecosystems, especially those which are unsuitable for agricultural production. The profession of pastoralism involves the whole family and is usually hereditary; therefore herding is strongly rooted to their ethnic and cultural identity.

An estimated 20 to 100 million people worldwide make their living as pastoralists (Blench 2000, Downie 2011). No official figures exist for the population of pastoral communities in India but they are estimated to make up 7–11% of the population (8.7 to 13 million people). Almost all the small ruminant meat consumed in India and a large part of the milk consumed originates from pastoral sources. Although hidden from public discourse with no official figures, their contribution to the Indian economy is considered to be substantial (Sharma *et al* 2003).



© Gayatri Ganesh 2017.

Maternal health in Maharashtra

India accounts for 20% of the world's maternal death burden (Goldie *et al* 2010), but there are large interstate variations well-documented within the country. Maternal deaths in India tend to occur during the intrapartum and postpartum period with obstetric haemorrhage being the leading medical cause of death (Montgomery *et al* 2014). The western Indian state of Maharashtra is one of only five Indian states that have already achieved Millennium Development Goal (MDG) 4 — reduce child mortality (by two-thirds) and MDG 5 — improve maternal health (by reducing maternal mortality by three-quarters and improving universal access to reproductive health care by 2015) (United Nations 2014). Maharashtra experienced a sharp decline in maternal mortality rate (MMR) which is currently 37 per 100,000 births, well below the national average of 167 (Ministry of Health and Family Welfare 2017). According to the *National Family Health Survey - 4 2015-2016* (Ministry of Health and Family Welfare 2017), 69.4% of rural women in Maharashtra received four antenatal checkups, 86.7% delivered at a health facility, and 3.6% delivered at home, assisted by a skilled birth attendant.

While Maharashtra has created an extensive health infrastructure and trained personnel that has brought down the MMR and infant mortality rate, inter-district variations mean that some districts are comparable to the worst in the country. These districts have a high number of scheduled tribe and scheduled caste populations — constitutionally protected tribal and lower caste populations that have suffered generations of marginalisation — that live in rural areas, and have inequitable access to education, economic opportunities and maternal and child health (MCH) services. The size and plight of these communities is well-documented and efforts to mitigate the inequities faced by them are a priority for civil society groups and state governments (Sanneving *et al* 2013).

Limited data on semi-nomadic communities

However, the Dhangar shepherds are not officially classified as a scheduled tribe or scheduled caste — vulnerable populations that enumerators focus on due to known inequalities in health, education and economic status — but as denotified tribes, for which there is very little data. Due to the shepherds' differences in lifestyle and traditions, it would be a mistake to attribute the same beliefs, practices and challenges of the tribal populations to the semi-nomadic Dhangars, despite both being vulnerable populations. Very little is known about the Dhangars' social and gender relations or how much access they have to health care and education. The little research and knowledge that exists about pastoralists has been driven by ecologists and veterinarians investigating the health of livestock, animal husbandry, their migratory patterns, genetic variation, and access to water (Dhas 2006). There is little anthropological, developmental

or interdisciplinary studies on pastoralists in India. One of the first attempts to profile these varied communities was by the Ministry of Social Justice and Empowerment (2008) who undertook a survey (among 122 communities in 16 states) and found that 70% of nomadic communities lived in temporary tents with no toilets, electricity or running water; only six per cent of nomadic communities reported access to Below the Poverty Line ration cards (to access government food subsidies); 50% did not possess caste certificates or voter identity cards; more than 50% did not have access to medical facilities and nine per cent of children from nomadic communities were working instead of attending school. An absence of information and documentation affects the Dhangars' ability to access constitutional benefits as well as the benefits of development programmes, many of which focus on MCH issues and institutional deliveries. Their report concludes that these communities are the most neglected and oppressed in India, pushed to the fringes of society.

A major debate in India today is about expanding the scope of a national digital identity card called Aadhar that the current government wants to make mandatory for all citizens to access welfare, banking, telecommunications, utilities and other public services and benefits. The Dhangars' constant migration means they lack the 'proof of address' document that is vital to registering for the Aadhar card, immediately excluding them from essential services. The issues facing the Dhangars intersect on multiple dimensions: economically, environmentally, politically, culturally and socially.

Working with the Dhangars

Anthra is an organisation working in the field of rural livestock development and sustainable use of resources (www.anthra.org). The organisation was started by a team of women veterinarians in 1992, several of whom are also on the board. Anthra mainly works with poor livestock holders, including small dairy farmers, women raising backyard poultry and pastoralists. We have been working with the Dhangar pastoralists for over a decade. The Dhangars are semi-nomadic shepherds who migrate seasonally across the semi-arid Deccan Plateau for six to nine months of the year in search of grazing pastures and fodder. They travel in small groups of three to five individuals with 50 to 200 sheep and goats, three to five horses, chickens and dogs. It was in discussions with the Dhangars that Anthra discovered one of the women in the community had died in childbirth. Anthra began to understand that other women and children had also faced difficulties and sometimes death in childbirth. We came to realise that the health of the livestock was closely linked to the health of the people looking after them and that we could not ignore the role of women and the challenges they face, particularly due to their constant migration. Jolted by the death of a Dhangar woman in childbirth, Anthra set out to understand how Dhangar women

deal with pregnancy, maternal health and giving birth while migrating for eight months of the year. It is part of a larger programme aimed at addressing some of the problems faced by pastoralists including access to fodder and grazing lands, better health care for their animals and ensuring a heightened sensitivity towards these communities and their problems by policy makers and development workers.

The authors were unable to find any research on the health, particularly maternal health, of pastoral communities in India, although a rigorous body of work from Africa, the Middle East and Central Asia (Thaddeus & Maine 1994, Münch 2007 cited in Randall 2010, Schelling *et al* 2008) informed our discussions with the Dhangars.

The role of women in Dhangar communities

Dhangars travel in groups as small as one man, his wife, children and mother, to as large as ten families with some elders. They can have as few as 100 goats to about 800 sheep and goats. They migrate to find grazing land for their animals and usually follow the path of the south west monsoon. They criss-cross the arid, rocky Deccan Plateau traveling a distance of about 800 kms over the eight- to nine-month period. They live in temporary makeshift tents and carry few possessions including blankets made of coarse sheep's wool and utensils for cooking. The Dhangar women are responsible for looking after children, chickens, horses and young lambs, cooking, collecting water and firewood and dried cow dung for fuel. The men are responsible for herding and finding grazing pastures. The women are also responsible for packing up belongings, loading the horses with packs for migrating, and setting up camp (tents, pens for animals, utensils for cooking, starting fires, collecting fuel and water) when the herd stops.

Women play a vital role in maintaining the Dhangar livelihood. But similar to most communities in India and the developing world, women have a lower position in (Dhangar) society which can affect their health. Research in many developing parts of the world, including Tanzania (Evjen-Olsen *et al* 2008), Nepal (Gittlesohn 1991) and Maharashtra (Ganatra *et al* 1998) has shown that the literacy level of the decision maker of the household, usually a male, seems to have a bearing on the woman's access to health care and risk of maternal death. The decision-making powers of gatekeepers like mothers-in-law or husbands are an indication of the low status of women in the household and their lack of autonomy to make decisions. A woman's educational, cultural, economic, legal and political position in a given society generally shapes her access to health services, and there are specific ways in which it directly affects and can delay the decision to seek care. Women needing to seek permission from men and to be accompanied by a man to a health facility are common requirements among pastoral societies.

Research objectives and methods

The objective of the research was to understand Dhangar women's views and practices in relation to MCH. This was an inductive and iterative approach where we began the research with a blank slate asking broad questions about demographic information and MCH practices, including number of pregnancies and children (alive and dead), pregnancy and child-birthing experiences (eg traditional practices: use of herbs, foods; sources of information; visiting health facility — frequency, access, experience, cost; procedures at health facility — reports, results, advice, medications; experience of childbirth — when, where and who they were with, what they did; postnatal period — breastfeeding, immunisation, birth registration, hospital visits). Through the interviews, we hoped to understand their practices and motivations, meanings, priorities and assumptions by constructing their views and actions in relation to MCH and determining where these sit in the larger social structure. The constructivist approach to grounded theory acknowledges that many social realities exist, and that all reality is a construction or interpretation by both researcher and participant.

Data were collected through in-depth interviews, analysing data *in situ* and using categories, insights and concepts from one interview to inform not only questions asked in the next interview but also to direct who was interviewed. This is a key concept of grounded theory, known as theoretical sampling. For example, the decision to interview women who had birthed in the last five years was informed by a pilot study among women of different ages, which showed that older women had all birthed in the field rather than a hospital and had received no check-ups at a health facility. This pattern coupled with the known reduction in maternal and infant mortality in Maharashtra in the last decade and health infrastructure improvements, led to interviewing Dhangar women who had birthed in the last five years, for a more current representation. The decision to interview mothers-in-law and husbands, arose out of insights in interviews with Dhangar women that highlighted the consideration of concepts such as 'gatekeepers' and 'enablers' of maternal health. Concepts and categories then move to a higher level of hypothesis with the aim of theory building, which is a journey still in progress. This paper reports on the pilot phase of the research and some of the challenges and results. Due to space constraints verbatim comments have not been included.

Between February and April 2015, the authors interviewed six Dhangar women who had had a child in the last five years, and three mothers-in-law. Between them they had 14 pregnancy and birthing experiences with one neonatal death a few hours after childbirth. The team travelled over 800 kms from the base in Pune to interview Dhangar women migrating around more populated areas including Pen, Chakan,

Wai and Narayangaon. Families who migrate across the vast and sparsely populated Deccan Plateau may have different experiences of pregnancy and childbirth and are still to be interviewed.

Anthra is in contact with about 350 migrating families via mobile phones. Some of the challenges of conducting the research include travelling great distances to locate Dhangar families in interior areas on dirt tracks and on foot where vehicles cannot reach. The mobile phone has made a considerable difference to staying in contact with Dhangars; however, often their mobile phones are not working, not charged, out of cellular range, or they have changed their telephone numbers. Conducting interviews in the open during the summer heat and monsoon rains without sheltered areas to speak to the women also proved challenging. Women are extremely busy and they had to be interviewed while they were looking after the lambs, cooking food or bathing the children. In their daily lives, Dhangar women are rarely asked for their opinion on any matter. Sometimes a second visit encouraged them to open up about their experiences, sensing our genuine interest in their views. While the repeat visits were beneficial to the research, the team also had to consider the time and cost involved.

Early findings

Presented here is a snapshot of the initial findings for this ongoing project.

Description of maternal health-seeking behaviour

Dhangar women appeared to prioritise, using a health facility in the antenatal period rather than during the birth. Their main concern was the health of the fetus during pregnancy rather than the potential risks involved during and after birth. The researchers explored why women believed that a doctor or medical professional was not required during delivery. Initial discussions revealed that their proximity to living with animals and being constant witness to the birth of lambs, chickens, and puppies, made them more familiar with the birthing process and they did not believe it to be a potentially life-threatening situation. Two women had heard of a Dhangar woman dying in childbirth.

Despite their concern about the early phases of pregnancy, a number of factors prevented Dhangar women from accessing a health care clinic which had diagnostic facilities such as blood tests and sonography. Women described the great deal of planning that had to take place in order for a woman to go for a check-up during her pregnancy, especially for those travelling in small groups; both husband and wife could not leave the sheep, children and other animals unattended. Animal predators (wolves, foxes, dogs) and hostile villagers are a security risk. Women are not allowed to travel without male accompaniment. Women expressed difficulties in

arranging for a male relative or friend from another Dhangar group to accompany them or look after the sheep while their husband took them for a check-up. Nonetheless, with the advent of mobile phones, getting in touch with people is easier. Making the journey from a campsite to a main road, village or town is arduous, with the pregnant woman sitting on the back of a bicycle travelling on unpaved, rocky dirt tracks. Most Dhangars do not have access to motorbikes or cars.

As they migrate between villages and towns, women visited different doctors during the antenatal period. Medical records were not always preserved, and women said that doctors disapproved of their migratory lifestyle. They are unable to follow through with the advice of the doctor in terms of fulfilling prescriptions and not exerting themselves during pregnancy. Being on constant migration they do not have access to pharmacies which are located in large hamlets or towns. Their outdoor lifestyle herding sheep and trekking across vast landscapes makes curtailing physical activity improbable. The women perceived less stigma when visiting a private practitioner, and some had in-house diagnostic facilities but the fees were higher. The women said that government facilities were less developed, waiting times were longer and staff often unfriendly but fees were considerably less. Due to their lack of education, the Dhangar women we spoke to were unaware of mandatory clinical and diagnostic procedures during the different stages of the antenatal period. Their perception of a good doctor's visit was if he/she performed an ultrasound. They were also unaware of the importance of their own weight, diet and blood test results and the impact of their health on the baby's well-being. None of the women interviewed could read or write and no one had explained to them what their test results meant. They were aware of their due date but they did not have calendars. Some men used the calendars on their mobile phone but often lost track of the days and weeks.

Most women had at least one antenatal check-up during her pregnancy either within the first three months or in the seventh or eighth month of pregnancy. They expressed a desire to go every month for a check-up but they had no decision-making powers and they acknowledged a number of limitations such as constant travel and having livelihood responsibilities, eg looking after sheep and children. Women also faced challenges that other studies have documented among semi-nomadic pastoral groups in the Middle East and Africa such as lack of accessibility and acceptability of hospital care and staff practices.

Women did not experience the same amount of concern during the antenatal period as they did during the time of childbirth. Women were less worried about having to birth in the fields without medical aid, possibly because it is a common practice among women from this community. Furthermore, the unacceptability of

hospital practices (including being forced in to a supine position and the way the placenta is disposed of), lack of transport, distance and cost were dissuading factors. In fact, husbands and mothers-in-law made no arrangements to be near a large town or to have transport available as the due date approached. A hospital birth was sought out only when labour was prolonged and the woman was in extreme pain. The decision to take the woman to a hospital was made by the mother-in-law (if present) or the husband/any other male present. Moreover, arrangements to get her to a hospital were made at the last minute.

We asked women to describe their experience of giving birth in the field. Not all women had the company of a mother-in-law or a woman who had gone through labour herself. When the woman began to experience painful contractions, she was taken to a tree or a tent and a sari or long cloth was used to make a screen for privacy. The woman was made to walk and pace right up to the point of birth. The woman birthed in the squatting position with a sheep's wool blanket placed underneath her. One woman interviewed was alone during the time of birth as her husband and sister-in-law had taken the sheep for grazing. She recalls how she cut the umbilical cord herself, with a 'chaku' (all-purpose knife), buried it and then walked down to a stream where she bathed herself and the baby. One woman we interviewed went in to labour while on migration, walking across the barren Deccan Plateau. There were no trees for privacy. She recalled that she kept walking until the final moment. Some Dhangar groups that travel with ten or more families and herd thousands of sheep may have a 'dai' or traditional birth attendant with them. We met one group with a 'dai' but at the time of the visit she had been called away to attend to a woman in labour in a nearby traveling Dhangar group.

One woman recalled having experienced an infant death. She had birthed alone in the field and believes that she fainted after giving birth. She recalls that the baby was a boy and that she placed the baby down next to her. When she regained consciousness, she says the baby was not breathing.

Most women believed that the umbilical cord had spiritual significance. It is buried along with a lime, flowers and some coconut, if available. As is common in south Asia, due to a lack of education, Dhangar women believe the colostrum to be dirty. It is thrown out and the baby is given pre-lacteal feeds in some cases for up to three days before feeding breast milk. None of the babies or children on this occasion had received full immunisation. Some had received one oral polio dose. Men were unaware of the importance of vaccination for infants, although all their sheep had received vaccinations.

Discussion

The key challenge for women to receive MCH is balancing their livelihood responsibilities that are

dependent on a migratory lifestyle with health services and infrastructure that are targeted to sedentary immobile populations. Despite these challenges, the Dhangar women in this study sought care in the antenatal period. Their motivation is to find out the health of the fetus. However, they seek out care at times suitable to their lifestyle, when someone is able to accompany them and take on their responsibilities of looking after sheep and homestead, rather than at a medically appropriate period in their pregnancy.

Similar to challenges faced by many Indian women, Dhangar women lack education and decision-making powers. They are unable to read the doctor's notes or due date or ask relevant questions due to their lack of literacy. The low status of women coupled with their migratory lifestyle means that they are stuck in a disempowering web where they are dependent on men to accompany them to a health care facility. Distances from habitations, the lack of a secure homestead to leave children and animals, and the lack of family support due to small households, magnifies their challenge. Dhangar women are highly aware of the crucial role they play in pastoral livelihoods.

Few studies have evaluated delivery of primary health care services to nomadic populations (Swift *et al* 1990). An intervention in Ethiopia's Afar region showed that mobile health services reaching nomadic camps were avidly used by nomadic pastoralists but it was not a cost-effective strategy (Green 1979, Schelling *et al* 2012). A World Bank funded initiative found that mobile health clinics were especially popular for women and children's illnesses in some Indian states but required public-private partnerships and civil society intervention to sustain operations (The World Bank 2012). Mobility makes it difficult to deliver services. Migration in general has been seen as deviant behaviour that has to be normalised by making these groups sedentary. However, ecologically and economically, pastoralism can only survive with mobility and in grassland landscapes pastoralism is one of the best land-use options. The current health infrastructure is unable to successfully deliver services to vulnerable village-based populations. Delivering services to migratory populations will require a significant shift in how we perceive the health care needs of different populations.

Conclusion

The maternal health needs and practices of semi-nomadic pastoral communities in India are largely hidden from view and unaccounted for. The lack of enumeration of these economically and ecologically significant populations means that the scale of the MCH issues and the problems they face cannot be quantified. Without knowing the magnitude of the problem their inequities and disadvantages remain hidden to policy makers. These populations make a significant contribution to the state and country's economy and women are an integral part of maintaining the occupation.

Anthra continues to examine these issues and explore a 'One Health' approach that recognises that humans, animals and ecosystems are all inter-connected. We believe there is an artificial separation of livestock care and human medical care. Communities do not necessarily view these as two separate streams. To integrate the two, ten women will participate in learning programmes through an improvisation on the One Health model. They will simultaneously learn and share experiences on livestock health care and MCH. This would also be an attractive model to get men involved in to contribute to the health of their women, building on their knowledge of animal health.

Gayatri Ganesh has a Master of Arts in Sociology and is a Research Consultant for Anthra.

Dr Nitya Ghotge has a Masters in Veterinary Science with a specialisation in surgery and is currently the Director of Anthra.

This study is funded by Misereor, the German Catholic Bishops' Organisation for Development Cooperation, based in Germany. The views expressed are those of the researchers.

References

- Blench R (2000). *Extensive pastoral livestock systems: issues and options for the future*. <http://dlc.dlib.indiana.edu/dlc/bitstream/handle/10535/5313/Blench.pdf?sequence=1> [Accessed 15 September].
- Dhas M (2006). How the migrant sheep and goat rearers of Maharashtra manage the water requirement of their herds. *Annual Partners Meet of IWMI-Tata Water Policy Programme*. Anand, 8-10 March. <http://publications.iwmi.org/pdf/H043617.pdf> [Accessed 15 September].
- Downie K (2011). *A review of good practice and lessons learned in programming for ASAL populations in the Horn of Africa*. UNICEF ESARO. <https://goo.gl/E5RxdF> [Accessed 15 September].
- Evjen-Olsen B, Hinderaker SG, Lie RT *et al* (2008). Risk factors for maternal death in the highlands of rural northern Tanzania: a case-control study. *BMC Public Health* 8(52). <http://www.biomedcentral.com/1471-2458/8/52> [Accessed 15 September].
- Ganatra BR, Coyaji KJ, Rao VN (1998). Too far, too little, too late: a community-based case-control study of maternal mortality in rural west Maharashtra, India. *Bulletin of the World Health Organization* 76(6):591-8.
- Gittlesohn J (1991). Opening the box: intrahousehold food allocation in rural Nepal. *Social Science and Medicine* 33(10):1141-54.
- Green PF (1979). Taking western medicine to a nomadic people. *Transactions of the Royal Society of Tropical Medicine and Hygiene* 73(4):361-4.
- Hatfield R, Davies J (2006). *Global review of the economics of pastoralism*. World Initiative for Sustainable Pastoralism. http://cmsdata.iucn.org/downloads/global_review_ofthe_economicsof_pastoralism_en.pdf [Accessed 15 September].
- Ministry of Health and Family Welfare (2017). *National Family Health Survey – 4 2015-2016. India fact sheet*. Mumbai: International Institute of Population Sciences. <http://rchiips.org/nfhs/pdf/NFHS4/India.pdf> [Accessed 15 September].
- Ministry of Social Justice and Empowerment (2008). *National commission for denotified, nomadic and semi-nomadic tribes*. <https://www.india.gov.in/national-commission-denotified-nomadic-and-semi-nomadic-tribes-ncdnt> [Accessed 15 September].
- Montgomery AL, Ram U, Kumar R *et al* (2014). Maternal mortality in India: causes and healthcare service use based on a nationally representative survey. *PLoS One* 9(1):e83331.
- Randall S (2010). Nomads, refugees and repatriates: histories of mobility and health outcomes in Northern Mali. *Society, Biology & Human Affairs* 75(2):1-26. http://www.biosocsoc.org/sbha/sbha_journal/SBHA-2010-75_2.pdf [Accessed 15 September].

Sanneving L, Trygg N, Saxena D *et al* (2013). Inequity in India: the case of maternal and reproductive health. *Global Health Action* 6:1-31.

Schelling E, Wiebel D, Bonfoh B (2008). *Learning from the delivery of social services to pastoralists: elements of good practice*. Basel: Swiss Tropical Institute. https://cmsdata.iucn.org/downloads/social_services_to_pastoralists_english_2.pdf [Accessed 15 September].

Schelling E, Bechir M, Daugla MD *et al* (2012). Health research among highly mobile pastoralist communities of Chad. *Society, Biology & Human Affairs* 75(2):95-116. http://www.biosocsoc.org/sbha/sbha_journal/SBHA-2010-75_2.pdf [Accessed 15 September].

Sharma VP, Köhler-Rollefson I, Morton J (2003). *Pastoralism in India: a scoping study*. London: Natural Resources Institute, University of Greenwich. <https://assets.publishing.service.gov.uk/media/57a08ce2e5274a31e00014fa/ZC0181b.pdf> [Accessed 15 September].

Swift J, Toulmin C, Chatting S (1990). *Providing services for nomadic people: a review of the literature and annotated bibliography*. UNICEF Staff Working Paper 8. New York: UNICEF.


Thaddeus S, Maine D (1994). Too far to walk: maternal mortality in context. *Social Science & Medicine* 38(8):1091-110.

The World Bank (2012). *Improving health services for tribal populations*. <http://www.worldbank.org/en/news/feature/2012/02/28/improving-health-services-for-tribal-populations> [Accessed 15 September 2017].

United Nations (2014). *The Millennium Development Goals Report 2014*. New York: United Nations.

Ganesh G, Ghotge N. MIDIRS Midwifery Digest, vol 27, no 4, December 2017, pp 527-532.

Original article © MIDIRS 2017.



Myles Pocket Reference for Midwives

Cathy Ashwin • Michelle Anderson

ELSEVIER

Myles Pocket Reference for Midwives

Cathy Ashwin & Michelle Anderson | 9780702072277 | £14.99

A brand new resource that offers readers a ready source of up-to-date information at the fingertips!

Well illustrated with over 100 figures, tables and pull-out boxes, this slim pocket guide includes a wealth of information ranging from physical examination to drug calculations, antenatal investigations, screening, infant feeding, medical complications of pregnancy, and birth emergencies.

Special offer for MIDIRS readers: Save 20% when you quote SAVE20 at checkout on www.elsevierhealth.co.uk

www.elsevierhealth.co.uk

ELSEVIER