

Perceptions of Mothers, Health Development Army and Health Extension Workers on Maternal and Newborn Health Care Services Utilization in 25 Districts of Four Ethiopian Regions: A Qualitative Study

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ABSTRACT

Background: Nearly half of all maternal deaths worldwide occur in Africa. In Ethiopia maternal mortality is still high. Maternal service utilization has great role in reducing maternal deaths. This study explored the perception that mothers, health development army members, and health extension workers have on maternal and newborn healthcare services in 25 selected districts of four Ethiopian regions.

Methods: A qualitative cross-sectional study was conducted in the 25 woredas selected from four Ethiopian regions; Amhara, South Nation Nationalities and People, Oromia and Tigray regions from July to August, 2013. We conducted 50 focus group discussions and 25 in-depth interviews. In each of the 25 districts (woredas) selected, each district consisted; 2 focus groups discussions (with mothers and local health development army) and an in-depth-interview with a health extension worker per district. The data transcribed in to the local languages and translated into English and narrated analyzed thematically

Results: Supply side constraints including lack of skills, training and supportive supervision were found to be barriers to the provision of high-quality care by health staff and constituted a source of frustration. At the community-level, these gaps are recognized, reinforcing the perception that health facilities are deficient and not worth the costs of seeking out health services. Perceptions of quality were tied to friendliness, proximity of the facility to home, short waiting times, and ability to access many services as possible during one appointment. Delivery in the home remains a common practice, however efforts to integrate clinical practice with traditional rituals improve uptake of services.

Conclusion: Despite the progress made to increase the availability of maternal healthcare, this study sheds light on inadequate levels of care that affect uptake. The absence of supplies, inadequate staffing, and difficulties in obtaining drugs were all mentioned as barriers to utilization of MNH services. In order to improve quality of care more effort is needed to address supply and demand side barriers affecting service utilization including sustained education and the development of culturally appropriate solutions that meet the needs of communities in Ethiopia.

Keywords: Focus groups; In-depth interview; Qualitative study; Maternal health; Care utilization

Abbreviations: CIFF: Children Investment Fund Foundation; EPHI: Ethiopian Public Health Institute; FGD: Focus Group Discussion; HAD: Health Development Army; HEW: Health Extension Worker; MNCH: Maternal and Newborn Child Healthcare; MOH: Ministry Of Health; SNNP: South Nations Nationalities and Peoples; WHO: World Health Organization

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INTRODUCTION

Receiving a new child into the world should be a moment of joy for families, but around the world a woman dies every day because of complications during pregnancy and childbirth [1]. This translates to more than half a million maternal deaths every year. In addition, nearly 4 million newborns die before they are one month old, and millions more suffer from disability, disease, infection and injury. Most of this burden is carried by sub-Saharan Africa and South Asia [2].

Nearly 50% of all maternal deaths in the world happen in Africa, where only around 15% of the world's population live. This means that a woman living in Sub-Saharan Africa is at a higher risk of dying while giving birth than women in any other region of the world [1]. The rate of maternal mortality is 129 times and rate of under-five mortality is 71 times higher in low and middle income countries compared to high income countries [3]. The lifetime risk of maternal death for a woman in a least developed country is more than 300 times greater than for a woman living in an industrialized country [2]. This might be evidenced by the fact that, over 60 million women a year deliver without skilled provider, 2 out of 5 births in Asia and 3 out of 5 births in Africa occur without skilled provider [4].

Despite the progress made in many countries in increasing the availability of maternal healthcare, the majority of women across Africa still lack full access to these services. Though much progress has been made during the past two decades in coverage of births in health facilities, reductions in maternal and neonatal mortality remain slow. With increasing numbers of births in health facilities, attention has shifted to the quality of care, as poor quality of care has been identified as a contributor to maternal and neonatal morbidity and mortality [5].

Various studies have demonstrated the barriers for poor quality of services, the costs of health care inhibit women's ability to access health care services, fear of cost at facility makes them think twice [6]. The study conducted among African countries point out that majority of women across Africa remain without full access to maternal healthcare care due to health worker crisis, poor infrastructural facilities, and health care cost [1]. Studies in Uganda [7], Eritrea [8], Nigeria [9], and Kenya [10] reveals the influence of socio-cultural factors on the utilization of maternal and child health services. As the core critical determinants of reproductive, maternal and child health care is poverty reduction [11], improving the quality of care through effective training, and monitoring the success through supportive supervision should be an integral part [12].

Ethiopia is one of the six countries that contribute to 50% of the total global burden of maternal mortality, with the country's current maternal mortality rate estimated at 676/100,000 live births [13]. Like other African countries, socioeconomic factors remain the main predictors of maternal and child health services utilization, as well as of child health outcomes in Ethiopia [14]. Despite the push for institutional deliveries, studies show that most Ethiopian women prefer to give birth at home, and continue to do so despite clear policies and directives from the Ministry of Health [15]. In order to increase the number of women that give birth in healthcare facilities, we must understand how local actors, both users and providers, perceive the quality of the services provided and how this perception is linked to health-seeking behavior and practice of maternal and newborn health care services. This paper explores the perception that mothers, health development army members, and health extension

workers have on maternal and newborn healthcare services in 25 selected districts of four region of Ethiopia.

METHODOLOGY

Study design and setting

A qualitative cross-sectional study design involving key informant interview and focus group discussion was conducted in four Ethiopian regions, namely - Amhara, South Nation Nationalities and People, Oromia and Tigray. The study was conducted from July to August, 2013.

Sampling

The study included interviews with community stakeholders from twenty-five woredas within the 4 regions. These 25 woredas were identified by the Federal Ministry of Health as unsupported by external partners and formed part of a Phase 1 intervention, that was implemented to improve maternal and newborn health service from 2013 through 2017.

In each of the selected 25 words selected, we conducted 2 FGDs with group size of 7 to 9; one with mothers and one with local health development army, and key informant interview with one health extension worker in each woreda. A total of 50 focus group discussions and 25 key informant interviews were conducted. Participants were selected on the basis of knowledge they might bring to the study to get diversity of perspectives as shown in Figure 1.



Figure 1: Health extension workers visiting mothers at their home in Ethiopia (photo courtesy of Karen Kasmauski).

Data collection

The approaches used to collect data were key informant interview with health extension workers and focus group discussion with mothers and health development army. Information collected through focus group discussion and in-depth interview include, general community information, knowledge and awareness about maternal and newborn health care, community demand and preconditions for services, community experience with services and perceived quality of the services and community experiences with newborn care.

Data analysis

Qualitative data which were collected through interviews and focus

group discussions was first, transcribed in to the local languages and translated into English. Then after we categorized and narrated thematically. The analysis considered careful reading of the transcripts, coding, clustering into categories, and finally making themes. Then, the themes were narrated and identified illustrative quotes.

RESULTS

Participant's profile

This study employed three categories of participants, health development army, health extension workers and mothers. Accordingly, to gather information from a standardized set of respondents 25 woreda's (districts) were selected for focus group discussions (FGD) and key informant interviews. In total 50 FGD and 25 key informant interviews was conducted.

Quality of MNCH service: Skills and training, supervision and supplies

From the community's perspective, quality was bound up with proximity of the facility to home, short waiting times, and ability to access all the services they required during one appointment. With some exceptions, most women praised HEW, and felt they were able to get services without too much inconvenience. Mothers interviewed in Amhara noted: "... We always get HEWs if we go to the health post. If HEW not present, we call by using their mobile number or go to their homes". However, few reported they encountered health post closed or empty. Health development army noted "I prefer health professionals at health centers because HEW says we don't work on Sunday or we're tired now, come other time" (FGD of Amhara)

Participants noted that proximity to their home outweighed almost all other considerations. HDA members' discussed quality on lack of approach at health centers. In sharing their experiences, they noted; "I went to the health center to get family planning service, and their approach was not good. I couldn't communicate with them and they told me that there was no drug...I came back home without getting the service...I feel sad, but in the health post, mothers are treated well". (Health Development Army FGD Participant Oromia).

On the supply side, skills and training were dominant themes and appeared to preoccupy providers and administrators at all levels. Participants reported that presenting requests for further training appeared opportunistic. However, there were also many examples where provider's lack of skills negatively affected their ability to quality provide service. Despite the lack of access to training, participants reported doing their best with the skills they did have. In elaborating the issue HEW from Amhara noted; "Training was given by selecting health posts. But our health post did not get the chance, and we were not trained on delivery. We are working using the knowledge we gained from college and we are working with referral linkage".

In some scenarios, health post was seemingly well equipped but the staff was not trained in all devices provided. HEWs reported having couch and autoclaves, but not knowing how to operate them. When this is combined with the reports of receiving inadequate supervision, a more complex picture of quality deficiencies in service provision appears. Supervision was not only of low quality, but was received irregularly: "I get supervision sometimes...once in a month, but it's not sustainable...they interrupt the supervision. It's

not satisfactory, we need regular supervision to improve our work". (Health Extension Workers from Oromia).

Availability of supplies was the most commonly cited reason among communities and providers for determining the quality of the services that were being delivered. At the health post level, community members pointed lack of equipment for provision of MNCH services beyond vaccination and malaria treatment: "We couldn't get full examination except for malaria and family planning here in the health post". Health extension workers in Amhara also confirmed lack of supplies at their health posts. One HEW noted, "Health post equipment are not fulfilled, when community comes for service, they see it and criticize us, 'why you work like this?'" (Mother, FGD Amhara region).

Despite the government's push to increase the uptake of MNCH services, particularly facility-based delivery, maintaining adequate levels of supplies and staff proved difficult and was a source of frustration for both communities and providers: "Delivery service is given at health center level but 'one finger can't wash a face!' ... There is only one professional here, so, if 10 pregnant mothers come to deliver, imagine what would happen to them" (HDA, SNNP).

Traditional beliefs and practices on MNCH services

Considerable heterogeneity emerged in the findings on traditional MNCH practices, particularly related to traditions surrounding initiation and timing of breastfeeding (including whether colostrum is given or discarded) and umbilical cord care. Adoption of vaccination, however, appeared universal and was widely valued. All respondent types mentioned women's willingness to take infants for vaccination; any barriers to this related to circumstances beyond mother's control such as distance or ability to arrange transport. One mother participant in Amhara shared her experience, "... I born one child with a great problem; I didn't receive any vaccination during the time. But now I got vaccination from the pregnancy to the birth. After birth, the child has got immunization up to 9 months of age and I have a 1-year and 8 months' old child, and he started walking at this age. The one who didn't get immunization couldn't walk until 3 years".

Many respondents knew and could repeat advice received from HEW members. Some may have been reluctant to admit diverging from recommended practice during the FGDs, particularly if other respondents were expressing positive views about exclusive breastfeeding. But enough women admitted maintaining of traditional beliefs on infant feeding to suggest that these were fairly common across the regions. Mothers in Tigray marked, "The HEW teaches us not to give the baby anything other than breast milk until they get to six months, but I gave to my daughter at four months".

Perhaps one of the traditional practices remains was delivery in the home. Although none of the qualitative interviews provided a reliable breakdown of local births by location, the data make clear community belief that childbirth was a natural, and women prefer the comfort of their own home. Yet the mothers FGD in Amhara revealed, "There are traditional cultural beliefs. When we give birth at home, mothers and neighbors may help the pregnant woman, like by palpating her abdomen so that the labour is not hard. But at the health facility, nobody helps the mother while she is in labour. So, we believe that the labour is hard at the health facility".

On the other hand, women were cognizant that lifesaving equipment was available in some health centers and this could improve their

delivery care. Mother's participants in Oromia mentioned, "During previous periods, our mothers give birth at home. This time we went to the health facility... they gave us injections, tablets, and glucose, which gives us strength during labour".

While it is difficult to assess why some women appeared to be more trusting of modern health care while others preferred traditional practices, some possible determinants could be extent of exposure to health education messages, positive relationships with local HEW, or hearing successful stories from friends and family members who delivered in health centers or hospitals. Certainly, some mothers themselves suggested that HEW and a general rise in awareness levels were likely to change practices over time. Mothers participants in Amhara argued, "... the main reason for home delivery is awareness problems. There are some mothers who says 'our earlier practice is good and we don't want to leave them.' ... after we get education from HEW, we are taking such services from health facilities and we are changed".

Context of MNCH service: Geography, transport, and socioeconomic and demographic profile

Difficulty in obtaining transportation was a commonly mentioned barrier to use of MNCH services, particularly in communities that were remote, scattered or mobile. Information provided on the availability of ambulances provides a mixed picture, with some contradictory statements within the same woreda. In one woreda, for example, the FGD with HDA members stated that HEWs call an ambulance when a woman goes into labour or suffers an emergency. During the FGD with mothers', respondents said there was no ambulance available to them. It is possible that the FGD with mothers was conducted in a more remote kebele than that with HDA members or that those participants were simply unaware of the ambulance service, but the discrepancy may suggest that information about available transport may not be widely disseminated, or that even within the same woreda, ambulance coverage is inconsistent.

In some places, unreliable mobile phone connectivity limited HEWs' ability to call an ambulance when required, in others; the ambulance is unable to reach all the locations within the woreda due to geographical constraints. Due to the limited ambulance to take women to a health center or hospital for delivery women are discouraged from frequent visits to health centers due to expensive options. One mother shared her experience, "... routine visits to health facilities for ANC or PNC require walking long distances or paying for alternative means of transport, such as motorbike, which was costing roughly 300-500 birr (12 to 20 USD) depending on distance". Mothers in Oromia indicated, "We paid for motorcycle transport by selling our cow".

Respondents recognized that poverty affected health service. Lack of money could directly reduce use of services where there were user fees. Although there are not supposed to be any user fees levied for MNCH care in Ethiopia, respondents described paying for equipment and being charged for some services. Another mother in SNNP noted, "When we go to hospital, they forced us to buy gloves and pay 50 Birr for the check-up". Poverty, lack of education and unequal gender relations were all mentioned as barriers to uptake of modern MNCH services. HDA members described women's extensive responsibilities in the home as barriers to their use of services and more broadly, to their achievement of optimal health. At least one HDA member in Tigray listed multiple examples of how

women's position remained undervalued and detrimental to their health, "... those women who married early face communication of stool and urine during delivery [fistula]. As a result, for the next time, she may not delivery".

Furthermore, poorer households often relied more heavily on farming and women had even less time to attend health facilities while juggling both their household and agricultural responsibilities. Several respondents singled out farmers as the least likely to receive MNCH care, due to a combination of work responsibilities and tendency to be less well educated and thus less aware and receptive of health promotion advice. Yet mothers in SNNP mentioned, "Sometimes we are busy at home, and we give priority for our homework. Due to this, we may miss some appointments". While HDA in Amhara participant noted, "Farmers know the pregnancy of mothers but do not care to take them to the health center for follow-up".

DISCUSSION

This study explores the perception that mothers, health development army members, and health extension workers have on maternal and newborn healthcare services in 25 selected districts of four region of Ethiopia.

This study demonstrated that lack of quality of services which is explained in terms of lack of health professionals' approach, poor communication, and unavailability of drugs. This finding was consistent with the study in Bangladesh which has shown clients expressed dissatisfaction for inadequate quality of care represented with less consultation time, poor compassion by providers, inadequate supply of drugs [16]. However, this finding was not consistent with the study conducted in India which argues, community had high level of satisfaction with the health services they received [17].

The current study depicted, in some scenarios, facilities were well equipped but the staff was not able to utilize all devices provided, lack of skill is there to operate the equipment, and they were also receiving inadequate supervision. Congruently, other study conducted the status of maternal and newborn health care services in Zanzibar revealed the importance of effective training and supportive supervision to improve quality of care [12]. As the availability of trained health care providers plays a crucial role to improve quality of the health care service, there is a need to strengthen human resource capacity through training.

Despite the government's push to increase the uptake of MNCH services, particularly facility-based delivery, maintaining adequate levels of supplies and staff proved difficult and was a source of frustration for both communities and providers. Similarly, other study in Indian shows lack of sufficient staffing was a major concern to provide quality care [6]. In order to achieve high level of community utilization of maternal health care mechanism should be devised to overcome shortage of health work providers, equipment and supplies.

This study depicted unavailability of ambulance, expensive cost of transportations and geographical constraints discouraged women from frequent visits to health centers. Similarly, the study conducted in India on the utilization of maternal health care services noted the existence of transportation problem and a need to hire private vehicles to go to the health facilities [6]. Congruently, the study conducted in Afghanistan [18] on approaches to maternal and newborn health revealed the problem of availability and cost of

transport as the most significant obstacles to access health care.

A study in Eritrea shows the influence of socio-cultural factors on the use of maternal and child health services includes cultural beliefs which discourage delivery at health facility, and women preference in home delivery [8]. Similarly, other study conducted on attitudes and values surrounding stillbirth and neonatal mortality in some part of Ethiopia showed that women prefer to give birth at home and most do so [15]. Similarly, in this study noted traditional practices on delivery in the home, women prefer to deliver in the comfort of their own home. This has implications for public health policy and programs to design culturally acceptable interventions to bring behavior change.

Study conducted in African countries (Eritrea, Uganda, Nigeria, and Kenya) depicted that socio-cultural and demographic factors are the most important variables that affect the use of maternal and child health services [7-10]. Similarly, other study conducted on inequalities in utilization of maternal and child health services in Ethiopia described the existence of socio-cultural factors in utilization of maternal and child health services [14]. In cognizant to the prior studies, this study also depicted socio-cultural practices such as women burden in household, their role in agricultural activities, tendency to be less educated, and less awareness on health promotion advice results the key factors affecting women to attend health facilities to receive MNCH care. Therefore, there is a need to formulate policies and design maternal health services programs that fits socio-cultural and economic context of women.

CONCLUSION

Despite political prioritization of maternal and newborn care services and concomitant investments made to increase the availability of maternal healthcare in Ethiopia, our study demonstrates that perceptions of quality, context, community knowledge and socio-cultural practices contribute to inadequate utilization of maternal health care services and adoption of optimal health practices. Many respondents expressed frustration, while the government actively promoted modern MNCH care, from supply side, the requisite supplies and infrastructure were not there to support the system as a whole. Absence of supplies, inadequate staffing, difficulties in obtaining drugs were all mentioned as barriers to provision of high-quality services at each level of the health system. In order to improve quality of care it is important to consider effective training and supportive supervision, addressing the shortage of health staff, responding to the inadequacy of drugs and supplies and improvements in facility infrastructure and integration of traditional practices can encourage women to utilize services. While demand for home delivery continues and is a barrier to the utilization of maternity services, there are examples of integrating clinical practice with traditional rituals to improve uptake. Continued development and scale-up of culturally appropriate solutions are required to meet the needs of communities in Ethiopia. Finally, strengthened health and community-based education on optimal practices to support pregnant and lactating mothers are recommended.

CONSENT FOR PUBLICATION

Not applicable.

CONFLICT OF INTEREST

The authors have no conflicts of interest to disclose.

AUTHORS' CONTRIBUTIONS

GG, AD, determined the design of this study. GE, AD, EM, JB writes methodology and data analysis; AB, HT, TG, GT, MG and TT provided critical review on the methodology and analysis results. All authors contributed to the writing of this paper and all approved the final version.

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REFERENCES

1. Africa Progress Panel: Policy Brief. Maternal Health. 2010;
2. The state of the world's children. UNICEF. 2009;
3. Lassi ZS, Salam RA, Das JK, Bhutta ZA. Essential interventions for maternal, newborn and child health: background and methodology. *J Reprod Heal.* 2014;11(1):1-7.
4. How to Mobilize Communities for Improved Maternal and Newborn Health. *ASAIID.* 2009;
5. Standards for improving quality of maternal and newborn care in health facilities. *WHO.* 2016;
6. Vidler M, Ramadurg U, Charantimath U, Katageri G, Karadiguddi C, Sawchuck D, et al. Utilization of maternal health care services and their determinants in Karnataka State, India. *J BMC.* 2016; 13(1):55-65.
7. Rutaremwa G, Wandera SO, Jhamba T, Akiror E, Kiconco A. Determinants of maternal health services utilization in Uganda. *BMC Health Serv Res.* 2015; 15(1):1-8.
8. Habtom GK. Factors affecting the use of maternal and child health services in Eritrea. *J. Complement Med Altern Healthc.* 2017; 2(3).
9. Obiyan MO, Kumar A. Socioeconomic inequalities in the use of maternal health care services in Nigeria: trends between 1990 and 2008. *Sage Open.* 2015; 5(4):2158244015614070.
10. Silali M, Owino D. Factors influencing accessibility of maternal and child health information on reproductive health practices among rural women in Kenya. *Fam Med Med Sci Res.* 2016; 5(1).
11. Policy Brief Multi-Sector Determinants of Reproductive Maternal Newborn and Child Health. *African Union.* 2015.
12. Fasih B, Nofly AA, Ali AO, Mkopi A, Hassan A, Ali AM, et al. The status of maternal and newborn health care services in Zanzibar. *BMC Pregnancy Childbirth.* 2016; 16(1):1-9.
13. Murray SF, Pearson SC. Maternity referral systems in developing countries: current knowledge and future research needs. *Soc Sci Med.* 2006; 62(9):2205-2215.
14. Memirie ST, Verguet S, Norheim OF, Levin C, Johansson KA. Inequalities in utilization of maternal and child health services in Ethiopia: the role of primary health care. *BMC Health Serv Res.* 2016; 16(1):1-8.
15. Sisay MM, Yirgu R, Gobeze AG, Sibley LM. A qualitative study of attitudes and values surrounding stillbirth and neonatal mortality among grandmothers, mothers, and unmarried girls in rural Amhara and Oromiya regions, Ethiopia: unheard souls in the backyard. *J Midwifery Womens Health.* 2014; 59(1):110-117.

16. Chowdhury S, Hossain SA, Halim A. Assessment of quality of care in maternal and newborn health services available in public health care facilities in Bangladesh. *Bangladesh Med Res Counc Bull.* 2009; 35(2):53-56.
17. Roy S, Sahoo A, Sarangi L. Factors Affecting Utilization of Maternal Health Care Services in Urban area of Bhubaneswar, India. *J Pharm Pract Community Med.* 2017; 3(3).
18. Innovative Approaches to Maternal and Newborn Health Compendium of Case Studies. UNICEF. 2013;