

Newborn care seeking practices in Central and Southern Ethiopia and implications for community based programming

Yared Amare¹, Tedbabe Degefe², Brian Mulligan²

Abstract

Background: In Ethiopia, close to 120,000 newborns die annually and newborn mortality now constitutes 42% of under-five deaths. The use of health care for newborn illnesses is very limited.

Objective: To investigate local perspectives and practices related to newborn care-seeking and the factors affecting them.

Methods: Key informant interviews with grandmothers and in-depth interviews with mothers, TBAs and fathers were used to collect data in four communities in Sidama Zone, Southern Nations, Nationalities and Peoples Region and East Shewa Zone and West Arsi Zone in Oromia Region. Analysis consisted of manual thematic coding of the data and synthesis for write-up.

Results: Locally recognized signs and types of illness only partially conform to medically recognized danger signs. Households apply home therapies, traditional healers or health facilities to get treatment for sick newborns. Lack of resources, transportation and appropriate treatment are barriers to making use of health facilities.

Conclusion: Local conceptions of newborn illnesses, inadequate recognition of danger signs, using traditional treatment, and lack of financial resources, transportation and appropriate treatment constrain or delay resorting to health facilities for newborn illnesses. [*Ethiop. J. Health Dev.* 2012;27(1):3-7]

Introduction

The number of under-five deaths worldwide has declined from more than 12 million in 1990 to 7.6 million in 2010. However, the proportion of under-five deaths that occur within the first month of life (the neonatal period) has increased about 10 percent since 1990 to more than 40 percent (1, 2).

Despite the fact that Ethiopia has made considerable improvement in child health, it is increasingly evident that there is still a disproportionate burden of deaths within the neonatal period. Close to 120,000 newborns die annually and newborn mortality now constitutes 42% of under-five deaths. This burden is even greater for the large rural population due to poor access and use of maternal and newborn health services. Mortality is highest in the first 24 hours after birth – 25 to 45% of all neonatal deaths - whereas three quarters of neonatal deaths occur in the first week (3).

Care seeking is a crucial part of managing illness and preventing mortality in newborns. Care seeking practices depend on local beliefs, preferences and decision-making with respect to newborn illnesses. The recognition of signs of ill-health, which may have similarities and differences with medically recognized dangers signs, is an important starting point for care seeking. Household responses to signs of ill-health, which include the use of home-based treatments and traditional healers, can affect the use of modern health care. In addition to the common financial and geographic barriers to access (4), studies in Asia and Africa have documented delays in recognition,

in delivery and poor quality of care by providers and lack of knowledge of newborn danger signs (5, 6).

Improvement of newborn care seeking practices, which can include reinforcing their strengths and eliminating their weaknesses, is a vital aspect of the efforts to reduce newborn morbidity and mortality. Strategies to improve these practices need to be informed by better understanding of their nature and factors that influence them. Studies on newborn care seeking in Ethiopia have been few and comprehensive descriptions of newborn care seeking practices are needed (7).

In order to come up with an appropriate design for a community-based neonatal health care intervention, we conducted formative research to explore newborn care seeking practices. The findings of this study have important programmatic implications for community-based programs to improve neonatal health and survival.

Methods

Qualitative research methods were used to collect data for the study done in 4 communities or *kebeles* (the lowest administrative unit) in Sidama Zone in Southern Nations, Nationalities and Peoples Region, and East Shewa and West Arsi Zones in Oromia Region. The study was conducted in June and July of 2008. The study communities were selected purposively for their accessibility and varying distances to health facilities. Each community was located in one of 4 *woredas* (districts) - Aleta Chuko and Arbe Gonna *Woredas* in Sidama Zone, and Liben Chukala *woreda* in East Shewa Zone and Gedeb Asasa *Woreda* in West Arsi Zone. A

¹P.O. Box 70196, Addis Ababa, Ethiopia, Tel. 0911407412, 0113728182, E-mail yaredamare@yahoo.com

² Save the Children Federation, Addis Ababa, Ethiopia.

total of eight key informant interviews with grandmothers, seven in-depth interviews with TBAs, fifteen in-depth interviews with fathers, and twenty seven in-depth interviews with mothers were made for in the study.

Research assistants experienced in qualitative investigation did the interviews. Local translators were used to translate from Sidama and Oromiffa to Amharic. The interviews were tape recorded and later transcribed verbatim in Amharic.

Data analysis started with a review of the transcripts. Responses were manually coded under various themes that were of concern in the study including perceived signs, symptoms, causes and types of newborn illnesses as well as factors influencing responses to them. The data that was compiled under the various themes were then synthesized, noting relationships and frequencies among themes and differences by respondent type and study sites, and written up.

Results

Care seeking practices are aimed at the attainment of locally recognized conditions of good health in newborns. In the study communities, signs of health in newborns are seen to include steady weight gain, breastfeeding well, high birth weight, and absence of skin sores and illnesses such as colds, diarrhea and fever. Newborns who do not cry a lot and are happy and playful are also thought to be healthy.

Care seeking practices are also based on and address locally recognized signs of illness. A common and closely related set of signs of illness in newborns frequently identified by mothers, grandmothers and fathers were continuous crying or irritability, inability to suck and fever. Newborns in Aleta Chuko and Arbe Gonna are given a herbal medicine called *hamessa*. In Liben Chukala, mothers label the condition as *mitch*¹, and rub them with a local herb or have them inhale the smoke from burning the leaves. Respondents in Gedeb Asasa said that *mitch* is caused by the evil eye or the devil and take such babies to a *qalicha*² who may prescribe an amulet or a herbal drink, or to a *wogessa*³ for massaging with butter. Other mothers and most fathers said that they would take the baby to a health facility as a first resort or if such treatments did not work. On the other hand, a Protestant mother in Liben Chukala, who had church elders pray for the baby, gave what was a

¹A widely accepted condition in Ethiopia in which people are affected by environmental conditions causing fever, cramps or skin sores particularly when stepping outside the house after eating or sweating.

²A local spiritual leader.

³A traditional healer skilled with the use of his or her hands to correct physical abnormalities.

common explanation for not taking newborns to health facilities.

We don't take him to a health facility because they will not do anything for him. I just call the elders here to pray for him, according to our faith. They don't give medicine to a baby under one month of age. Since they told me to go back and just breastfeed the newborn in the past, I don't take him there.

A second set of signs of illness were vomiting, diarrhea, stomach ache and weight loss. Most mothers and fathers said that they would take a newborn exhibiting such signs to the health facility promptly. Some of them would take such babies to a traditional healer or give them a herbal drink. Others believe that vomiting is just a sign of a growing chest or overfeeding.

Some mothers and fathers identified skin rashes as a sign of illness. In Arbe Gonna, they rub the newborn with a herb called *hamessa*, or take the baby to a health facility like many mothers in the other communities. Sore skin is said to come from lack of hygiene or the evil eye in Gedeb Asasa and treated by bathing or having the baby inhale smoke from roasting coffee and barley, respectively.

Difficult or fast breathing was recognized as a sign of illness by some mothers and grandmothers while others either did not know about it or considered it a temporary problem. Those who recognized it as a sign of ill-health recommended taking the baby to a health facility. In conformity with some grandmothers in Arbe Gonna, an eighteen-year old woman asserted that babies experiencing such breathing problems 'have folded intestines from not being carried properly. They are taken to a *wogessa*. If the *wogessa* does not heal the baby, he has to be taken to a health center'.

Many respondents did not identify redness of the eye, lethargy, umbilical infections, low temperature or fits as signs of illness. Those who recognized redness of the eye as a health problem treated babies with the *hamessa* herb in Arbe Gonna, rubbed them with a local herb in Liben Chukala, whereas others took them to a health facility. People may only resort to prayer in case of lethargy in babies. Newborns with umbilical infections are again treated with *hamessa* or considered to have a temporary problem in Arbe Gonna, or taken to health facilities in Aleta Chuko and Gedeb Asasa. A mother in Gedeb Asasa said that she would get ampicillin from the clinic and put it on a sore stump. Also in Gedeb Asasa, a woman said that babies who had stomach cramps – recognized when they wriggle or cry when defecating – are given a mixture of local herbs known as *tena adam*, *tikur azmud*, *kebericho*, *tej sar* and *abesud*.

Closely related to the signs of illness outlined above, local notions of full-fledged newborn illnesses also guide

care seeking practices. Table 1 summarizes such locally recognized newborn illnesses, their perceived causes and symptoms, and care seeking for them. The table shows that home remedies and approaching traditional healers

are common responses to locally recognized illnesses in newborns, while they are taken to health facilities for other illnesses or as a second resort after pursuing the former options.

Table 1: Local Newborn Illnesses and Care Seeking

Local Illness	Locality	Causes	Symptoms	Care-Seeking
Hamessa	Aleta Chuko	Illness, lack of good food during pregnancy, failure of mother and newborn to drink hamessa herbal medicine	Inability to suck, continuous crying or irritability, fever, stomach cramps, skin rashes and redness of the eye and umbilicus.	1 st -Hamessa herbal medicine, 2 nd -Health facility
	Arbe Gonna			
Mitch	Liben Chikuala	N/A	Inability to suck, continuous crying, fever.	Herbal rub and inhalation of herbal smoke
	GedebAsasa	Excessive exposure to sun	Sickness of the eye and stomach.	
Buateta	Aleta Chuko	Unknown	Vomiting, diarrhea, abdominal distention, inability to suck or sleep and continuous crying	Health facility or local medicine from wogesha or TBA
Berd	Liben Chikuala	Contact with cold air or wind	Fever, difficulty breathing, coughing, sore throat, continuous crying, inability to feed and open eyes	Health facility with possible delay
	Gedeb Asasa			
Samba mitch	Aleta Chuko	N/A	Cough, raising eyes upwards & sounds of pain	Health facility or herbal medicine
	Arbe Gonna			
Kufto	Gedeb Asasa	N/A	Fever, skin rash and swellings	1 st -Herbal bath 2 nd -Health facility
Kufa (cold)	Gedeb Asasa	Unsanitary conditions eg. smell of livestock urine	Cough and swelling of the face	Health facility if it persists or gets worse
Megagna	Gedeb Asasa	Contact with an evil spirit	Swelling of the body, face and hands; peeling off of skin	Health facility
Wosfat	Arbe Gonna	Stomach worms due to intake of unhygienic water	Vomiting and diarrhea	1 st -Herbal medicine, 2 nd -Health facility

If they determine that a visit to a health facility is appropriate, many mothers denied that any factor would prohibit them from making such a visit with their newborn. According to some mothers, grandmothers and fathers, however, the cost of or inability to pay for care and their perceptions regarding the severity of the illness and the lack of capacity of health workers to treat sick newborns can affect the likelihood or timeliness of a visit to health facilities.

It is mostly mothers who notice a sign of illness in a newborn and who consult their husbands and sometimes neighbors about it. The decision to go to a health facility is often made by the father but in consultation with mothers. Grandmothers sometimes influence such decisions also.

Discussion

Care seeking practices play an important role in reducing the impact of newborn illnesses including mortality. While correct recognition of danger signs in newborns is

essential to effective care seeking, previous studies have shown that mothers often have limited knowledge about them (8-10). In the study communities, some locally recognized signs and types of ill-health correspond with medically recognized indicators and types of illness while others were distinct. Many respondents were also not aware of medically recognized danger signs such as redness of the eye, lethargy, umbilical infections, hypothermia or fits.

As in other settings, community members pursue specific care-seeking options for the different types and signs of illness they recognize, which include the use of home-based herbal medicines, baths, rubs or inhalants, consultation of traditional healers who prescribe herbal drinks, massages or amulets, or visits to health facilities (11-13). Similarities and differences within and between communities were observed in responses to newborn illnesses. In some cases, households made use of modern health care subsequent to the unsuccessful use of home-based remedies and traditional healers whom they may

prefer due to cultural beliefs and greater accessibility (14, 15). This inevitably leads to delays in using health facilities for newborn illnesses, in addition to the influence of time lapses related to assessments of the severity and persistence of illnesses (16, 17).

Similar to the findings from a study conducted in Ghana, factors such as the cost of health care, lack of money or transportation, and the lack of appropriate treatment for newborns in health facilities were also said to delay or constrain use of modern health care in the study communities (18). The decision to seek care from health facilities is mostly ultimately made by fathers, although often in consultation with mothers. Grandmothers are also apparently able to influence such decisions in certain cases.

Conclusion

Initiatives to scale-up the nationally recommended package of practices for improving neonatal health in Ethiopia should be adapted to local socio-cultural contexts and health practices. This will guide message development for behavior change communication and allow prioritization of recommended practices according to ease of introduction and impact on reducing newborn mortality.

The findings of this study call for certain steps to improve care seeking and services for newborns. It is necessary to strengthen community awareness of illness signs in newborns and demand for medical care. Awareness raising efforts should relate known newborn danger signs with local beliefs regarding signs and types of newborn illness and target various household members—mothers, fathers and grandmothers. It is important to address financial, physical and other socio-cultural barriers to care-seeking. The involvement of traditional healers in improving prevention of and care-seeking and referrals for newborn illnesses should be considered as well.

Acknowledgements

The Saving Newborn Lives Project implemented by Save the Children, USA and John Snow International sponsored the study.

We would like to thank our research assistants Seblewongel Ayalew, Yewilsew Mengiste, Serawit Omer and Selamawit Menkir who collected the data for the study in a highly competent manner. We also appreciate the permission and support provided by Oromia and SNNP Regions. We are grateful for the willing participation of members of the study communities.

References

1. UNICEF, WHO, World Bank, UN DESA/Population Division. Levels & Trends in Child Mortality. Report 2011. New York: UNICEF, 2011.
2. Liu L, Johnson HL, Cousens S, Perin J, Scott S, Lawn JE, et.al. Global, regional, and national causes of child mortality: An updated systematic analysis for 2010 with time trends since 2000. *Lancet* 2012;379(9832): 2151-2161.
3. Central Statistical Authority (Ethiopia) and ICF International. Ethiopia Demographic and Health Survey 2011. Addis Ababa, Ethiopia and Calverton, Maryland, USA, 2012.
4. Bazzano AN, Kirkwood BR, Tawiah-Agyemang C, Owusu-Agyei S, Adongo PB. Beyond symptom recognition: Care-seeking for ill newborns in rural Ghana. *Trop Med Int Health* 2008;13(1):123-8.
5. Mohan P, Agarwal SDK, Martines JC and Sen K. Care-seeking practices in rural Rajasthan: Barriers and facilitating factors. *Journal of Perinatology* 2008;28:S31-S37.
6. Waiswa P, Kemigisa M, Kiguli J, Naikoba S, Pariyo GW and Peterson S. Acceptability of evidence-based neonatal care practice in rural Uganda—Implications for programming. *BMC Pregnancy and Childbirth* 2008;8(21):1471-2393.
7. Warren, C. Care of the newborn: Community perceptions and health seeking behavior. *Ethiop J Health Dev* 2010; 24 Special Issue 1: 110-114.
8. Syed U, Khadka N, Khan A and Wall S. Care-seeking practices in South Asia: Using formative research to design program interventions to save newborn lives. *Journal of Perinatology* 2008; 28: S9-S13.
9. Choi Y, El Arifeen S, Mannan I, Rahman SM, Bari S, Darmstadt GL, Black RE, Baqui AH; Projahnmo Study Group. Can mothers recognize neonatal illness correctly? Comparison of maternal report and assessment by community health workers in rural Bangladesh. *Trop Med Int Health* 2010;15(6):743-53.
10. Waiswa P, Kallander K, Peterson S, Tomson G, Pariyo GW. Using the three delays model to understand why newborn babies die in eastern Uganda. *Trop Med Int Health* 2010;15(8):964-72.
11. Ahmed S, Sobhan F, Islam A, Barkat-e-Khuda. Neonatal morbidity and care-seeking behavior in rural Bangladesh. *J Trop Pediatr* 2001;47(2):98-105.
12. Chowdhury H, Thompson S, Ali M, Alam N, Yunus M and Streatfield P. Care seeking for fatal illness episodes in neonates: A population-based study in rural Bangladesh. *BMC Pediatr* 2011;11:88.
13. Warren, C. Care of the newborn: Community perceptions and health seeking behavior. *Ethiop J Health Dev* 2010;24 Special Issue 1:110-114.

14. Syed U, Khadka N, Khan A and Wall S. Care-seeking practices in South Asia: using formative research to design program interventions to save newborn lives. *Journal of Perinatology* 2008;28:S9-S13.
15. Mohan P, Agarwal SDK, Martines JC and Sen K. Care-seeking practices in rural Rajasthan: Barriers and facilitating factors. *Journal of Perinatology* 2008;28:S31-S37.
16. Awasthi S, Srivastava N M and Pant S. Symptom-specific care-seeking behavior for sick neonates among urban poor in Lucknow, Northern India. *Journal of Perinatology* 2008;28:S69-S75.
17. Mohan P, Agarwal SDK, Martines JC and Sen K. Care-seeking practices in rural Rajasthan: Barriers and facilitating factors. *Journal of Perinatology* 2008;28:S31-S37.
18. Bazzano AN, Kirkwood BR, Tawiah-Agyemang C, Owusu-Agyei S, Adongo PB. Beyond symptom recognition: care-seeking for ill newborns in rural Ghana. *Trop Med Int Health* 2008;13(1):123-8.