



Traditional birth attendants' roles and homebirth choices in Ethiopia: A qualitative study

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ABSTRACT

Background: In Ethiopia, it is encouraged that labour and delivery care are performed under the observation of skilled/trained midwifery or medical professionals. However, 70% of all births occur outside the healthcare system under the care of unskilled birth attendants, family members, or without any assistance at all.

Objective: This study aimed to assess the reasons for choosing homebirth and the role of traditional birth attendants in Arba Minch Health and Demographic Surveillance Site.

Method: A qualitative, exploratory study was carried out between May and June 2017. Twenty-nine semi-structured interviews were conducted with various respondent groups such as traditional birth attendants, pregnant women, skilled birth attendants, and health extension workers. Data were transcribed and for analysis, structured as per the participants' responses, sorted and categorized as per the topic guide, and presented in narrative form.

Findings: The study revealed that traditional birth attendants are actively engaged in assisting homebirths in the selected area. It was also found that many women still prefer traditional birth attendants for childbirth assistance. Reasons for choosing homebirth included lack of transport to health care facilities, distance to health care facilities, lack of respectful care at health care facilities, and the friendliness of traditional birth attendants. Lack of formal partnerships between traditional birth attendants and the health system was also observed.

Conclusions: There is a need to incorporate traditional birth attendants as a link between healthcare facilities and pregnant women; thereby, improving respectful care at the healthcare facilities.

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Statement of significance

Problem or issue

More than seventy percent of all births in Ethiopia occur outside healthcare facilities and with the assistance of unskilled birth attendants.

What is already known

Common reasons for choosing homebirth and theoretical role of traditional birth attendants as a positive link between women and healthcare facilities.

What this paper adds

The care given by traditional birth attendants during childbirth is still preferred by the women despite the availability of professional care. To change the role of traditional birth attendants, there is a need to strengthen partnerships between traditional birth attendants and the healthcare system.

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1. Introduction

The World Health Organization (WHO) estimates that about 140 million women give birth every year globally.¹ In every society, pregnancy and childbirth are expected to be joyful and positive experiences for the mother as well as for the families. However, for many millions of women and their families across the world, it is experienced not as the joyful event it should be, but as a dangerous and frightening time in their lives.^{1,2}

In 2015, an estimated 303,000 women died of maternal causes worldwide (maternal mortality ratio of 216 per 100,000 live births); about 302,000 (99%) of which occurred in low and middle-income countries (LMICs), and sub-Saharan African alone was responsible for 66% of the deaths. It is suggested that more than three-quarter of the deaths may be avoided by using evidence-based obstetric interventions by promoting facility-based births.^{1–3}

However, in 2016 about 50 million births took place outside any health institution globally, majority of which was in sub-Saharan Africa where nearly half of all births occurred at home without skilled birth attendants.³ Evidence has shown that childbirth at home is significantly associated with a higher risk for maternal death in LMICs.^{4,5} Likewise, the main reasons women gave for birthing at home have also been identified^{6,7} and can be related to the Three Delays Model: a late decision to seek care for obstetric complications as a result of socio-cultural factors; a delay in reaching the healthcare facilities caused by transportation problems; and a delay in receiving appropriate care after the woman has reached the healthcare facilities, which can be explained by a poorly functioning health care system.⁸

In many LMICs, the majority of births are attended by Traditional Birth Attendants (TBAs). In areas where professional help is not accessible, the help of TBAs is often the only source of help women can rely on.^{9,10} A TBA is defined by the WHO as a person, generally a woman, who assists pregnant women during childbirth and who learned the skills by attending homebirths, potentially with the help of other TBAs.^{9,11,12} They are often older, respected women who are part of the local community, but do not have a formal education and are often illiterate.^{9,11}

Apart from the advantage of being nearby and available, TBAs are trusted by the women and they provide culturally appropriate pregnancy care in line with the traditional expectations of the community.^{11,12} Unfortunately, they are also responsible for implementing potentially harmful cultural practices or for postponing seeking professional help in case of problems.^{9,12}

Because TBAs already live in many rural communities of LMICs, together with the special position and status that they have in the community, the WHO and its partners promoted that TBAs could assist home births if they receive training.^{10,11} From the 1970s until the early 1990s, training of TBAs was regarded as a key intervention to lower the high maternal and infant mortality and morbidity rates. Subsequently, this program was accepted and implemented in more than seventy LMICs where there had been a shortage of skilled birth attendants.^{10–12} However, the program was modified in the late 1990s as evidence showed that training of TBAs had little impact on the reduction of maternal mortality without the support of skilled back up from healthcare facilities.^{10,12–14}

The WHO and its partners then started promoting skilled birth attendants and skilled care for all births. “Having a health worker with midwifery skills present at childbirth, backed-up by transport in case emergency referral is required, is perhaps the most critical intervention for making motherhood safer” was a major conclusion from the 1997 Safe Motherhood Conference.¹⁵ In the meantime, the WHO suggested the roles of TBAs to be changed from assisting birth to acting as a positive link between women and the health care system as they have great cultural and social acceptability.^{4,9,12}

However, one review has shown that although TBAs are expected to work in collaboration with the health system, they are not working collaboratively with the healthcare system.¹⁶ This is partly due to low appreciation and lack of respect by professional health workers who consider TBAs as competitors, and because the rewards and incentives for the new TBAs roles are considered inadequate.^{10,16}

Ethiopia is the second most populated (94,351,001) country in Africa after Nigeria.¹⁷ With regard to maternal health, the country has been showing progress in the reduction of its maternal mortality ratio, from 871 per 100,000 live births in 2000 to 412 per 100,000 live births in 2015.¹⁸ Though there has been real progress in the proportion of facility-based deliveries over time (5% in 2000, 10% in 2011, and 26% in 2016), homebirth is still common, and more than half of homebirths are attended by TBAs. As there are many culturally deep-rooted practices and rituals connected to pregnancy and childbirth, women prefer homebirth with the assistance of TBAs who are responsible for performing these rituals and practices.¹⁸

Given this fact, Ethiopia had accepted training of TBAs to assist homebirths in the past. In some parts of the country, they were the only birth assistants given the shortage of healthcare professionals to provide skilled care.¹⁹ When the global support for TBA training was stopped in 1997, Ethiopia also started to promote facility-based delivery as one of the main interventions in preventing maternal mortality.²⁰

The country's health service delivery system is organized at primary, secondary, and tertiary level care, and the three care levels are linked to one another through a referral system. The primary level consists of primary health care units including primary hospitals, health centres, and health posts. The health centres are staffed with professional midwives, nurses, and public health officers; while the health post, the lowest government structure in the health system of Ethiopia, is run by Health Extension Workers (HEWs), who are women that have followed a one-year training program after completing high school.²⁰

As part of their duties, HEWs are expected to establish partnerships and collaborate with the community through a network of community volunteers called the Health Development Army, in which TBAs are members, and their role as community volunteers is to persuade women to start prenatal consultation as early as possible during pregnancy and to accompany women during childbirth to healthcare facilities, but not as the main birth attendant.^{21,22}

Since the launching of the Health Extension Program in 2003, there has been a change in Ethiopian policy: TBAs are no longer allowed to attend births, but TBAs should refer and accompany pregnant women to the nearby health facilities in order to make sure that the women will give birth with the assistance of skilled providers.²² However, many women still give birth at home; especially high figures are found in the rural part of the country. Moreover, an in-depth understanding of the current roles and practices of TBAs in the very rural part of the country is lacking. To get a clearer understanding of TBAs' role in rural areas, we conducted an explorative study to identify the reasons for choosing homebirth and the current roles and practices of TBAs in Arba Minch Zuria district, where the Health and Demography Surveillance Site (HDSS) of Arba Minch University is being conducted.

2. Methods

2.1. Study design

An exploratory qualitative study was conducted to identify the reasons for home birth and to gain an insight in the current roles and practices of TBAs along with the relationships with the formal

health system from the perspectives of women, midwives, HEWs, and TBAs in Arba Minch town and Zuria district of HDSS kebeles (the lowest administrative structure in Ethiopian government).

2.2. Study setting

Our study was conducted in Arba Minch Zuria district from May 25 to June 10, 2017. Arba Minch Zuria district is located in the Gamo Gofa zone, which is part of the Southern Nations, Nationalities, and People's region: the most diverse region in Ethiopia in terms of language, culture, and ethnicity. There are 11 kebeles in Arba Minch town and 29 kebeles in Arba Minch Zuria district. Nine of the 29 kebeles of the district are being followed prospectively in the HDSS of the Arba Minch University, which is part of International Network for the Demographic Evaluation of Populations and their Health since 2015. According to the 2017 HDSS report, the total population of the nine kebeles is 76,719 people in 15,653 households. There are seven health centres in the district where basic emergency obstetric and new-born care is being provided. The health centres have referral linkage with Arba Minch general hospital where comprehensive emergency obstetric and newborn care services are available.

2.3. Study participants and sampling strategy

A purposive sampling technique was employed to select key informants from maternal and newborn care service providers from health centres, HEWs from health posts, and women and TBAs from the community. The assumption to include these participants was that they are the ones closely linked with the childbirth process in the community and are a rich source of information on the reasons for home births. Although we had planned to include TBAs in the study, we could not have managed to reach them through the health system since they are invisible and have no formal link with the health system. Therefore, we decided to apply a snowballing technique and finally, we met four TBAs from four different kebeles and managed to interview them on their current roles and practices.

2.4. Data collection methods and instruments

A semi-structured interview guide with open-ended questions was used for data collection. The tool was developed in English after reviewing relevant literature on the topic. Staff members of

Arba Minch University, who were fluent speakers of the local language and team members of the project, translated during the interviews. Field notes were taken during each interview, which were first coded selectively based on the predetermined themes. To enhance the quality of the data, we summarized the information and then asked the study participants to determine the accuracy of the interview.

2.5. Data processing and analysis

For analysis purpose, data were structured as per the predetermined themes and sorted and categorized according to the respective themes and presented in narrative form.

2.6. Ethical considerations

Ethical clearance was obtained from the Institutional Review Board of College of Medicine and Health Sciences, Arba Minch University and informed consent was obtained from all participants prior to the interview.

3. Findings

The findings are presented under three main themes and within each theme, several sub-themes are emerged (Fig. 1). A total of 29 in-depth interviews were conducted, including fourteen midwives, five HEWs, six pregnant women, and four TBAs. The characteristics of the in-depth interview participants and the key guiding questions which the study participants were asked are also presented in Tables 1 and 3 respectively.

3.1. Reasons for choosing homebirth

3.1.1. Cultural acceptability of care

The study revealed that reasons for women to give birth at home included the fear that a stranger (and especially a male caregiver) would see them naked while they are in labour. Even though some of the women mentioned they would prefer male caregivers because they thought they were “more empathic” than their female counterparts (Table 2). A pregnant woman from Genta Bonke said (Woman 1), “I would prefer to give birth at home as I can take different birthing positions without exposing my private body to strangers . . . exposing private body parts to men other than the husband is unacceptable in our culture.”

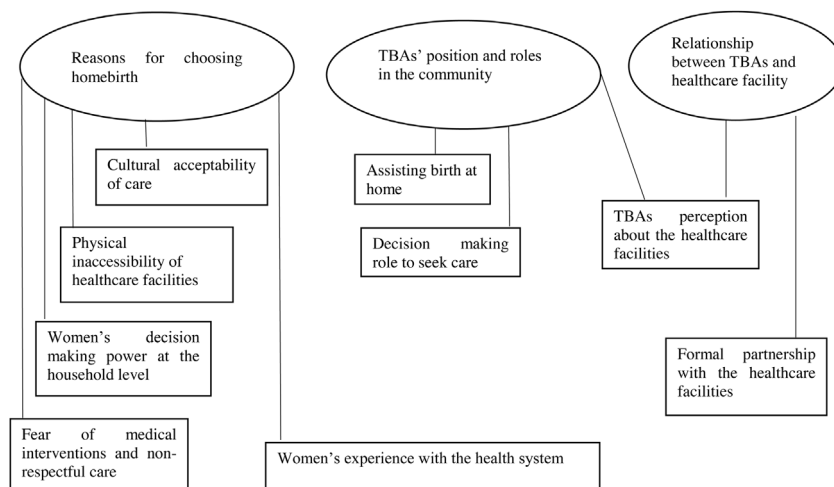


Fig. 1. Thematic map on traditional birth attendants' roles and reasons for choosing homebirth.

Table 1
 Socio-demographic characteristics of the participants, Arba Minch Health and Demographic Surveillance Site, 2017.

Socio-demographic variables	TBAs (n = 4)	Midwives (n = 14)	Health extension workers (n = 5)	Pregnant women (n = 6)
Age				
Below 30 years	0 (0%)	12 (85%)	3 (60%)	4 (66%)
30 or above	4 (100%)	2 (15%)	2 (40%)	2 (34%)
Total	4 (100%)	14 (100%)	5 (100%)	6 (100%)
Sex				
Male	0 (0%)	4 (28%)	0 (0%)	0 (0%)
Female	4 (100%)	10 (72%)	5 (100%)	6 (100%)
Total	4 (100%)	14 (100%)	5 (100%)	6 (100%)
Religion				
Orthodox Christian	1 (25%)	6 (42%)	1 (20%)	3 (50%)
Protestant	3 (75%)	8 (58%)	4 (80%)	3 (50%)
Total	4 (100%)	14 (100%)	5 (100%)	6 (100%)
Respondent's level of education				
No formal education	4 (100%)	0 (0%)	0 (0%)	4 (67%)
Formal education	0 (0%)	14 (100%)	5 (100%)	2 (33%)
Total	4 (100%)	14 (100%)	5 (100%)	6 (100%)
Respondents occupation				
Agriculture	2 (50%)	0 (0%)	0 (0%)	4 (68%)
Housewife	1 (25%)	0 (0%)	0 (0%)	1 (16%)
Service	0 (0%)	14 (100%)	5 (100%)	0 (0%)
Small business	1 (25%)	0 (0%)	0 (0%)	1 (16%)
Total	4 (100%)	14 (100%)	5 (100%)	6 (100%)

Woman 2 also added “It is not customary to talk about obstetric related problems rather it is advised to tolerate the pain since it is a natural”

3.1.2. Physical inaccessibility of healthcare facilities

Physical distance from the healthcare facilities and problems related to arranging transportations were other reasons why women give birth at home. A Health Extension Worker (HEW 1) said, “Women sometimes give birth at home while the husband is looking for money to organize the means of transportation to the health care facilities.”

She added (HEW 1): “There is only one ambulance for the district and the cost of other means of transportations is very high to afford for the families . . . often men who carry labouring mothers on their shoulders, the traditional ambulance, to health facilities may not be available during the critical time of childbirth as they are working in their fields.”

Maternity waiting homes, residential facilities where pregnant women stay during the last days of pregnancy, were constructed in all the six health centres as a means to overcome the physical inaccessibility. Yet those homes are not in a position to accommodate more than three women at a time and are no longer providing food as they did in the past. As a result, pregnant women prefer not to stay in a maternity waiting home.

“Women prefer to be at their homes because of the unavailability of food and long period of stay at the waiting home together with having children and family to take care of.”: said HEW 2.

She also added (HEW 2), “The women are also expected to provide food for all the family members who travelled with them and accompany them while waiting for the delivery, and this is very costly for the women”

3.1.3. Women's decision making power at the household level

Lack of women's decision-making power in households was also mentioned as a constraint for not utilizing facility-based delivery. Another reason to give birth at home was financial constraints. HEW 3 said: “During the forums, we encourage the

women to have their own birth plan including being prepared financially and arranging transport for their delivery. But they usually encounter a problem to do so as they are not the one who decides on the financial affairs at the household level.”

Some of the women interviewed perceived that “Labour is a natural and spontaneous process”; therefore, giving birth at a health care facility is not necessary unless complications arise. “Many women have been giving birth at home with the assistance of TBAs, and nothing has happened to them.” said woman 2.

3.1.4. Fear of medical interventions and non-respectful care

Fear of medical interventions is also mentioned as one of the reasons for choosing homebirths. Woman 1 noted, “At home, no one cuts our skin with scissors and insert figures into our body; which is very painful.”

Non-respectful care at the healthcare facilities keeps women away from the health care facilities. Woman 5 said: “During my first delivery, I went to a hospital as I was feeling pushing down sensation, but they shouted at me they thought I was too early and told me to go back home, and I went back and called a TBA, who stayed with me until I gave birth.”

3.1.5. Women's experience with the health system

Women included in the study are aware of some of the danger signs during pregnancy and the importance of antenatal visit; though they do not know when to first contact healthcare facilities.

Some women mentioned that although they greatly trust the midwives and nurses in the healthcare facilities, they have the perception that all decisions are taken by the midwives.

“If you do what the midwives ask you, you won't have problems with the delivery, I trust them 100%. But if don't follow the instructions of the midwives, you get in trouble,” said woman 6.

A woman we interviewed at a maternity waiting home (woman 3) explained that many pregnant women in the district did not want to come to those homes because there are a lot of inconveniences for those staying there: lack of food, the long period of stay without having someone to look after their children, and being idle and bored.

Table 2
Themes/subthemes which were constructed based on the participants' responses and sorted and categorized according to similarities of ideas, Arba Minch Health and Demographic Surveillance Site, 2017.

Theme 1 – reasons for homebirth	
Sub-themes	Responses
1 Culturally acceptability of care	One of the reasons identified was fear that a strange caregiver (and especially a male caregiver) in the health care facilities <i>"I would prefer to give birth at home as I can take different position of birthing without exposing my private body to strangers, exposing private body parts to other men other than the husband is unacceptable in our culture."</i>
2 Physical inaccessibility of the health care facilities	The other reason mentioned was some of the healthcare facilities in the area are far to reach and cost for transportation is unaffordable. <i>"... women sometimes give birth at home while the husband is looking for money to organize the means of transportation to the health care facilities."</i> She added: <i>"... there is only one ambulance for the district and the cost of other means of transportation is very high to afford for the families ..."</i>
3 Women's decision making power at the household level	The decision-making level at the household level is also mentioned as reason for homebirth. <i>"women are encouraged to have their own birth plan including being prepared financially and arrange transport for their delivery. But they usually encounter a problem to do so as they are not the one who decides on the financial affairs at the household level."</i>
4 Fear of medical interventions	Fear of medical intervention/ episiotomy/Cesarean Section were among the reasons for homebirth emerged from the responses. <i>"at home, no one cuts our skin with scissors and insert figures into our body; which is very painful."</i>
5 Respectful and abusive free care at the health care facilities	Non-respectful care at the health care facilities keeps women away from the health care facilities: <i>"... during my first delivery, I went to a hospital as I was feeling pushing down sensation, but they shouted at me they thought I was too early and told me to go back home, and I went back and called a TBA, who stayed with me until I gave birth."</i>
6 Preferred birthing position	Another reason identified for the women not choosing the health care facilities for birthing is the health care professionals do not let the women to have the position they preferred. <i>"... women don't want to go to healthcare facilities as they fear that they would not be allowed to choose their preferred birthing positions and companionship."</i>
Theme-2 – TBAs' position and roles in the community	
Subtheme:	Reponses
Assisting birth at home	The TBAs interviewed declared they stopped assisting women during delivery. Since 2003 when the health extension program was launched in the country, they only assist deliveries when the woman is not able to reach the health center, e.g. because of already pushing. <i>"... I examine the women in labor to check whether the baby's 'position' is normal or not, if the baby is in a normal position, I sit and wait till the baby comes out."</i>
Decision-making role to seek care	TBAs have decisive role to seek professional care from the health care facilities; <i>"it is me who makes the final decision whether or not skilled care from health care facilities should be sought."</i> <i>"... quite often the final decision to ask for skilled help is made by the husband together with the TBA."</i>
Theme 3 – relationship between TBAs and healthcare facility	
Subthemes	Responses
Formal partnership with the health care facilities	Midwives and HEWs were used to have a kind of formal partnership <i>"... we used to have a good relationship with the TBAs in this area and they used to refer clients to the health care facilities. But currently, we don't have any cooperation at all because other volunteer women (health development army) are now best placed to accompany women to the healthcare facilities."</i> <i>"... we used to have some form of partnership with TBAs and even we have been giving them gloves but currently TBAs are not allowed to perform home deliveries and so that we have stopped to give them materials."</i> <i>"... formal relationship with TBAs is not necessary because if TBAs are encouraged to accompany women or would be linked in some way to the health care facilities, then there would be a risk that people will think that TBAs also offers good care and then the number of births in the healthcare facilities would decrease rather than increase."</i> This means that teamwork with TBA is completely in-existent. <i>"... TBAs are not allowed to assist deliveries since 2003, even they are punished whenever they are found practicing, yet the health system doesn't have any means to compensate them for their new role, accompanying women to the health care facilities."</i>
TBAs perception about the health care facilities	TBAs perceive that the health care providers considered us someone who took their job, as a result, they don't want to have any relationship. Even sometimes we may accompany women to the health care facilities but we are not welcomed appropriately and get collaborative approach. <i>"... sometimes we feel that we are not welcomed at the healthcare facilities, even we perceive that the midwives consider us a competitor of their job so they don't want to have a formal partnership with us."</i>
TBAs role (assisting homebirth) banned by the government	TBAs are well aware that they are no longer allowed to assist deliveries rather they are expected to encourage pregnant women to go to the nearest healthcare facilities. However, they said that women prefer their labor to be assisted by TBAs because TBAs allow the women to adopt birthing position of their choice and companionship, and they also practice the cultural rituals of the community.
Women experience with the health care facilities	All of the interviewed women are aware of some of the danger signs during pregnancy and the importance of antenatal care visit; though they don't know the time when first to contact health care facilities.

3.2. TBAs' position and roles in the community

3.2.1. Assisting birth at home

The TBAs interviewed declared that they stopped assisting childbirth. Since 2003, when the country's health extension program was launched, they only assist homebirths when the woman is not able to reach the health centre, for example, they are already in active labour. The interviewed TBAs said they got some form of training on how to assist women during labour and that

this training helped them to stop performing harmful practices and to refer labouring women to health care facilities whenever problems such as bleeding arise.

3.2.2. Decision-making role to seek care

The TBAs also mentioned that they play a role in the decision-making process for seeking skilled care from the healthcare facilities. TBA 1 stated, "It is me who makes the final decision whether or not skilled care from health care facilities should be sought."

Table 3

Semi-structured interview guide we used for data collection purpose, Arba Minch Health and Demographic Surveillance Site, 2017.

I Health posts/ health extension workers
Date/ location/ name health post/ name interviewed person/function interviewed person
Are you, as HEW, part of this community? If not, is this a problem?
How long do you work here as a HEW?
What are your daily tasks?
What are the tasks of the HEW for pregnancy and delivery care?
Do you arrange 'group discussions' with pregnant mothers?
Who would be involved in these discussions?
What would be the advantage of these discussions?
Do the HEW make a birth plan with the pregnant mothers? Who is involved in this?
What is the HDA (health development army)? What tasks should they do in your opinion?
Do you know TBA? What are they doing here? How do they do this? What are their tasks?
Could you imagine a collaboration or teamwork with TBA for pregnancy and delivery care?
What role would the HEW take, and what role could the TBA take at that point?
How many, how long ago, how did these deliveries go?
II Pregnant women
Date/location/name health center/name interviewed person/function interviewed person
How many deliveries have you seen? How long ago?
Do you have children?
What help does a birthing woman need during delivery? Is this help available in this region?
What problems can occur during pregnancy? Have you ever heard about these problems?
What kind of problems can occur during delivery? How many times do these problems happen?
What is necessary to improve this?
What would you do in case of problems?
Would you try to go to a health center?
How would you try to reach it?
Who decides how you're going to deliver?
Who makes decisions regarding the place of delivery?
Who pays for the delivery?
Do you know ANC? Did you have the opportunity to attend ANC? Is it useful?
What do pregnancy and childbirth mean to a woman?
III Traditional birth attendants
Date/location/name health center/name interviewed person/function interviewed person
What are the tasks of TBA?
Can you describe how delivery takes place in this community?
How many persons attend the delivery? female helpers? male helpers?
Have you ever met problems during delivery? How manage these problems?
Who takes the decision to go to a health center for the delivery? When should you recommend this?
Would you accompany the patient on the road to the hospital? Why? Why not?
Have you ever heard of a delivery that caused problems? Is it long ago?
What was the problem? Had you yourself ever such a problem? Do you know friends/relatives who had problems?
IV Health centers/midwives
Date/location/name health center/name interviewed person/function interviewed person
How many skilled health workers work in this health facility?
MD? Nurses? Midwives? Health officers? others? 24H service? working hours?
Is there supervision from (a health officer or) a medical doctor?
Can you (nurses, midwives, HEW) discuss your problems with them? If yes, how often? Where? How? If not? Why not?
How is the relationship with the hospital when referring a patient? Communication before referral? Communication after referral?
Giving/asking advice by telephone? Supportive, respectful?
With whom do you discuss difficult cases/near deaths?
What do you learn out of these discussions?
Do women have to pay for antenatal care/ delivery care? How much do women have to pay? For what services? Do you ask payment beforehand?
How is transport organized?
How is supply of materials organized? Who cares about this?
Are there some periods of the month shortages?
Where can women wait before delivery? How long can they stay there?
By whom are they supported at that stage of labor? Are women accompanied during delivery? By whom?
Who decides about the position during labor and during delivery? What proportion of women will choose an alternative position? Is this possible/helpful in case of a normal delivery?
Are treatment options discussed with the patient? Who takes the decisions concerning treatment?
How is the communication with the TBA when they refer a patient?
Could you imagine a room, next to the delivery ward, or next to the health center, where a TBA + relatives + birthing mother can stay and give birth without skilled health worker, but in close proximity so they can come to the delivery room in case of problems? Would this be helpful?
How long do women stay after delivery? What kind of postnatal advice do you give? Who gives it? When?
What could be a good strategy to make more women deliver in the health facility? What would improve the quality of care in your health facility?

Midwife 5 added, "Quite often the final decision to ask for skilled help is made by the husband together with the TBA."

According to the TBAs interviewed, one of their roles is referring women to health care facilities only when problems arise; otherwise,

they simply observe the progress of labour and reassure the women through telling stories. TBA 4 formulated this as: "I examine the women (in labour) to check whether the baby's 'position' is normal or not, if the baby is in a normal position, I sit and wait till the baby comes out."

3.3. Relationship between TBAs and healthcare facility

3.3.1. Formal partnership with the healthcare facilities

Some midwives and HEWs denied any formal communication and cooperation with TBAs, while others declared they had been collaborating with them even though the collaboration was not formal. Midwife 4 said: “We used to have a good relationship with the TBAs in this area and they used to refer clients to the health care facilities. But currently, we don’t have any cooperation at all because other volunteer women (health development armies) are now in the best place to accompany women to the healthcare facilities.”

HEW 4 also said, “We used to have some form of partnership with TBAs and we had even been giving them gloves but currently TBAs are not allowed to perform home deliveries and so we have had to stop giving them materials.”

The midwives also disregarded any collaboration between TBAs and healthcare system. Midwife 7 expressed her concerns as follows: “A formal relationship with TBAs is not necessary because if TBAs are encouraged to accompany women or would be linked in some way to the health care facilities, then there would be a risk that people will think that TBAs also offer good care and then the number of births in the healthcare facilities would decrease rather than increase.”

HEW 5 said: “TBAs are not allowed to assist homebirths since 2003, they are even punished whenever they are found practicing, yet the health system doesn’t have any means to compensate them for their new role of accompanying women to the healthcare facilities.”

3.4. TBAs perception about the healthcare facilities

TBA 4 expressed how she experienced the attitude at healthcare facility: “Sometimes we feel that we are not welcomed at the healthcare facilities, even we perceive that the midwives consider us as competitors for their jobs so they don’t want to have a formal partnership with us.”

TBAs included in the study were well aware that they are no longer allowed to assist homebirths and instead are expected to encourage pregnant women to go to the nearest healthcare facilities. However, they said that women prefer their labour to be assisted by TBAs because TBAs allow the women to adopt the birthing position of their choice, they provide companionship, and they also practice the cultural rituals of the community. TBA 3 said: “Women don’t want to go to healthcare facilities as they fear that they would not be allowed to choose their preferred birthing positions and companionship.”

Most of the time, the TBAs are contacted for the first time when a woman is in labour. TBA 1 said, “Even two days prior to this interview, a family contacted me to assist with a birth at home but I decided to call the ambulance; however, the child was born before the ambulance arrived.”

The TBAs have also mentioned that they are paid in cash (\$3–\$5) or in kind (food and presents) for assisting birth at home but they also said that if government officials found them while they are assisting homebirths they would be fined up to \$10.

4. Discussion

The study has tried to explore the reasons for homebirth and the current roles and practices of TBAs in Arba Minch Zuria district of south Ethiopia. In general, our findings support those described by others. In a focus group discussion from Sierra Leone, both men and women argued that health facility deliveries are unnecessary, not free of charge, involved long travel times and long waiting times before getting help, and were disruptive to daily activities.²³

In our study, women also complained about the lack of respect and few years’ experience of young healthcare workers in comparison with TBAs. This was also reported by a study conducted by Shiferaw et al.²⁴

These findings coincide with factors explaining the Three Delays Model.⁸ The first delay, a late decision to search for help and, cultural and socioeconomic factors constitute major determinants.²⁵ Evidence from Ethiopia has highlighted that women are not allowed to perform traditional rituals, that are deeply rooted in the community, in the health centres contributes to the first delay.²⁶ Sometimes no help is searched for because complications are interpreted as non-medical (“bleeding is healthy”) and in some communities’ arrest of labour is considered a sign of female sexual unfaithfulness.²⁵

In our study, the issue of privacy, exposing private body parts to strangers, especially male caregivers, in the absence of the companionship of their loved ones was raised as one of the reasons why the women prefer homebirth. However, different views were expressed regarding skilled male birth attendants as some of the women mentioned them as more empathic than their female counterparts. This fear of the unknown can be reduced when women have repeated contact with the healthcare facilities and are involved in health information dissemination in different forums that include men and family members.²⁷

The study also revealed a lack of awareness about complications of childbirth and misunderstandings about medical interventions as one of the reasons for preference of homebirth. The women described medical interventions like caesarean section, episiotomy, and instrumental delivery as unnecessary and harmful procedures. Even though the clinical indications of those procedures are sometimes wrong and the routine use of ineffective obstetric interventions is also common in LMICs, it is very crucial to increase women’s understanding of the importance of these – sometimes lifesaving – interventions.^{28–30}

The second delay concerns difficulties to reach professional care due to geographic and transport problems making it physically difficult or impossible to reach a centre once labour has commenced. Given the fact that the district is very mountainous, it is difficult for pregnant women to walk all the way to the healthcare facilities. As part of the intervention to minimize the physical inaccessibility, the government is build and promoting the use of maternity waiting homes as a means to increase facility-based delivery, but these are rarely used in practice.^{5,24} Moreover; most women in Ethiopia are not decision-makers in their households and this is another explanation why they stay at home rather than seeking skilled care or leave for a maternity home; usually because of their economic dependence on their husbands.^{24,31}

The third delay is related to factors after arrival at the health facility including lack or absence of personnel, faulty infrastructure, or simply the substandard level of care provided.^{32,33} Long waiting times after arrival; no follow up of women in labour; no information provided to women in labour; insufficient communication between caregivers and clients; a lack of privacy; and no freedom to choose who would be with her, what position to adopt, and what to eat result in bad experiences with professional health centres and make women avoid coming the next time.³⁴

This was demonstrated in our study as a lack of respectful care, and abuse during childbirth by healthcare providers was also described as another obstacle for seeking skilled care. Treatment accompanied by a caring and friendly nature, and a good interpersonal relationship is more important for attracting clients than physically accessible care and it is one of the quality domains which was recently proposed by the WHO to improve intrapartum care for a positive childbirth experience. This confirms the statement that TBAs are trusted by the women and provide

culturally appropriate pregnancy care in line with the traditional expectations of the community, which professional health care workers often lack. When a woman receives more dignified and respectful treatment during pregnancy and childbirth, the probability of returning back to the facility will be high.^{30,35}

A recent interventional study conducted in Arba Minch Zuria district demonstrated that improving the quality of health centre care increases clients visit significantly. It has shown a 10% reduction in home deliveries and 64% reduction in maternal mortality in a 3-year follow-up period.³¹

Our findings highlight the roles and position of TBAs in the community. According to the TBAs and the women, TBAs are considered as the key decision-makers for the women to seek skilled care together with the husbands or the mother in law during childbirth. As TBAs are elders and respected women, they can easily influence the decision to seek care and easily build up a trusting relationship with the community. Thus, if they are linked in any way to the health system they can contribute by promoting skilled care and accompanying mothers to give birth in a healthcare facility where maternal health services are available.^{9,11}

In contrary to the position that they have in the community, combined with the fact that many women find it normal to initially contact the TBA in early labour, the midwives and HEWs judge TBAs as not contributing in any way to the improvement of maternal health including their current role of companionship and linkage. Hence the midwives and HEWs do not want to have any formal communication with TBAs, but some admitted a kind of informal collaboration.¹⁶ This illustrates a conflict in views on the birthing process, in traditional “giving birth” the woman is placed in the centre, in contrast with a medicalized “being delivered,” where the surrounding process is central.³⁶

The other controversy from the health care providers side is, the fear that establishing formal linkage with the TBAs would negatively affect facility-based delivery as the community would consider the TBAs as skilled care providers and would go to them during labour.^{13,19} This finding is not consistent with other studies from LMICs literature which support that strengthening partnerships with TBAs has a positive contribution for the reduction of maternal mortality.^{10,37}

TBAs in Arba Minch Zuria district are still attending homebirths because it is their source of income in addition to the reputation that they are enjoying in the community. Therefore, to make their new role of guiding clients to healthcare facilities effective, the TBAs should be compensated to stop home delivery; which has proven effective in other countries.^{16,24,38,39}

Regarding the pregnant women’s experience with the health system, some women are aware of the danger signs that require immediate medical attention during pregnancy and childbirth, but they do not know when to start the first contact with health care facilities. Although there are efforts being made through different awareness-raising forums to increase birth preparedness and complication readiness among pregnant women, none of the interviewed women had a plan for their most recent pregnancy. At the same time, maternity waiting homes found in the district are underutilized by the expectant women as there are a lot of inconveniences for the mothers staying at the waiting home.

Several interventions to overcome the aforementioned Three Delays and to guide both TBAs and professional health care workers to a future in cooperation have been reviewed. Some of the interventions were education of TBAs, integrating TBAs in the health care system with a new role, providing them with communicative possibilities, and renew training yearly, but also offer skilled attendants and other professionals training in cultural competencies and support them to build constructive interpersonal relationships

with TBAs. All these interventions have been demonstrated to increase deliveries in health centres.⁴⁰

5. Study limitations

Social desirability bias might be introduced as the interviews with pregnant mothers were conducted at the healthcare facilities. The study participants whom we interviewed for this study cannot be considered a representative sample and should be interpreted with caution as the sample size was small and purposive sampling technique was used. This study gives an idea of the overall situation regarding the reasons for homebirths and current roles of TBAs and can also be an input for further studies on the area.

6. Conclusions and recommendations

TBAs are still preferred by the women for childbirth and they are conducting a significant proportion of homebirths in Arba Minch HDSS in south Ethiopia. This is because TBAs are easy to contact, they allow the women to practice common cultural rituals, adopt their preferred birthing position and companionship during labour. In spite of this, the coordination between TBAs and health professionals, including HEWs, for linking pregnant women to the healthcare facilities is poor, as there is no true partnership and collaboration, which hinders the TBAs from referring labouring women to the healthcare facilities and instead attend the labour by themselves at home. On the other hand, women are also forced to consult TBAs as primary birth attendants because of the distance from the healthcare facilities over difficult terrain, non-respectful care at healthcare facilities, and fear of medical interventions that the women perceived as harming their body.

Therefore, TBAs who are still engaged in assisting homebirths should be convinced to stop and if possible incentives should be given to them to accompany and refer mothers to give birth in healthcare facilities. Health professionals, including HEWs, need to be aware of the importance of TBAs in linking the women to the healthcare facility and their contribution in promoting skilled care utilization. Thus, in order for TBAs to stop assisting with homebirth and perform their new role effectively in the very rural district of Arba Minch, it is necessary for the health system to establish good working relationships with them. For improved skilled attendance at birth, health care providers should be made aware of the full array of birthing positions and let the women choose their preferred position and companion. Finally, improving respectful maternity care at the healthcare facilities, increasing awareness among women about the importance of medical interventions, and further mixed type studies are recommended.

Authors contribution

VD, KM & YJ led this research including proposal write up and designed the instrument. VD, KM & MK collected data in the field, analyzed and wrote the manuscript. VD, KM, MK, VJP & YJ contributed to the study design and to the final version of the manuscript. All authors read and approved the final manuscript.

Ethical statement

The research proposal has been approved by the Institution Review Board (IRB) of College of Medicine & Health Sciences (CMHS) and Arba Minch University (AMU) on March 25, 2017 as ethically sound research for implementation.

Conflict of interest

None declared.

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References

- World Health Organization. *Intrapartum care for a positive childbirth experience*. [cited 2018 July 23]. Available from: Geneva: World Health Organization; 2018 <http://apps.who.int/bookorders>.
- WHO, UNICEF, UNFPA, World Bank. *Trends in maternal mortality: 1990 to 2015*. Geneva: World Health Organization; 2015.
- WHO. WHO | *Skilled attendants at birth*. [cited 2017 December 24]. Available from: WHO: World Health Organization; 2017 http://www.who.int/gho/maternal_health/skilled_care/skilled_birth_attendance_text/en/.
- Starrs AM. Safe motherhood initiative: 20 years and counting. *Lancet* 2006;**368**(9542):1130–2.
- Campbell OM, Graham WJ. Strategies for reducing maternal mortality: getting on with what works. *Lancet* 2006;**368**(9543):1284–99 [cited 2017 July 10]; Available from: <https://www.sciencedirect.com/science/article/pii/S0140673606693811>.
- Kebede A, Hassen K, Teklehaymanot AN. Factors associated with institutional delivery service utilization in Ethiopia. *Int J Womens Health* 2016;**8**:463–75. Dove Press [cited 2017 July 23]. Available from: <https://www.dovepress.com/factors-associated-with-institutional-delivery-service-utilization-in-peer-reviewed-article-IJWH>.
- Gabrysch S, Campbell OM. Still too far to walk: literature review of the determinants of delivery service use. *BMC Pregnancy Childbirth* 2009;**9**(1):34. [cited 2017 July 21]. Available from: <http://www.biomedcentral.com/1471-2393/9/34>.
- Thaddeus S, Maine D. Too far to walk: maternal mortality in context. *Soc Sci Med* 1994;**38**(8):1091–110.
- Lane K, Garrod J. The return of the traditional birth attendant. *J Glob Health* 2016;**6**(2). [cited 2018 April 27]. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4994477/pdf/jogh-06-020302.pdf>.
- Kruske S, Barclay L. Effect of shifting policies on traditional birth attendant training. *J Midwifery Womens Health* 2004;**49**(4):306–11.
- World Health Organization. *Traditional birth attendants: a joint WHO/UNFPA/UNICEF statement*. Available from: Geneva: World Health Organization; 1992 <http://www.who.int/jris/handle/10665/38994>.
- Bibbo C, Shirazian T. Maternal mortality: the greatest health divide in the world. In: Shirazian T, e. G, editors. *Around the globe for women's health: a practical guide for the health care provider*. New York: Springer Science and Business Media; 2013. p. 1–19.
- Temesgen TM, Umer JY, Buda DS, Haregu TN. Contribution of traditional birth attendants to the formal health system in Ethiopia: the case of Afar region. *Pan Afr Med J* 2012;**13**(Suppl. 1):15. [cited 2018 April 21]. Available from: <http://www.panafrican-med-journal.com/content/series/13/1/15/full>.
- Sibley L, Sipe TA, Koblinsky M. Does traditional birth attendant training improve referral of women with obstetric complications: a review of the evidence. *Soc Sci Med* 2004;**59**(8):1757–68. [cited 2018 May 25]. Available from: https://ac.els-cdn.com/S0277953604000589/1-s2.0-S0277953604000589-main.pdf?_tid=0a6c7aff-9da5-4638-bb98-cdec742a572&acdnat=1527258492_df2a7892e5d7a943aae5daf8fd5a85d4.
- Graham WJ, Bell JS, Bullough CH. *Can skilled attendance at delivery reduce maternal mortality in developing countries? Safe motherhood strategies: a review of the evidence*, 17. Studies in Health Services Organisation and Policy; 2001. p. 98. [cited 2017 November 25]. Available from: <http://193.190.239.98/bitstream/handle/10390/2655/2001shsop0097.pdf?sequence=2>.
- Miller T, Smith H. Establishing partnership with traditional birth attendants for improved maternal and newborn health: a review of factors influencing implementation. *BMC Pregnancy Childbirth* 2017;**17**(1):1–10. [cited 2018 June 13]. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5649078/pdf/12884_2017_Article_1534.pdf.
- Central Statistical Agency of Ethiopia. *Population projection of Ethiopia for all regions at Wereda level from 2014–2017*. Available from: Central Statistical Agency of Ethiopia; 2013 http://www.csa.gov.et/images/general/news/pop_pro_wer_2014-2017_final.
- Central Statistical Agency (CSA) [Ethiopia] and ICF. *Ethiopia demographic and health survey 2016*. [cited 2018 May 27]. Available from: Addis Ababa, Ethiopia, and Rockville, Maryland, USA: CSA and ICF; 2016 <https://dhsprogram.com/pubs/pdf/FR328/FR328.pdf>.
- Yousuf J, Mulatu T, Nigatu T, Seyum D. Revisiting the exclusion of traditional birth attendants from formal health systems in Ethiopia. *Afr Med Res Found Discuss Pap Ser* 2010;**3**(003):3.
- Ethiopian Federal Ministry of Health. *MDG accelerating framework Ethiopia: accelerated action plan for reducing maternal mortality*. Addis Ababa: Ethiopian Federal Ministry of Health; 2014.
- Ethiopian Federal Ministry of Health. *Health sector transformation plan (2015/16–2019/20)*. Addis Ababa: Ethiopian Federal Ministry of Health; 2015.
- Kok MC, Kea AZ, Datiko DG, Broerse JE, Dieleman M, Taegtmeier M, et al. A qualitative assessment of health extension workers' relationships with the community and health sector in Ethiopia: opportunities for enhancing maternal health performance. *Hum Resour Health* 2015;**13**(1):1–12. [cited 2018 June 14]. Available from: <https://human-resources-health.biomedcentral.com/track/pdf/10.1186/s12960-015-0077-4>.
- Oyerinde K, Harding Y, Amara P, Garbrah-Aidoo N, Kanu R, Oulare M, et al. Barriers to uptake of emergency obstetric and newborn care services in Sierra Leone: a qualitative study. *J Community Med Health Educ* 2012;**2**(5). Available from: <https://www.omicsonline.org/barriers-to-uptake-of-emergency-obstetric-and-newborn-care-services-in-sierra-leone-a-qualitative-study-2161-0711.1000149.php?aid=6531>.
- Shiferaw S, Spigt M, Godefrooij M, Melkamu Y, Tokie M. Why do women prefer home births in Ethiopia? *BMC Pregnancy Childbirth* 2013;**13**(1):5. [cited 2017 November 30]. Available from: <https://bmcpregnancychildbirth.biomedcentral.com/track/pdf/10.1186/1471-2393-13-5?site=bmcpregnancychildbirth.biomedcentral.com>.
- Evans EC. A review of cultural influence on maternal mortality in the developing world. *Midwifery* 2013;**29**(5):490–6. doi:<http://dx.doi.org/10.1016/j.midw.2012.04.002> Available from: .
- Jackson R, Tesfay F, 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 Heal* 2017;**22**(2):148–60.
- Tadele N, Lamaro T. Utilization of institutional delivery service and associated factors in Bench Maji zone, Southwest Ethiopia: community based, cross sectional study. *BMC Health Serv Res* 2017;**17**(1):101. Available from: <http://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-017-2057-y>.
- McCauley M, Stewart K, Kebede B. A survey of healthcare providers' knowledge and attitudes regarding pain relief in labor for women in Ethiopia. *BMC Pregnancy Childbirth* 2017;**17**(1). [cited 2018 May 27]. Available from: <https://bmcpregnancychildbirth.biomedcentral.com/track/pdf/10.1186/s12884-017-1237-4>.
- MoghaddamHosseini V, Nazarzadeh M, Jahanfar S. Interventions for reducing fear of childbirth: a systematic review and meta-analysis of clinical trials. *Women Birth* 2017;(August):254–62. [cited 2018 July 20]. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S1871519217302561>.
- Oladapo OT, Tunçalp Ö, Bonet M, Lawrie TA, Portela A, Downe S, et al. WHO model of intrapartum care for a positive childbirth experience: transforming care of women and babies for improved health and wellbeing. *BJOG Int J Obstet Gynaecol* 2018;**125**(8):918–22.
- Lindtjörn B, Mitiku D, Zidda Z, Yaya Y. Reducing maternal deaths in Ethiopia: results of an intervention programme in Southwest Ethiopia. *PLoS One* 2017;**12**(1). [cited 2017 November 30]. Available from: <https://bmcpubhealth.biomedcentral.com/track/pdf/10.1186/s12889-017-4071-8?site=bmcpubhealth.biomedcentral.com>.
- Allen SM, Opondo C, Campbell OMR. Measuring facility capability to provide routine and emergency childbirth care to mothers and newborns: an appeal to adjust for delivery caseload of facilities. *PLoS One* 2017;**12**(October (10)):e0186515. [cited 2017 November 30]. Available from: <http://dx.plos.org/10.1371/journal.pone.0186515>.
- Knight HE, Self A, Kennedy SH. Why Are women dying when they reach hospital on time? A systematic review of the "Third Delay". *PLoS One* 2013;**8**(5). [cited 2017 November 30]. Available from: <http://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0063846&type=printable>.
- Rosen HE, Lynam PF, Carr C, Reis V, Ricca J, Bazant ES, et al. 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;**15**(1). [cited 2018 May 27]. Available from: <https://bmcpregnancychildbirth.biomedcentral.com/track/pdf/10.1186/s12884-015-0728-4>.
- Meguid T. (Re)Humanising health care – placing dignity and agency of the patient at the centre. *Nordic J Hum Rights* 2016;**34**:60–4. [cited 2018 May 27]. Available from: <http://www.tandfonline.com/action/journalInformation?journalCode=rnh20>.
- Afsana K, Rashid SF. Constructions of birth in Bangladesh understanding childbirth. In: Selin H, editor. *Childbirth across cultures*. Dordrecht: Springer; 2009. p. 123–35. [cited 2018 September 21]. Available from: https://link.springer.com/content/pdf/10.1007%2F978-90-481-2599-9_11.pdf.
- Owolabi OO, Glenton C, Lewin S, Pakenham-Walsh N. Stakeholder views on the incorporation of traditional birth attendants into the formal health systems of low-and middle-income countries: a qualitative analysis of the HIFA2015 and CHIL2015 email discussion forums. *BMC Pregnancy Childbirth* 2014;**14**(1). [cited 2018 August 14]. Available from: www.dgroups.org/hifa2015.
- Tomedi A, Stroud SR, Maya TR, Plaman CR, Mwanthi MA. From home deliveries to health care facilities: establishing a traditional birth attendant referral program in Kenya. *J Health Popul Nutr* 2015;**33**(1):1–7. [cited 2018 May 27]. Available from: <https://jhpn.biomedcentral.com/track/pdf/10.1186/s41043-015-0023-z>.
- Jiang H, Qian X, Chen L, Li J, Escobar E, Story M, et al. Towards universal access to skilled birth attendance: the process of transforming the role of traditional birth attendants in Rural China. *BMC Pregnancy Childbirth* 2016;**16**(1). [cited 2018 May 27]. Available from: <https://bmcpregnancychildbirth.biomedcentral.com/track/pdf/10.1186/s12884-016-0854-7>.
- Byrne A, Morgan A. How the integration of traditional birth attendants with formal health systems can increase skilled birth attendance. *Int J Gynecol Obstet* 2011;**115**(November (2)):127–34. doi:<http://dx.doi.org/10.1016/j.ijgo.2011.06.019> [cited 2017 November 30]. Available from: .