Barriers to the uptake of reproductive, maternal and neonatal health services among women from the pastoralist communities of Afar, Ethiopia: A qualitative exploration

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Abstract

Background: Women from the pastoralist communities of Ethiopia have lower levels of utilizing reproductive, maternal and neonatal health services compared to women living in agrarian communities of the country. Despite this disparity, the barriers to utilizing reproductive, maternal and neonatal health services in the pastoralist setting are not well understood.

Objective: This study aimed to explore the barriers to the uptake of reproductive, maternal and neonatal health services among women of reproductive age from the pastoralist communities of Afar, Ethiopia.

Methods: The qualitative study was carried out in five districts of Afar region in January 2016. Ten focus group discussions and 45 key informant interviews were conducted. The focus group discussants were married men and women. Key informant interview participants were clan, kebele and religious leaders; traditional birth attendants; health extension workers; health experts working in maternal and child health units and family planning units at health institutions, and at woreda and regional level; heads of women's affairs and health sectors (kebele, woreda and region); and representatives of non-governmental organizations in the region. Participants were selected based on their potential wealth of information. Semi-structured guides were used to facilitate the discussions and key informant interviews. Data were inductively coded and analyzed using Alas.ti software version 7.5. Data were coded, similar codes were organized into categories, and non-repetitive themes were developed. Peer debriefing and triangulation of data from focus group discussants and key informants were undertaken to enhance the reliability of the data.

Results: Low awareness regarding fertility regulation, skilled birth attendance and postnatal care, accompanied by low access to services, domestic work burdens and health facility-related factors, prevent women in the Afar communities from up taking reproductive, maternal and neonatal health services. The sub-themes of low awareness that emerged included religious disapproval of family planning; fertility and childbirth-related norms; husbands' disapproval; and limited discussions with partners regarding fertility. Moreover, difficulties getting transportation to give birth at a health facility, mobility, service-related costs and closed health facilities were components of low access to the uptake of these services. Health facility-related barriers were also explained by the absence of a conducive environment to give birth at a facility, including water availability, and women's preference for a female birth attendant at the facility and a traditional birth attendant during delivery.

Conclusions: The current study revealed poor awareness about, and low access to, reproductive, maternal and neonatal health services. Women in the Afar community still opt to use traditional birth attendants and female attendants for care during and following the delivery of a child. Strong, tailored and contextualized information, education and communication interventions aimed at women, husbands and religious and cultural leaders, may help to raise awareness and improve the uptake of these services. Empowering community health workers may also contribute to addressing low awareness these services. Moreover, concerted efforts to ensure actual and perceived access to the services are also recommended. [*Ethiop. J. Health Dev.* 2018;32(Special Issue):13-20]

Key Words: Barriers, Service Uptake, Afar, Pastoralist community

Background

Reproductive, maternal and newborn health (RMNH) spans a continuum of integrated care for mothers and children, which includes family planning (FP), antenatal care (ANC), skilled birth attendant (SBA) and postnatal care (PNC) services (1). Despite the role these services play in reducing morbidity and mortality among women and children, poor uptake of the services in developing countries is a challenge (2-5). Over the past two decades, although Ethiopia has shown remarkable progress in improving access to RMNH services, the uptake and utilization of RMNH services is much lower among women from pastoralist-dominated regions of the country (5). For instance, in 2016, the utilization of modern contraceptives in these regions was 12%; only 51% of pregnant women attended first ANC visit; just 16% of births were attended by a skilled attendant; and a mere 6.5% of women who gave birth had a PNC check-up either for themselves or their new born baby (5).

A recent systematic review of studies in developing countries identified a number of factors that limit the uptake of RMNH services: poor educational status, low wealth status, rural residence, being not married, lack of transportation, financial constraints, cultural beliefs and practices, gender issues, low women's autonomy to seek care, poor partners' involvement, burden of household work, poor approaches of health providers, and trust in traditional medicines and traditional birth attendants (TBAs) (2,3,6-9). However, most studies in the global literature focus on identifying barriers to accessing these services in the context of settled

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communities, and there is a scarcity of documented evidence for women in pastoral communities.

Pastoralist-dominated communities often base their lives on the availability of natural resources for their cattle and themselves, accompanied by mobility from place to place. Factors that characterize the context for pastoralist communities across the globe include limited access to natural resources, low economic and educational status, women-disfavoured gender-related norms, and harmful traditional practices. Therefore, the socio-cultural factors that hinder the uptake of RMNH services for women from these communities should be investigated so that they can be addressed by program planners and policy makers. The current study is aimed at qualitatively exploring barriers to the uptake of RMNH services by the pastoralist communities of Afar region, Ethiopia.

Methods and participants

Study setting: Afar is one of nine regional states in Ethiopia, with a total surface area of 97,256 km^2. The region is divided into five zones, 32 districts and five town administrations, with an estimated population of 1,816,304 people, 44% of whom (799,174) are females. Eighty-seven percent of the population is estimated to be rural. About 85% are pastoralist or agro-pastoralist, and the majority (96%) are Muslim (5). The study was conducted in a setting where the majority of women have no formal education, are from low wealth households, and reside in rural pastoral areas (5). More importantly, the study communities are predominantly Muslim, characterized by a clan-based system where male dominance is highly valued, and cultural and traditional beliefs have significant influence. Male dominance in decision-making about household issues is common (10), while most domestic work – such as grinding, food preparation, serving food, looking after goats and sheep, bearing and rearing children – is the responsibility of women (11).

***Study design*:** An explorative qualitative study was employed to explore the barriers to the uptake of RMNH services among women of reproductive age from the pastoralist communities of Afar region, Ethiopia.

Sample size and sampling procedure: A total of 10 focus group discussions (FGDs) were conducted. Five were with married women and the rest were with married men. The FGDs were followed by key informant interviews (KIIs). A total of 45 KIIs were conducted with clan, kebele and religious leaders; TBAs; health extension workers (HEWs); health experts working in FP units at health institutions, woreda, and regional-level offices; heads of women's affairs and health sectors (kebele, woreda and region); and representatives of non-governmental organizations in the region. The study was conducted in all five zones of Afar region. One district was selected randomly from each of the five zones. Similarly, two kebeles were randomly selected from each of the five districts and hence a total of 10 kebeles were included in the study. Purposive sampling was employed to select the study participants in consultation with the HEWs. A detail of sampling is provided in the manuscript[1] titled "Drivers to have more children in the pastoralist communities of Afar, Ethiopia: an explorative qualitative study").

Data collection tools and procedures: The data were collected using FGDs and KIIs. The topic guides mainly covered barriers to using FP, ANC, SBA and PNC services. A detailed description is provided in one of the articles included in this special issue.[1]

Data analysis: Preliminary analysis was carried out alongside data collection, and emerging issues were included in the data collection guides. Transcripts were imported into Atlas.ti version 7.5 for qualitative data analysis (ATLAS.ti Scientific Software Development GmbH, Berlin, 2015). Details about the reliability of the data and ethical considerations are provided in one of the articles included in this special issue.[1]

Results

Description of participants: An average of eight individuals participated in each FGD and the minimum and maximum number of participants per FGD was 6 and 11, respectively. All of the FGD and most of the KII participants are Muslims in religion and Afar in ethnicity.

Respondents mentioned that the utilization of RMNH services was not common, and was limited to women (or their partners) who are educated, urban dwellers, and those who live short travels distance from health facilities. The participants repeatedly mentioned that pregnant women in Afar pastoralist communities generally only consider using ANC, SBA and PNC services when they suffer from severe diseases and/or complications.

The utilization of FP services was reported to be remarkably low among women from the pastoralist communities of Afar. Most women don't use contraceptives, as they value and want to have more children. Respondents repeatedly mentioned that it is common in the Afar community for women to have a birth interval of less than one year (bearing a child within a year of giving birth to their previous child). Compared to their husbands, women are relatively willing to use FP services. Furthermore, participants also mentioned that some women in their community use contraceptives without discussing with, and disclosing it to, their husbands. Participants mentioned that husbands in general object to contraceptive contraception because they want to have more children, and a substantial number of women consider birth spacing through breast-feeding. A key informant from Dulecha district stated:

> *Women do not disclose their use of contraceptives. The women want to use it because*

[1] D*rivers to have more children in the pastoralist communities of Afar region, Ethiopia: an explorative qualitative study*

they have the experience of complications related to short birth intervals.

The importance of fertility control is reiterated by the elders. They say that nowadays there is a palpable improvement in FP use among women. Women tend to use contraceptives because of the health problems they face due to multiple births. In addition, frequent episodes of drought in the pastoralist communities have motivated women to consider fertility control measures, as supporting large families when a cattle rearing becomes more difficult.

Barriers to the use of RMNH services

The following factors were emerged as barriers to uptake RMNH services in pastoralist community of Afar; Low awareness, perceived religious disapproval, fertility and childbirth-related normative orientations, husbands' disapproval, partners' limited discussions on fertility-related issues, low access to the services, and health related factors.

Low awareness: Low awareness was among the repeatedly reported barriers to using RMNH services. Most of the women deliver at home and are not aware of the need to go to a health facility for a check-up, even if they look healthy and have no apparent disease/complications. They wonder why they should go if there is no obvious risk to their health. Furthermore, a few respondents mentioned that awareness-raising activities are limited in Afar pastoralist communities. Lack of awareness was the most frequently cited barrier to PNC visits. The participants indicated that HEWs' awareness-raising activities for PNC are low compared to the other RMNH services, such as FP, skilled birth attendance and ANC services. A female FGD participant from Dulecha reported:

The health workers do not tell us to come back after delivery for a check-up. They told us about attending a health facility during pregnancy. They do not tell us whether we should go to health facility for a check-up even if the woman and the infant look healthy.

Low awareness was also reported as a barrier to institutional delivery (ID). A health center expert from Yalo district reflected:

The first thing is that they [women] do not know the advantage of giving birth at a health institution. Particularly those who reside in places far from health facilities do not know the advantage. Hence, they do not come to a health facility to give birth.

A regional women's affairs expert stated:

The communities residing around the rural catchment do not consider using health institutions for delivery. Rather, they consider calling traditional birth attendants to assist them. This is because they do not think of death associated with excessive bleeding. They might not think of the dire consequences of using unclean tools for delivery at home.

Perceived religious disapproval: Women's perceptions of potential religious disapproval of RMNH service utilization was a barrier to FP and the use of contraceptives. Furthermore, participants frequently reflected views that highly oppose controlling birth through FP. Participants quoted sayings in the Holy Quran that support the view that limiting the number of children using contraceptive methods is forbidden by Allah. A religious leader from Dalifage district strictly opposed FP:

There is no possibility of justifying family planning use to regulate the number of children an individual will have with its economic status. It may be applicable if the mother is seriously ill but the door is closed for economic reasons in the Islamic Holy Quran.

However, the participants less frequently reported religion as a barrier to ANC, SBA and PNC. A religious leader from Dalifage explained:

Kitab/Holy Quaran supports the efforts of health professionals that would keep the mother and the fetus healthy during and after pregnancy.

Contrary to this viewpoint, a few participants reflected that religious leaders disallow a pregnant woman from getting help from professionals during pregnancy and childbirth.

Fertility and childbirth-related normative orientations: With respect to culture, a normative orientation that encourages a family to have many children was also cited as barrier to FP. Consequently, women felt ashamed to use FP methods and hide themselves from the community because they fear that they could be discriminated against and be ex-communicated. A married woman from Chifra district stated:

Neither our religion nor the culture ('Afar Adda') discourages having many children. It is believed that every child would come with his own fate. No more children will compete with the fate of the other. Hence, it is our culture to have many children.

Women also tend to deliver at home for normative reasons like unwillingness to be touched and to be seen naked by a male health professional in a health facility. In addition, women recalled that older women didn't suffer when giving birth in their homes. Women also prefer to deliver at home to be with, and to receive care and food from, their relatives, to wash the infant and the mother, and to practice traditions such as 'Onur' (where a religious or clan leader feeds the infant milk and butter with herbs, in the belief that the infant will become religious and a hero). These norms were found

to be restricting factors for skilled birth attendance and PNC. Moreover, FGD discussants stated:

> *It is customary in Afar pastoralist communities that women and infants should be washed immediately after delivery. However, health professionals advise the women to abstain from washing the baby for 24 hours, which leads them to be unpleasant.*

Besides, a few participants reported that:
It is not customary for Afar women to go out of the home before 40 days of giving birth if the woman does not become severely ill. They perceive that it is a risk for evil eye and wind beat (refers to strong wind or Windstorm) *that could cause 'breast pain' and other related pains.*

Husbands' disapproval: Married men and women in the FGDs frequently reported that a child is considered a gift from God. The more children you have, the greater will be your power, dominance and support in later adulthood, and the stronger your clan will be. Stemming from these orientations and others, husbands in general tend to have more children than women, whereas women tend to regulate fertility using contraceptives to prevent suffering from consecutive births. However, women's low decision-making power to use RMNH services and to confront husbands' desires to have more children has a significant impact on women's use of contraceptives. Women would not confront their husbands' decisions. The fear of divorce restricts women from using contraceptives to limit children, or space birthing. Besides, the respondents also highlighted male domination as factor for discouraging discussions about birth spacing among married women.

Partners' limited discussions on fertility-related issues*:* The respondents mentioned that partners' discussions regarding fertility and fertility-related issues and service utilization were poor. Women in Afar are shy about discussing fertility regulation, birth spacing, and family planning use with their husbands. Newly married couples, in particular, would not discuss their future fertility and related issues because of shyness. Married women are also expected by relatives and their community to give birth immediately. They are less likely to delay pregnancy for two to three years after getting married.

Low access to RMNH services: Strong barriers to using RMNH services were the lack of transportation services to health facilities, closed health facilities, the need to be mobile to search for water and food for livestock, and the perceived difficulty of covering the cost of RMNH services.

Difficulty getting transportation: Almost all participants in the FGDs and KIIs mentioned transportation as a significant barrier to the uptake of RMNH services, except for FP services. In particular, the lack of transport was the most frequently mentioned barrier to skilled birth attendance and ANC follow-up. Due to the lack of transport services, young males are obliged to carry pregnant women who are in labour or suffering from an illness to the nearby health facilities using locally made stretchers called 'Osaka'. Participants claim that there is an increasing demand for ANC compared to the past. However, they also say that a lack of transportation hinders women from using ANC and it affects the frequency and regularity of ANC follow-up. A religious leader from Ada'ar district stated:

> *There are many mothers who do not go to a health facility for follow-up. The reason is long travel distance. They are not able to reach it on foot. At the same time, they could not get a car. If they could not get car, they could not go.*

Regarding ambulance use, the participants reported that there is poor connectivity to the mobile phone network, economic constraints regarding the cost of fuel, and an absence of roads. A few also mentioned that they do not know whom to call to get an ambulance. Because of the delays in getting an ambulance, TBAs who participated in the study repeatedly mentioned that they are obliged to assist births at home or on their way to health facility. A lack of transport was also reported by the health professionals and experts. An expert from Dulecha women's affairs office stated:

> *It is when the women live nearby to a health facility that they could attend such service. They [women] could not walk for 60 and 70kms for a check-up after delivery.*

Mobility: According to the current study, the mobile life of the Afar pastoralist community poses a challenge to utilizing RMNH services. A female FGD participant from Yalo district stated:

> *Why they [women] do not follow ANC is because they would go far from their settlement during dry seasons. Even if they have got a severe disease, there is no transportation there. Hence, they could die there.*

In addition, an HEW from Yalo district stated how the mobile life of the community challenges women's efforts to utilize RMNH services:

> *In the previous months, I have registered 70 pregnant women home to home in my catchment kebele. I have advised them to undergo an ANC visit in a health facility. However, only 20 of them visited health facilities for ANC services in two months. A pregnant woman who was here today will relocate or move to a different village after a week. A pregnant woman who starts the visit here will go far from the health facility that it would not be possible to come back for second visit.*

Difficulties covering service-related costs: The study participants reported that there are economic constraints to cover expenses relating to the use of health facilities. Although the community members know that RMNH services are free of charge, they need to cover other expenses such as the cost of transport, medicines, and to act on health professionals' advice regarding nutritional practice. The participants revealed that ANC and skilled delivery are the services particularly influenced by economic constraints in the region, as the women are required to travel a long distance and often spend often many days away from home. To deliver a child at a health facility, there would be TBAs, mothers and family members who would go to the town where the service is and provide their support. Consequently, there would be expenses for food, overnight accommodation and other related costs for their family members. A key informant reported:

> *If the husband does not have enough money, his wife would become hungry because she needs food after giving birth. The women who come from rural areas often do not have money to cover their costs.*

The participants also added that when the mother comes to a health facility for delivery, there could be no one to take care of her other children staying at home, look after the goats and other domestic animals, and fetch water for them. This makes it costly to use a health facility for delivery. Moreover, in a health facility, some drugs may not be available. Women could be ordered to buy drugs from a private pharmacy. A male FGD participant from Dalifage shared his experience:

> *I took a mother to a health facility for delivery and paid for intravenous fluid and drugs while the delivery service is free of charge*.

Married female FGD participants from Dulecha district also reported:

> *Their husbands would be asked to cover the fuel cost of the ambulance service, which may not be affordable. Hence, women prefer to give birth at home.*

Closed health facilities: After the women reach their nearest health facility, sometimes health professionals or essential drugs for RMNH services are not always available. A female FGD women participant in Yalo district explained this irritating phenomenon:

> *When women come to health facilities for ANC after walking long distances on foot, no health professional is available and the health facility is closed. No services are provided because the health facility is always closed. Thus, why would they [women] come to a health facility the next time?*

Equally, pregnant women would not be motivated to go to health facility for an ANC check-up. An HEW from Yalo district explained pregnant women's perceptions regarding ANC follow-up:

> *They tell the other mothers that there is no service and medication; there is no drugs and so on. Hence, those who have never attended would be de-motivated to attend ANC.*

***Domestic work burden*:** According to the current study, the domestic work burden of women substantially hinders the use of RMNH services in general, and ANC and PNC services in particular. Participants mentioned that because of their domestic workloads, they would have no time to visit health facilities for RMNH services. District and regional women's affairs experts, religious and clan leaders agreed that women are busy caring for children, looking after domestic animals, fetching water and giving care to other household members. Consequently, combined with the distance of the health facilities from their home and the absence of transportation, they often have no time left to go to health facilities to use RMNH services.

Health facility-related factors

Participants also reported factors related to health facilities such as women's preference to TBAs for delivery assistance, absence of conducive environment like water availability at health facilities and preference for female skilled birth attendants as barriers to uptake RMNH.

Women prefer to be assisted by TBAs: Although the point was not raised by the female participants, health professional informants indicated women's preferences for TBAs. This further inhibits the use of health facilities for ANC, skilled delivery and PNC attendance. According to the current study, TBAs have a critical role in assisting childbirth in the Afar pastoralist community and attending women from the sixth month of their pregnancies. The informants disclosed that women believe that TBAs know how the vagina becomes tightly closed as a result of female genital mutilation, which for two reasons makes the women prefer TBAs over health professionals. First, the women feel ashamed to allow health professionals to see their circumcised vaginas. Second, the women believe that the health professionals lack the skill to manage their cases compared to TBAs.

According to the informants, TBAs do not think that death can result from bleeding during delivery. For TBAs, excessive bleeding is acceptable as it helps women clear their body from 'dirt'. Health workers explained that women's preference for TBAs over health professionals may lead them to practice home delivery.

Absence of conducive environment at health facilities: According to the participants, the lack of water and beds in health facilities makes women less motivated to use RMNH services, particularly skilled

delivery. As is customary in the Afar pastoralist community, birthing mothers and infants should be washed immediately after delivery. With no water available, they don't feel comfortable staying in a health institution for a couple of days. An FGD participant in Dulecha district stated:

> *Pregnant women in our community deliver at their home. They do not give birth at a health facility. We have heard that there is no water there. If the woman would not be washed, her clothes would not be washed and so would the infant. If this is the case, the women said that we shall deliver in our home.*

Female FGD participants in Yalo district reached the consensus that:

> *Absence of water constitutes a substantial reason to deliver at home*.

Female FGD participants also mentioned that:

> *Women who delivered at health institutions for their previous birth were required to leave the institution the day after they give birth because of a shortage of beds. Hence, there are women who do not want to use a health facility for delivery.*

In addition to the issue of water and beds, the respondents also revealed that women do not want to deliver at a health facility because there is no food, milk or coffee, as opposed to what they would get at home immediately after giving birth. A Maternal and Child health expert from Megalle district agreed with this view:

> *The health professionals faced a problem to change the attitude of the women regarding skilled delivery due to the absence of food in the maternity waiting homes after delivery. They would come to this institution from rural areas for delivery. They would stay for two or three days. However, the problem is to get food to eat.*

Married female FGD discussants also mentioned that women prefer home to a health facility for fear of ill treatment by health professionals. An MCH focal person from Ada'ar district reported:

> *Some women think that the health professional will handle them roughly, insult and ill treat them as a consequence of the actions they do because of the pain during giving birth. Because of this fear, women want to give birth at home with the assistance of traditional birth attendants.*

Preference for female skilled birth attendants: Among the RMNH services, skilled delivery followed by ANC service utilization were the main services particularly affected by the gender of the service providers. The gender of SBAs, lack of transportation and lack of awareness were the major barriers to ID. To avoid coming into contact with male professionals, women prefer to use TBAs for delivery assistance. A few respondents also referred to the physical contact of the male professionals during delivery and ANC, stating that it is not allowed by religion (although the religious leaders opposed these views).

A religious leader from Yalo district shared some of his observations:

> *I saw a woman who came to the health institution for delivery. Unfortunately, the skilled attendant was male and she refused to let the professional assist her. I have also seen another woman who delivered at home but the placenta delayed for almost a day. They brought her to the health facility and the male professional started to assist her. She refused and said no male health professional would send his hand to my reproductive organ.*

Similarly, the respondents reported that pregnant women do not prefer male health professionals at ANC visits. A TBA from Yalo district explained:

> *During antenatal care, male health professionals are not preferable for women in the Afar community. They might not allow being seen naked and touched by male professionals, which they think is against the norm of their culture.*

A few participants also reported that:

> *Women in the Afar pastoralist community do prefer health professionals who speak the local language, Afarigna.*

Discussion

The current study explored barriers to the use of RMNH services among the pastoralist communities of the Afar region, North Eastern Ethiopia. The main factors identified as barriers to the use of FP, ANC, skilled delivery and PNC services by women of reproductive age from these communities are: limited awareness, low access to RMNH services (difficulties getting transportation, mobility, difficulty covering health service-related costs, closure of health facilities), lack of support from husbands, women's low decision-making power (because of husbands, religious orientations and normative orientations), domestic work burdens, women's preference for TBAs and female health professionals for delivery assistance, the need to have more children, the poor quality of services, and the absence of conducive environments at health facilities.

Limited awareness emerged as a significant barrier to RMNH services in Afar, a finding which is echoed in previous studies of pastoralist communities in Ethiopia (12,13,15). The low educational attainment of women (5) in Afar region may contribute to this low awareness

of RMNH services. It also may imply awareness-raising activities aimed at increasing demand for the services are poor. Despite HEWs has trained and deployed to create awareness in Ethiopia and some progress has been made, further efforts may be needed this regard.

Women's lack of decision-making power also inhibits their use of modern health services in Afar (10,14). The current study identifies access as a barrier to using RMNH services for women, while previous studies also recognize transport, fear of service cost, and being from a rural residence as barriers (9,15,16).

Women's low decision-making power and husbands' low support to uptake RMNH services also hinders women in Afar pastoralist communities. While evidence suggests that women with health decision-making autonomy have a higher tendency to use RMNH services (17-20), the barrier is significant for women from pastoralist communities, where the husband decides on fertility-related issues (12). Given the low socio-demographic and economic status of women in pastoralist communities (5), this may imply that women are less empowered to decide to seek RMNH services. Previous studies in pastoralist communities show that husbands disapprove of their wives using FP services (8,10,21), and husbands in Afar pastoralist communities want to have more children, which is consistent with studies in Kenya (20,22,23).

Similar to the findings of the current study, previous reports show that the burden of household activities prevents women from seeking RMNH services (8,12,21). In Afar, most domestic work, as well as looking after goats and sheep, is the domain of women, which may prevent them from finding the time to seek RMNH services. With the constant mobility of the pastoralist life, and long distances to reach health facilities, this barrier may be highly significant for women from pastoralist communities.

Afar women opt to be assisted by TBAs at home, or by female SBAs at health facilities. Previous studies support these findings (3). Seeking TBAs for delivery assistance is common in Afar and elsewhere because TBAs are easy to reach and assist the women respectfully (3,12). Other findings show that male attendants are repeatedly mentioned as a barrier to skilled delivery service utilization (10,11,14). The fear of being seen naked by a male attendant and the lack of privacy may lead women to opt for home delivery and abstain from seeking other RMNH services.

Moreover, a lack of compassionate and respectful care at health facilities may also prevent women from utilizing RMNH services, particularly those of SBAs. A cross-sectional study of health facilities in East and Southern Africa supports the existence of physical and verbal abuse during delivery care (24). Another study in Ethiopia reports that nearly 90% of women who deliver at health facilities experience some form of disrespectful care (25).

Greater availability of transport was one of the suggestions cited by the participants to improve the uptake of RMNH services, specifically ID. Despite the fact that the Ethiopian government introduced ambulances to each district in Afar region, and although a previous study in Afar region reports that ambulances are facilitating skilled birth attendance (14), the current study indicates that a lack of transportation continues to be one of the leading barrier for pastoralist women to use RMNH services. Insufficient numbers of ambulances in the district, the cost of fuel for ambulances, the lack of mobile phone connectivity to call ambulances, and the lack of roads are the constraints related to the ambulance service. This suggests that concerted efforts are needed to provide women with better access to transportation so that they can use RMNH services.

Inadequate supplies and opening hours of the health facilities emerged as barriers to the uptake of RMNH services in the Afar pastoralist community. Other barriers were poorly supplied health facilities, such as the absence of water and beds, electricity, lack of traditional foods in the maternity waiting homes, as well as the inability of staff to speak Afarigna. Qualitative studies from Ethiopia, Uganda, Nigeria and India also document the lack of supplies, drugs and basic infrastructure at health facilities as barriers to RMNH services (26,-28).

Conclusions and recommendations:

The use of RMNH services among women of reproductive age from the pastoralist community of Afar is low. In general, women opt to use RMCH services only after they become severely ill and/or develop complications. Barriers to the uptake of RMNH services include limited awareness, poor access to RMNH services; lack of support from male partners, poor female empowerment their reproductive health rights, heavy domestic workloads, a preference for TBAs and female health professionals, the need to have more children, poor quality of services, and the absence of conducive environments at health facilities.

To increase the use of RMNH services, the following are recommended: strengthening tailored information, education and communication(IEC) interventions to create awareness among certain segments of the community (religious and clan leaders, women, husbands and TBAs), concerted efforts to making transportation options available at kebele level, improving girls' formal education, and improving the quality of care.

References

1. World Health Organization. Reproductive, maternal, newborn and child health and human rights: a toolbox for examining laws, regulations and policies. Geneva; 2014.
2. De Jongh TE, GurolUrganci I, Allen E, Zhu NJ, Atun R. Barriers and enablers to integrating maternal and child health services to antenatal care in low and middle income countries. BJOG. 2016;Mar 1;123(4):549-57.

3. Ahmad J, Ahmad MM, Ahmad A. Measuring and mapping the social vulnerabilities for public health management: a retrospective study of disasters induced displaced population. In: Conference Agenda in Netherlands (p. 56).
4. Elmusharaf K, Byrne E, O'Donovan D. Strategies to increase demand for maternal health services in resource-limited settings: challenges to be addressed. BMC Public Health. 2015;Dec;15(1):870.
5. Central Statistical Agency (CSA) [Ethiopia] and ICF. Ethiopia Demographic and Health Survey 2016: Key Indicators Report. Addis Ababa, Ethiopia, and Rockville, Maryland, USA. CSA and ICF, 2016.
6. Sumankuuro J, Crockett J, Wang S. Sociocultural barriers to maternity services delivery: a qualitative meta-synthesis of the literature. Public Health. 2018;Apr 1;157:77-85.
7. Coast E, Jones E, Portela A, Lattof SR. Maternity care services and culture: a systematic global mapping of interventions. PloS One. 2014;Sep 30;9(9):e108130.
8. Wilunda C, Quaglio G, Putoto G, Takahashi R, Calia F, Abebe D *et al.* Determinants of utilisation of antenatal care and skilled birth attendant at delivery in South West Shoa Zone, Ethiopia: a cross sectional study. Reproductive Health. 2015;12(1):1.
9. Rwabufigiri BN, Mukamurigo J, Thomson DR, Hedt-Gautier BL, Semasaka JP. Factors associated with postnatal care utilisation in Rwanda: a secondary analysis of 2010 demographic and health survey data. BMC Pregnancy and Childbirth. 2016;Dec;16(1):122.
10. Johansen RE, Diop NJ, Laverack G, Leye E. What works and what does not: a discussion of popular approaches for the abandonment of female genital mutilation. Obstetrics and Gynecology International. 2013;(2).
11. Biza N, Mohammed H. Pastoralism and antenatal care service utilization in Dubti District, Afar, Ethiopia, 2015: a cross-sectional study. Pastoralism. 2016;Dec 1;6(1):15.
12. Zepro NB, Ahmed AT. Determinants of institutional delivery service utilization among pastorals of Liben Zone, Somali Regional State, Ethiopia, 2015. International Journal of Women's Health. 2016;8:705.
13. Lama S, Aki K. Barriers in utilization of maternal health care services: perceptions of rural women in Eastern Nepal. Kathmandu Univ Med J. 2014;48(4):253-8.
14. Yousuf J, Ayalew M, Seid F. Maternal health beliefs, attitudes and practices among Ethiopian Afar. Exchange. 2011;1:12-3.
15. Jackson R, Tesfay FH, Gebrehiwot TG, Godefay H. Factors that hinder or enable maternal health strategies to reduce delays in rural and pastoralist areas in Ethiopia. Trop Med Int Health. 2017;22(2):148–60.
16. Ameyaw EK, Tanle A, Kissah-Korsah K, Amo-Adjei J. Women's health decision-making autonomy and skilled birth attendance in Ghana. International Journal of Reproductive Medicine. 2016.
17. Hou X, Ma N. The effect of women's decision-making power on maternal health services uptake: evidence from Pakistan. Health Policy Plan. 2013;Mar 28;(2):176–84.
18. Tiruneh FN, Chuang K, Chuang Y. Women's autonomy and maternal healthcare service utilization in Ethiopia. BMC Health Serv Res. 2017; 17:718.
19. Situ KC. Women's autonomy and maternal health care utilization in Nepal. MSc Thesis, University of Tampere, 2013.
20. Morgan R, Tetui M, Kananura RM, Ekirapa-Kiracho E, George AS. Gender dynamics affecting maternal health and health care access and use in Uganda. Health Policy Plan. 2017;Dec 1;32(suppl_5):v13-v21.
21. Rosen HE, Lynam PF, Carr C, Reis V, Ricca J, Bazant ES. Direct observation of respectful maternity care in five countries : a cross-sectional study of health facilities in East and Southern Africa. BMC Pregnancy Childbirth. 2015;1–11.
22. Conteh-Khali N. Socioeconomic and cultural factors influencing desired family size in Sierra Leone. Doctoral dissertation, Bowling Green State University.
23. Ndirangu WP, Wanjiru KR, Chui MM, Thinguri R, Orodho JA. Socio-economic and cultural barriers to family planning practices among rural women Socio –Economic and Cultural Barriers to Family Planning Practices among Rural Women in Murang'a North Sub County, Muranga County, Kenya. IOSR Journal of Research & Method in Education. 2016;6(2):12-21.
24. Asefa A, Bekele D. Status of respectful and non-abusive care during facility-based childbirth in a hospital and health centers in Addis Ababa , Ethiopia. Reprod Health. 2015;Apr 16;12:33.
25. Wilunda C, Quaglio G, Putoto G, Lochoro P, Dall'Oglio G, Manenti F, *et al.* A qualitative study on barriers to utilisation of institutional delivery services in Moroto and Napak districts, Uganda: implications for programming. BMC Pregnancy Childbirth. 2014;14(1).
26. Kyei-Nimakoh M, Carolan-Olah M, McCann TV. Access barriers to obstetric care at health facilities in Sub-Saharan Africa – a systematic review. Systematic Reviews. 2017;6:1–16.
27. Yaya S, Bishwajit G, Uthman OA, Amouzou A. Why some women fail to give birth at health facilities: a comparative study between Ethiopia and Nigeria. Plos One. 2018; May 3;13(5):e0196896.
28. Singh A. Supply-side barriers to maternal health care utilization at health sub-centers in India. PeerJ. 2016; Nov 3;4:e2675.