BMJ Open

Why some women who attend focused antenatal care fail to deliver in health facilities: a qualitative study of women's perspectives from slums of Addis Ababa, Ethiopia

Endalew G Sendo ,[1] M E Chauke,[2] M Ganga-Limando[2]

To cite: Sendo EG, Chauke ME, Ganga-Limando M. Why some women who attend focused antenatal care fail to deliver in health facilities: a qualitative study of women's perspectives from slums of Addis Ababa, Ethiopia. *BMJ Open* 2020;**10**:e039189. doi:10.1136/bmjopen-2020-039189

► Prepublication history and supplemental material for this paper is available online. To view these files, please visit the journal online (http://dx.doi.org/10.1136/bmjopen-2020-039189).

Received 07 April 2020
Revised 12 August 2020
Accepted 30 November 2020

[1]Midwifery, Addis Ababa University, Addis Ababa, Ethiopia
[2]Department of Health Studies, University of South Africa School of Humanities, Pretoria, Gauteng, South Africa

Correspondence to
Dr Endalew G Sendo;
endalew.gemechu@aau.edu.et

ABSTRACT

Objective The purpose of this study was to explore why some women who attend focused antenatal care (FANC) fail to deliver in health facilities from slums of Addis Ababa, Ethiopia.

Setting Public health facilities (three health centres and one district hospital).

Study design A qualitative exploratory and descriptive research design was used.

Study participants Study participants comprised women of reproductive age (18–49 years) living in slum areas of Addis Ababa, Ethiopia. We used 20 in-depth audio-recorded interviews. Data were analysed concurrently with data collection. Thematic analysis was done for the study. A multilevel life-course framework of facility-based delivery in low-income and middle-income countries developed by Bohren *et al* was used to frame the current study and link the findings of the study to the body of knowledge.

Results From the analysis of in-depth interview data, four themes emerged, namely, perceived benefits of home delivery, knowledge deficit about health facility-based delivery, poor access to healthcare facilities and inadequate (demand side) resources. These themes were identified as rich and detailed accounts of the perspectives of facility-based and home delivery among attendees of FANC in Addis Ababa, Ethiopia.

Conclusion The findings of this qualitative study revealed that perceived benefits of home delivery, knowledge deficit about health facility-based delivery, poor access to healthcare facilities and inadequate (demand side) resources were related to low uptake of facility-based delivery services. Use of ANC visits to advise women about birth preparedness and complication readiness, the use of facility deliveries to reduce risks of home delivery to the mother and the newborn should be stressed.

Strengths and limitations of this study

- The analysed data were based on information obtained only from women who delivered their last child at home in the last 12 months.
- The perspectives of women attending focused antenatal care in private facilities and delivered at home were not explored in the study.
- The information obtained from study participants could be subject to recall bias.
- The researcher was self-aware and cognisant of his immersion in the research process to allow the process to be as objective as possible.
- The findings of this study applied to a similar population in the study setting.

BACKGROUND

Maternal mortality related to pregnancy and childbirth remains high globally even though it has declined by 44% from 385 deaths per 100 000 live babies in 1990 to 216 per 100 000 live births in 2015.[1] The same authors mention that 3.9 million women will die from maternal causes in the next 15 years if the current rate of reduction of 2.9% in maternal mortality continues. Women's chance of dying from problems of being pregnant and childbirth through the span of their lifetime is 1 in 160 in sub-Saharan Africa (SSA), in comparison to 1 in 3700 in developed nations.[2–4] These same regions account for 98% of about 3.3 million international neonatal deaths that occur every year. The implication is that there is an urgent need to accelerate the drop in maternal mortality rate (MMR) in order to achieve the sustainable development goal 3.1 of reducing the global maternal mortality ratio to less than 70 per 100 000 live births by the year 2030 with no country having an MMR of more than twice the global average.[5]

In Ethiopia, even though there was a decline in MMR (600 in 2011 and 412 per 100 000 live births in 2016) and an increase in the proportion of women who received antenatal care (ANC) from a skilled provider (33% in 2011 to 62% in 2016), the decline in unskilled deliveries or home deliveries and

the increase in institutional deliveries were not substantial. For example, home deliveries declined from 90% in 2011 to 73% in 2016, while institutional deliveries increased from 10% in 2011 to 28% in 2016.[6] Home delivery in our study is defined as a delivery that is not being attended by a skilled health worker using a safe delivery kit; it is rather attended by non-trained women (the majority of whom are family members or unskilled traditional birth attendants (TBAs)) during delivery.[7]

In city slums, the poor women are a tremendously liable and marginalised group with unplanned/poor housing, no essential services and low use of skilled care at delivery.[2 8] Morbidity in urban poor populations is also influenced by way of social determinants such as social gradient, social exclusion, social support, stress and physical activity; and suboptimal health behaviours.[2] Though there is no scientific evidence, a large number of urban populations in Addis Ababa live in slums. These slums draw a high density of low-income employees and/or jobless individuals, with low levels of literateness. In spite of the efforts of Ethiopia's government to promote health facility-based delivery in the country, the majority of births (an estimated 85%) still takes place at home,[9] including those of slum dwellers of Addis Ababa, the capital city of Ethiopia. Still, there is no study on facility deliveries in urban slums of Addis Ababa. The purpose of this study was to explore why some women who attend focused antenatal care (FANC) fail to deliver in health facilities from the slums of Addis Ababa, Ethiopia.

METHODS

Study design and setting

A qualitative, exploratory and descriptive research design was used to achieve the objective of the study. The present study was conducted from February to April 2018 at public health facilities in Addis Ababa, Ethiopia. Three health centres and one district hospital were purposively selected for the present study. The public health facilities were selected because they attended to a high number of women who attended FANC but attended to less skilled deliveries in the past year preceding the study. In this study, a slum household is defined as a group of individuals living under the same roof lacking one or more of the following conditions: access to improved water, living on petty trade/daily labour, access to improved sanitation, sufficient living area and durability of housing. The study included the slums dwellers of Ketchne and Kolfe Keraniyo, which are mainly low-income residential areas and are characterised by a large number of poor people in the city centre.

Study population and sampling strategy

Study participants comprised women of reproductive age (18–49 years) living in the slum areas of Addis Ababa, the capital city of Ethiopia. A purposive sampling strategy was used to select women who were able to provide rich information that adequately answered the research questions because of their experience of FANC, and facility-based and home delivery. The women who met the eligibility criteria were contacted through the midwives/nurses in charge of the maternal and child health units of the selected hospitals and health centres to discuss the purpose of the study and study activities, and request for participation in the study. Then the researcher approached all women who agreed to take part in the interviews face to face and they were followed into the communities where the health facilities are located.

Table 1 Sampling (n=20)

Health facilities	Younger women (<24 years)	Older women (25 years and above)
HC 1	2	2
HC 2	2	3
HC 3	3	2
District hospital	3	3
Total	10	10

HC, Health Center.

In order to be included in the study, the participants had to be women who had attended FANC in selected health facilities and had given birth to babies at home in the past 1 year preceding data collection, could communicate well in Amharic (local working language), and had resided in the slums of Addis Ababa for at least 6 months. Exclusion criteria comprised women who attended FANC but had not experienced home delivery. We contacted 30 eligible women for the interview and interviewed 20 of them. Ten women contacted were not engaged in the interviews; three because of relocation out of the study setting, and seven because they were busy and refused to participate (table 1).

Data collection

The principal author with a trained female research assistant conducted in-depth face-to-face interviews. An interview guide was used to outline the open-ended topics in English and Amharic. The interview guide used in this study is attached as online supplemental Annexe 1.

The researcher piloted the interview schedule on three women who met the set eligibility criteria. These women were not included in the main study. The results were not included in the main study as the purpose was to test whether the research questions generated appropriate responses. The pilot study helped the researcher improve the interview guide. Some changes were made due to the issues that emerged during the pilot study. For example, some questions were rephrased and sequentially aligned.

The interviews covered the central question 'What were your reasons for attending FANC (which promotes the use of skilled attendance at birth) but decided to deliver your baby at home and not at the health facility?' Additional questions included: What prompted you to attend antenatal care? How many times did you receive ANC during

this pregnancy? What were the benefits of attending antenatal care for you? What information did you receive from the healthcare providers about health facility-based delivery? What is your opinion regarding delivering a baby in the health facility? What are the benefits of going for institutional delivery? Would you recommend health facility delivery to your friends? In-depth interviews were conducted until saturation, which was reached after 20 interviews when additional data did not lead to any new emergent codes and themes. The number of participants in qualitative research is adequate when data saturation is achieved. According to Hancock *et al*[10] the qualitative research 'gold standard' for quality research is data saturation. The same authors explain that data saturation or adequacy is reached when there are no new emerging ideas of information in the data, the point in coding when no new codes occur in the data.[10 11]

During the interviews, a favourable, non-threatening and relaxed environment was created when the researcher introduced himself to the participants and explained the interview process. The interviews took place in the private rooms of selected health facilities. With the permission of the participants, the assistant researcher audio-recorded the interviews and took written notes during the interview in order to capture the original accounts of the participants' responses and to verify their interpretations by referring back to the original responses.

The researcher listened attentively to research participants as they responded to the interview questions. During the in-depth interviews, one participant expressed reservation about the use of the audiotapes, even after the researcher had assured confidentiality of the collected data for the study. The researcher respected her wish by switching off the audiotape for her interview.

In this study, on the spot member checking was performed during the interviews by repeating what the participant said and what was documented in the field notes to the participants and confirming that is what they wanted to say. Through member checking, the feedback was given to the participants. The researcher also obtained feedback regarding the participants' response to the interpretation of the data from them as individuals. The researcher spent considerable time (4 weeks) interacting with the participants during in-depth interviews in order to develop a rich understanding of their perceptions of facility-based and home delivery service until data saturation. The time spent during data collection was sufficient to establish a rapport with the participants. The researcher conducted the interviews in Amharic and these interviews lasted for about 30–50 min.

Patient and public involvement

Patients were not involved in this study.

Data analysis

Descriptive statistics were used to summarise sociodemographic characteristics of participants.

Data were analysed concurrently with data collection. All transcribed data were read and categorised into meaningful units that were subsequently coded manually by the principal researcher. The analysis involved the use of both a priori codes (from the question guide) and emergent inductive codes. Thematic analysis was done for the study. The researcher used Techs' eight steps of qualitative data analysis method.[12] To ensure dependability in the study, the researcher liaised with the two senior research supervisors regularly by email, personal contact and phone calls to track any changes carried out in the protocol and procedures, including reviewing themes, defining and naming themes identified. Moreover, verbatim quotes were designated and used to elucidate study findings.

Ethical consideration

The authors obtained informed written consent from all participants to conduct the interviews. The voluntary nature of participation in this study was underlined. Confidentiality was assured about the identity and other personal information of all interviewees. The data collected were stored electronically as audio recordings to use as a form of backup and the transcriptions and notes were stored as Microsoft (MS) word files. The MS word files were password-protected to ensure confidentiality.

Research findings

Characteristics of study participants

A total of 20 participants was involved in the in-depth interviews. The mean age of the total sample was 28.96 (±4.19 SD) years. Educational characteristics of the participants show that the majority (14 out of 20) was found to have no formal education and two-thirds of them was found to have one to three children. All of them delivered their last child at home during this study.

Themes

Four themes emerged from the analysis of in-depth interview data. These themes were identified as rich and detailed accounts of the perspectives of facility-based and home delivery among attendees of FANC in Addis Ababa, Ethiopia.

Theme I: Perceived benefits of home delivery

The first theme that emerged from data analysis was the perceived benefits of home delivery. Within the theme, three categories: support available during home delivery, the familiarity and warmth of the home setting and affordability of home delivery emerged. The subcategories were as shown in table 2

Partner's, family's and neighbours' supportive presence at birth

The findings revealed that the benefits of home delivery (as perceived by the participants) were one of the reasons women decided to deliver their babies at home and not at the health facilities. Some of the participants indicated that the presence of partners, family members, friends and neighbours offers the required support and assistance during delivery at home. Sample responses included;

Table 2 Theme I: Perceived benefits of home delivery

Theme	Categories	Subcategories
Perceived benefits of home delivery	Support available during home delivery	Partner, family and neighbours' supportive presence at birth
	Familiarity and warmth of the home setting	Familiar, comfortable and convenient home setting
	Affordability of home delivery	The cost of health facility-based delivery services too high

I delivered at home without any problems and was assisted by my mother (Participant 08).

When I was in labour, my family and TBA from neighbours were with me. The presence of family and TBA was to provide me physical, social, and emotional support during childbirth (Participant 16).

When labour started me at night I was alone because my husband was on fieldwork. So, there was nobody else close to me. I then shouted to call my neighbours but I already delivered before they came (Participant 01).

Elder women influence the decision-making power regarding delivery place in Ethiopia. However, decision-making processes are dominated by men and the male household head is regularly accountable for making the final decision. Other participants perceived home delivery safe because of the confidence they have in the experienced members of the community such as mothers, grandmothers and neighbours who assist during delivery. Furthermore, the availability of TBAs in the community might confirm a woman's decision to give birth at home.

My grandmother asked me to wait a little longer at home. She told me to wait and I gave birth spontaneously. We have confidence in her (TBAs) (Participant 04).

As the labour progressed, I asked them to take me to a facility. But my husband said no because he wanted me to deliver at home (Participant 18).

A study suggests that birth companionship especially continual support in labour and delivery can advance women's childbirth experience and birth outcomes.[13] The issue of husband/partner companionship during labour is regarded with concern by the study participants, who opted for home delivery. The findings of the study found that most women wanted to be accompanied by their partner to the facility for childbirth and most of them wanted to have a companion stay with them during labour and after delivery. Women's reasons for desiring a companion were mostly related to having someone around to help them meet their physical needs; more so than for emotional support. The results, nevertheless, suggest that women are less likely to be allowed continuous support at delivery if the companion was a male partner. These findings suggest that we need to find better ways of changing social norms about the role of men during labour and delivery and encouraging the participation of male partners in maternal and child healthcare while prioritising women's preferences. Sample responses included;

I am scared of delivering at a health facility alone because family members (especially my husband) aren't permitted to attend a woman in the labour room. I won't have such problems when I deliver at home (Participant 05).

Men are not allowed to accompany their wives to the labour ward for the reasons I don't know. What is wrong if he is allowed to stay with his wife during childbirth? (Participant 03)

Yet, men aren't permitted to attend a woman in the labour room and only one female relative is sometimes allowed to be with a woman in labour ward (Participant 02).

Familiar, comfortable and convenient home setting

The findings revealed that some of the participants identified familiarity with the home setting and warmth of the home setting as another benefit of home delivery, in that at home one can rest comfortably in their own bed. This finding was apparent in the following sample responses;

At home, you can rest in *your* bed after delivery, and your family and friends feed you porridge (Participant 05).

I would have lost the comfortable house where my close families, relatives, and neighbours nearby me, had I gone hospital for delivery (Participant 07).

I never find a place like my home. It is my pleasure to deliver my baby on my own bed…. (Participant 13).

One participant mentioned the immediate celebration of the birth of a child by women singing traditional songs as one of the benefits of home delivery. In addition, she mentioned the caring and feeding of the mother by the neighbours. This is what she said "Following childbirth, neighbouring women will make some porridge and will serve the woman. They (women) will celebrate this special occasion by singing traditional songs and eating porridge. If childbirth takes place in the facility, you miss this wonderful event and the warmness of your home. I think this ceremony is unique to Ethiopian women" (Participant 01).

Cost of facility-based delivery too high

The high cost of delivering at a health facility was mentioned as one of the reasons women decide to deliver their babies at home. Although maternal service is free in Ethiopia, indirect costs linked with childbearing were too high for numerous women who regarded themselves as too poor to deliver in a health facility. For instance, economically constrained women might have concerns obtaining funds to pay for gloves, medications and lab

Table 3 Theme II: Knowledge deficit

Theme	Categories	Subcategories
Knowledge deficit	Inadequate information received from health professionals	Lack of knowledge about facility-based delivery
	Perceptions of home and facility-based delivery	Home delivery is for normal delivery
		Unnecessary procedures carried out at health facilities

tests during facility-based delivery care at the time of service, predominantly those families who depend on intermittent labour. Some women regarded costs outside of the direct cost for childbirth as 'unseen' and difficult to prepare for. The sample response

> You know you need someone who arranges taxi and pays money for it to go to health facility (Participant 6).
>
> When you go there (health facility) for childbirth, you are required to buy gloves, medications and lab tests, etc. Had there is a strong national health insurance system in place, you could have used it to cover your expenses (Participant 10).

Theme II: Knowledge deficit

The second theme that emerged from data analysis was knowledge deficit. Within the theme, two categories of inadequate information received from the health professionals and beliefs about home and facility-based delivery emerged. The subcategories were as shown in table 3.

Lack of knowledge about facility-based delivery

According to the study findings, a lack of knowledge about facility-based delivery influenced the women's decision to give birth at home. Some of the participants stated that they did not know about the facility-based delivery service at public health facilities. Sample responses in that regard included:

> We must be told about the significance of health facility delivery by the service providers at the ANC clinic. Nobody raised the issue to us. So, we decided to give birth at home. There is a TBA in our community and she was called and assisted me (Participant 02).
>
> The nurse I was attended to by was busy and she only checked my abdomen and gave me an appointment to return. Otherwise, I don't recall anything I was told about facility delivery (Participant 05).
>
> I didn't receive any information about delivering in a facility. She (the midwife) only checked me and told me to come on the next appointment…. I guess it is because they are at times busy or they might not be well prepared to do so (Participant 01).

The perception that home delivery is for normal delivery

The study findings revealed some participants' perceptions of home delivery that made them decide to give birth at home, even though they attended FANC. The finding was evident in the following sample responses;

> I delivered my last child at home because it was a normal delivery, however, I would have gone to the hospital had any complication occurred (Participant 08).
>
> If I encounter difficulty to deliver in my home I can go there at last while labour is prolonged and painful. Otherwise, why should I visit a health facility while I am healthy? (Participant 15).
>
> I delivered five children at home being assisted by TBA, my family, and relatives. You will continue to deliver at home if you deliver the first child at home (Participant 02).

The perception that unnecessary procedures are carried out at health facilities

According to the study findings, some of the women had a perception that unnecessary procedures are carried out at health facilities during delivery. Sample responses in that regard included:

> Lots of women are cut and stitched for the reasons I don't know. For example, if one goes to a private hospital, almost every one of them delivers by the operation (Participant 01).
>
> Fear of Caesarean section delivery discourages us (women) to come for health facility-based delivery (Participant 08).

Theme III: Poor access to health facilities

The third theme that emerged from data analysis was poor access to health facilities. Within the theme, two categories, that is, lack of transport and financial constraints emerged. The subcategories were as shown in table 4.

Inaccessible and inadequate ambulance service

According to the study findings, the participants ended up giving birth at home because of poor access to health facilities. The difficulty of getting transport, in particular, ambulance services to the health facility, especially at night resulted in women delivering their babies at home. Sample responses included;

> In the night, it is difficult to get the ambulance as fast as you need it (Participant 01).
>
> There is limited access to ambulance service mainly in the night (Participant 06).
>
> Sometimes, the driver doesn't respond to the telephone call and, the woman will deliver at home (Participant 03).

Table 4 Theme III: Poor access to health facilities

Theme	Categories	Subcategories
Poor access to health facilities	Lack of transport	Inaccessible and inadequate ambulance service Lack of prior arrangement for transport Distance and poor roads
	Financial constraints	Lack of emergency and complications readiness planning

Lack of prior arrangement for transport

Planning for childbirth includes decisions about the location of delivery, transportation planning and money to pay for childbirth. The findings of the study revealed that study participants did not arrange for transportation to a health facility. This was evident in the sample responses;

> We didn't arrange transportation before (Participant 19).
>
> I delivered this baby at home because labour started in the night while it was heavily raining, and there was no time to arrange transport (Participant 02).

Distance and poor roads

According to the study findings, the long distance to the healthcare facilities, as well as the bad state of the roads diminished access to healthcare facilities. One participant explained 'My home is a bit far from the main road and a taxi can't come in because of the bad road (cobblestone was under construction)' (Participant 04).

Lack of readiness planning for emergencies and complications

The study findings identified the lack of funds in an emergency as a barrier to the utilisation of facility-based delivery

> You know you need someone who arranges taxis and pays money for it to go to health facility (Participant 03).
>
> There is no strong national health insurance system in place in our country to cover your expenses during childbirth… The government should do more on this (Participant 14).

Two mothers reported that they delivered at home because labour was unpredictably too fast, and did not give their families a chance to reach the health facility for delivery. Childbirth after unusually rapid labour, culminating in the rapid and spontaneous expulsion of the infant is called precipitate delivery. In precipitate delivery, the first and the second stages of labour are combined, and the duration of labour is under 2–3 hours.[14] The sample responses included;

> Suddenly, I went into labour pain after midnight (at one pm) and delivered normally my last child at about two pm. There is a well-known TBA in our community and she came and assisted me (Participant 08).
>
> I delivered this baby at home because labour started in the night while it was heavily raining, and the baby was born *soon* (Participant 06).

These findings are similar to the findings reported in previous studies by Alabbi *et al*[15] and Yakubu *et al*.[16]

Theme IV: Inadequate (demand side) resources

The fourth theme that emerged from data analysis was inadequate resources. Within the theme, two categories, inadequate skilled health professionals and inadequate equipment, emerged. The subcategories were as shown in table 5.

Perceived incompetence among healthcare professionals

From the participants' perspective, the inadequacy of both skilled healthcare professionals and equipment are some of the reasons some women do not use healthcare facility-based delivery services. The findings revealed the perceived incompetence of healthcare professionals, lack of knowledge, skill and appropriate attitudes to care for pregnant women during pregnancy and childbirth as reasons women do not go for health facility-based delivery. The participants expressed confidence in TBAs. Sample responses include

> I was really upset with how they took care of me when I delivered my first child in the health centre. She (the nurse) who attended to me didn't even know how to manage the removal of the placenta, and the baby. It seemed that she didn't get proper training or she lacked some experience (Participant 01).
>
> They (Providers) lack experiences to assist women in labour and childbirth… (Participant 14).

Table 5 Theme IV: inadequate resources

Theme	Categories	Subcategories
Inadequate resources	Inadequately skilled healthcare professionals	Perceived incompetence among healthcare professionals Negative attitudes of healthcare professionals and poor service at health facilities
	Inadequate equipment	Inadequate beds/supplies

We have confidence in traditional birth attendants (Participant 04).

Negative attitudes of health professionals and poor service at health facilities

The findings of the study revealed that women did not choose facility-based delivery because of the negative attitudes of healthcare professionals and poor service at health facilities. Many participants mentioned physical and verbal abuse, lack of respect, and lack of sympathy at the hands of midwives and nurses. These findings were evident in the following sample responses;

> That some of the midwives, they even beat you, and scream on you, they don't have tolerance for you. They are verbally abusive, impolite, and lack sympathy (Participant 01).

> There is some negligent staff. We go there to get their help, but they talk and chat about their private issues. So, it is not advisable to go there (Participant 03)

> While I delivered my second baby at a health centre I was in pain and shouting for help to the midwife who was chatting with her friends. She didn't show any concern to me and one physician also came and yelled at me. I suggest that these people have to in the first place respect their clients and also know their professional duties and responsibilities (Participant 06).

Inadequate equipment (beds, blood pressure (BP) apparatus, bedsheets and thermometers)

The participants stated that the equipment required for providing quality care at healthcare facilities was inadequate. According to the findings, there was a shortage of beds, bedsheets, blood pressure monitoring equipment, as well as thermometers, resulting in women in early labour sent home. Some of the women indicated that the health professionals sent them back home because there were no beds, hence the home delivery even though they had planned to have facility-based delivery. Sample responses included; 'For me, I don't think delivering at home is safe. I wanted to give birth at health facility but they returned me home because the contractions weren't strong and there weren't sufficient admission beds in the health centre' (Participant 04).

> I went to deliver my firstborn child and they sent me home and I delivered that evening at home. So, if there were enough delivery beds I wouldn't deliver at home (Participant 15).

> Due to the shortage of beds, some women are referred from one facility to another. At times, the health facilities even don't have gloves, bed sheets, drugs, equipment like thermometer and BP apparatus (Participant 08).

> Let me tell you my own story. I was referred to the hospital due to heavy vaginal bleeding when delivered my second baby. There was no BP apparatus in the hospital except one in the emergency room. There is staff, hospitals, and patients but no BP apparatus even in that big hospital (Participant 02).

DISCUSSION

This study explored why some women who attend FANC fail to deliver in health facilities in slum residents of Addis Ababa, Ethiopia. A multilevel life-course framework of facility-based delivery in low-income and middle-income countries (LMICs) developed by Bohren *et al*[17] was used to frame the current study and link the findings of the study to the body of knowledge.

Perceived benefits of home delivery

According to the findings, the women who took part in this study chose home-based delivery because of the supportive presence of family and neighbours during childbirth as well as the comfort and convenience of the home environment. These findings were consistent with findings of previous studies among the urban poor in Mumbai, India and Nigeria where over half delivered outside hospital facilities and 81.8% of those deliveries were not attended to by a skilled health provider.[18 19] Adinew and Assefa[20] reported similar findings that Ethiopian women who took part in their study chose home-based delivery and TBAs to facility-based delivery and health professionals, respectively. The same authors explain that the choice was based on the familiarity, comfort and convenience of the home environment. In addition, the home environment does not limit the involvement of TBAs who are trusted by the community because of their status and the perceived quality of care (skill and warmth) they render during childbirth.[21 22] According to the study findings, women indicated that the presence of family and TBAs provide physical, social and emotional support during childbirth. According to Bohren *et al*,[17] Magoma *et al*[22] and Moyer *et al*[23] the availability of TBAs in the community might confirm a woman's decision to give birth at home.

The findings also revealed that it is easier to deliver at home where women are able to use their own belongings and receive support from their neighbours. Gebrehiwot *et al*,[21] Magoma *et al*[22] and Titaley *et al*[24] reported similar findings. Another important finding was that traditional practices influenced some of the women's decision to deliver at home and not at a health facility, evidenced in the present study. This finding is consistent with the results of previous studies.[21 22 25] A parturient woman may not be in control of the decision to seek facility-based delivery, and instead be relying on decisions made by elder women, husbands, other family members and neighbours.[17 21 26] Elder women hold the greatest influence and decision-making power regarding delivery location across Asia and SSA, including Ethiopia. Decision-making processes are dominated by men and the male household head is regularly accountable for making the final decision.[17 21 22]

Skilled attendants during labour, delivery and in the early postpartum period, can prevent up to 75% or more

of maternal deaths. Yet, in many developing countries, few mothers make at least one antenatal visit and even less receive delivery care from skilled professionals.[27] In Ethiopia, the majority of childbirth takes place at home by unskilled persons. Home delivery assisted mostly by relatives or unskilled TBAs is as high as 74% in Ethiopia.[6] Hence, the community-based skilled birth attendant (CSBA) programme should be introduced to increase accessibility to skilled delivery at home.

Affordability of home delivery was mentioned as one of the reasons some of the women who participated in the study preferred home-based care delivery. Yaya *et al*[28] conducted a survey in Ethiopia and Nigeria to examine country-level variations of the self-reported causes of not choosing to deliver at a health facility. The results of the same study identified cost as one of the barriers reported for not attending health facility delivery in both countries. Oyerinde *et al*[29] and Ghazi *et al*[26] reported similar findings in Sierra Leone and Iran, respectively. There is no need to arrange and pay for transport during a home birth.

The high cost of delivering at a health facility was mentioned as one of the reasons women decide to deliver their babies at home. This finding is consistent with the Bohren *et al*[17] multiple-level life-course framework of facility-based delivery in LMICs according to which the cost of childbirth may become a barrier to facility-based delivery. According to Bohren, economically constrained women might have concerns obtaining funds to pay for facility-based delivery care. The same authors indicate that some women regarded costs outside of the direct cost for childbirth as 'unseen' and difficult to prepare for.[17 22 30]

Knowledge deficit

The findings of the study revealed that women's lack of knowledge about facility-based delivery influenced their decision to give birth at home. The findings of the study are consistent with some of the previous studies that found that knowledge deficit regarding the benefits of health facility-based childbirth made women choose home delivery. Various researchers are of the opinion that ANC workers might not be effectively instructing women on the significance of facility-based delivery service possibly because of the heavy workload and constrained time due to deliberate complex matters with their clients.[17 22 31] The findings of the study also revealed a perception among some participants of the study that home delivery is for women who had a history of normal delivery. The study findings are consistent with the research done by Øxnevad[32] on perceptions and practices related to home-based delivery and a qualitative study by Bedford *et al*[33] on the location of childbirth in rural Ethiopia. According to the findings in the same studies, the birthing process was considered a normal event, and women considered home delivery first and facility-based delivery only if complications arose.

The results of the survey conducted by Yaya *et al*[28] showed that one in four women in Ethiopia reported that it was not necessary to attend health facility-based delivery considering that delivery is a natural phenomenon and not an ailment requiring health facility services. Kebede *et al*[9] conducted a quantitative study on factors associated with institutional delivery service in Ethiopia and found that women who faced problems during pregnancy were 2.8 times more likely to use healthcare facility-based delivery than those who did not face problems during pregnancy

This finding is consistent with Bohren *et al*'s[17] multiple-level life-course framework of facility-based delivery in LMICs according to which their previous birth experiences may affect the women's choice of the location of delivery of the baby. For a woman who delivered normally her first child at home without being attended by skilled provider, using a health facility-based delivery for subsequent deliveries may be regarded as unnecessary[17 27 34] point out that some women may consider that ANC attendance will reduce the likelihood of a difficult delivery and that ANC may be viewed as a preventative method, guaranteeing a normal pregnancy and home delivery. This may explain why in some circumstances ANC coverage is almost universal while health facility-based delivery rates stay low.[17 22]

From the study findings of the study, the perception of some of the women who took part in the study was that unnecessary procedures are carried out at health facilities. The findings are consistent with some of the studies that identified fear of cutting (caesarean section, episiotomy) during delivery as one of the factors that facilitated home-based delivery.[17 22 26] The multiple-level life-course framework of facility-based delivery in LMICs suggests that medicalisation of childbirth may be one of the reasons women prefer home to facility-based delivery. According to the model, women in LMICs may fear various undesirable interventions and procedures such as episiotomies and caesarean sections and may prefer to deliver at home. This fear is usually based on the perception that birthing is a 'normal' process which is a woman's 'natural rite of passage' with no basis for delivering at a health facility.[17 21 22]

Poor access to health facilities

According to the findings of the study, poor access to health facilities played an important role in influencing women's location of delivery (home-based delivery in this study). The findings indicate that the women who took part in the study failed to reach the healthcare facilities because of the difficulty of getting transport to the health facility at night, long distance to travel to the health facilities, poor conditions of the roads to health facilities and financial constraints. Similar findings were reported in a variety of previous studies.[21 28 35] A noteworthy finding is that women who attended FANC did not make plans for emergencies and complications, as is expected in line with WHO.[5] The WHO recommends that all pregnant

women develop a written plan for dealing with birth and any unexpected adverse events such as complications or emergencies that may occur during pregnancy, childbirth or the immediate postnatal period.[36] Birth preparedness is the process of planning for a normal birth while complications readiness refers to anticipating the actions needed in case of an emergency. Emergency planning is the process of identifying and agreeing with all the actions that need to take place quickly in the event of an emergency, that the details are understood by everyone involved, and the necessary arrangements are made. The plans should be discussed with the skilled attendant at every FANC assessment and 1 month before the expected date of birth.[28 36 37]

Inadequate (demand-side) resources

The findings of the study revealed that women did not choose facility-based delivery because of the perceived incompetence and negative attitudes of health professionals, as well as poor service at health facilities. Similar findings were reported in previous studies. According to Adinew and Assefa,[20] women who took part in the study chose home-based delivery and TBAs to facility-based delivery and health professionals, respectively, because of the skill and warmth demonstrated by the TBAs. A number of studies found that women were mistreated during childbirth in health facilities, hence the decision to give birth at home.[20 28 38 39] The same authors reported similar findings of disrespectful treatment, unskilled care, poor health provider-client interaction as reasons women preferred to give birth at home. Bohren *et al*[17] conducted a systemic review with the aim of synthesising qualitative evidence related to the facilitators and barriers to delivering at health facilities in LMICs. Thirty-four studies from 17 countries were included in the review, and in the majority of studies reports of disrespectful and abusive obstetric care were found. The multiple-level life-course framework of facility-based delivery in LMICs suggests that previous birth experiences may be one of the reasons women prefer home delivery to facility-based delivery. Bohren *et al*[17] state that a number of women decide their level of risk for difficult deliveries based on their previous experience of delivery practices and birth results. For example, a woman might choose to give birth at a health facility if she had a previous positive experience of facility-based delivery.[17 27] The results of the study are not inline with that of the WHO,[5] which supports the health system approach and strengthening regarding the availability of supplies and positive pregnancy and delivery experience.

The most important policy and programme implications of this study are that stress has to be given to urban poor residents in a similar fashion to rural populations in the country. Individuals in slums might have physical access as presented in the present study. Nonetheless, a number of factors, including lack of money and awareness about the benefits of facility childbirth might be considered as barriers among others. Increasing health facility births among the slum dwellers can be enhanced through interventions tailored at increasing awareness, starting ANC in early stages of pregnancy and attending at least four ANC visits.[2] Responsiveness to the health of urban poor women could lead to augmented access to a facility delivery consequently improving the health status of the entire population. For instance, guaranteeing appropriate and timely referrals to a higher-level health facility for emergency care, arranging for ambulance service, and care during transport may motivate women to deliver in a facility. Decreasing referring to women to health facilities of similar status in the district might also help prevent delay in seeking care. It might also be useful to focus on rigorous outreach in vulnerable areas by community-based health workers (health extension workers in the context of Ethiopia), who may perhaps play a greater role in assisting women to plan their deliveries and making sure that they get help in time. The CSBA programme should also be introduced to increase accessibility to skilled delivery at home in the country.

Various studies conducted in different developing countries and in a different part of Ethiopia revealed different determinants of place of birth. Some of these factors are similar to those found in the current study while others were different. Most of the studies used the quantitative approach, while others used qualitative and mixed-method research. The common factors in literature that were the same as those found in the study include the perceived benefits of home delivery, lack of access to the health facility, absence of previous pregnancy-related complications, women's lack of knowledge of the importance of FANC, misconceptions regarding FANC and home delivery. In Ethiopia, researchers have documented a variety of reasons women are not accessing facility-based delivery services. The findings of this qualitative study add to the existing body of knowledge on perspectives of attendees of FANC on home delivery and facility-based delivery in the slums of Addis Ababa, Ethiopia.

Strengths and limitations of the study

This study is one of the first studies in Ethiopia to explore access to facility-based delivery care in urban slum settings. It should also be clear that the themes that emerged were substantiated by the local and global works. Hence, the findings are valuable to health organisations that need to improve health facility-based delivery services. However, our study has some limitations. The study was conducted in public health facilities of Addis Ababa, Ethiopia. Hence, more emphasis should be given to the need for including other stakeholders in such analyses in the future. The findings of this study applied to a similar population in the study setting. Criticism related to qualitative research often refers to concerns of the small sample, data interpretation and bias. In this study, however, the researchers

were self-aware and cognisant of their immersion in the research process to allow the process to be as objective as possible. The researchers are of the view that the rich description of the sample, methods of data collection and the data analysis process reveal the translucent nature of the study. The researchers ensured that their beliefs, opinions and experiences about the phenomenon under study did not affect data collection and data analysis through the use of bracketing. The researchers' gender (male nurse—midwife) and background did not in any way affect the data collection process and data analysis in the present study.

CONCLUSION

The findings of this qualitative study revealed that perceived benefits of home delivery, knowledge deficit about health facility-based delivery, poor access to healthcare facilities, and inadequate (demand side) resources were related to low uptake of facility-based delivery services. The results of this qualitative study add to the existing body of knowledge on perspectives of attendees of FANC on home delivery and facility-based delivery. Use of ANC visits to advise women about birth preparedness and complication readiness, the use of facility deliveries to reduce risks of home delivery to the mother and the newborn should be stressed.

Acknowledgements The authors thank the University of South Africa for its technical support. The authors also thank the study participants who profoundly took part in the study to share their experiences, and spoke out for other poor women, and deepened the authors' understanding.

Contributors EGS conceived of the research topic, designed the methods and materials, was involved in the data collection, conducted data analysis, and drafted and finalised the manuscript. MEC and MG-L participated in designing the study, data analysis, interpretation and presentation of results, and were involved in the final revision of the manuscript. All the authors have read and approved the final manuscript.

Funding A small grant for data collection was obtained through grants offered by the Federal Ministry of Education through the Addis Ababa University postgraduate office (Grant no: 12283/018).

Competing interests None declared.

Patient consent for publication Not required.

Ethics approval Ethical clearance was obtained from the Research Ethics Committee of the Department of Health Studies, University of South Africa. Permission to conduct the study was granted by the Addis Ababa City Government Health Bureau.

Provenance and peer review Not commissioned; externally peer reviewed

Data availability statement All data relevant to the study are included in the article or uploaded as supplemental information.

ORCID iD

Endalew G Sendo http://orcid.org/0000-0001-7768-0196

REFERENCES

1 Alkema L, Chou D, Hogan D, *et al*. Global, regional, and national levels and trends in maternal mortality between 1990 and 2015, with scenario-based projections to 2030: a systematic analysis by the un maternal mortality estimation Inter-Agency group. *Lancet* 2016;387:462–74.
2 Atusiimire LB, Waiswa P, Atuyambe L, *et al*. Determinants of facility based-deliveries among urban slum dwellers of Kampala, Uganda. *PLoS One* 2019;14:e0214995.
3 Say. L A. *WHO systematic analysis*. Lancet, 2014.
4 WHO. *Maternal mortality*, 2018.
5 Organization WH. *Sustainable development goals (SDG). health and health related targets*, 2016.
6 CSA. *Central Statistical Agency Ethiopia, ICFinternational. Ethiopia demographic and health survey*. Addis Ababa, Ethiopia and Calverton, Maryland, USA, 2016.
7 Belay A, Sendo E. Factors determining choice of delivery place among women of child bearing age in Dega Damot district, North West of Ethiopia: a community based cross- sectional study. *BMC Pregnancy Childbirth* 2016;16:229.
8 Dimanin P. *Exploring livelihoods of the urban poor in Kampala, Uganda. An institutional, community, and household contextual analysis ACF*, 2012.
9 Kebede A, Hassen K, amp;Teklehaymanot AN. Factors associated with institutional delivery service utilization in Ethiopia. *International Journal of Women's Health* 2016;8:463–75.
10 Hancock ME, Amankwaa L, Revell MA, *et al*. Focus group data saturation: a new approach to data analysis. *The Qualitative Report* 2016;21:2124–30.
11 Saunders B, Sim J, Kingstone T, *et al*. Saturation in qualitative research: exploring its conceptualization and operationalization. *Qual Quant* 2018;52:1893–907.
12 CresWell W. *Research design: qualitative, quantitative, and mixed methods approaches*. 4th edn. Thousand Oaks, California: SAGE, 2014.
13 Afulani P, Kusi C, Kirumbi L, *et al*. Companionship during facility-based childbirth: results from a mixed-methods study with recently delivered women and providers in Kenya. *BMC Pregnancy Childbirth* 2018;18:150.
14 Suzuki S. Selective uterine fundal pressure maneuver during the second stage of the first twin delivery at near term. *J Matern Fetal Neonatal Med* 2015;28:519–21.
15 Alabi AA, O'Mahony D, Wright G, *et al*. Why are babies born before arrival at health facilities in King Sabata Dalindyebo local Municipality, eastern Cape, South Africa? A qualitative study. *Afr J Prim Health Care Fam Med* 2015;7:881.
16 Yakubu J, Benyas D, Emil SV, *et al*. It's for the Greater Good: Perspectives on Maltreatment during Labor and Delivery in Rural Ghana. *Open J Obstet Gynecol* 2014;04:383–90.
17 Bohren MA, Hunter EC, Munthe-Kaas HM, *et al*. Facilitators and barriers to facility-based delivery in low- and middle-income countries: a qualitative evidence synthesis. *Reprod Health* 2014;11:71.
18 Das S, Bapat U, More NS, *et al*. Prospective study of determinants and costs of home births in Mumbai slums. *BMC Pregnancy Childbirth* 2010;10:38.
19 Olusanya BO, Alakija OP, Inem VA. Non-Uptake of facility-based maternity services in an inner-city community in Lagos, Nigeria: an observational study. *J Biosoc Sci* 2010;42:341–58.
20 Adinew YM, Assefa NA. Experience of Facility Based Childbirth in Rural Ethiopia: An Exploratory Study of Women's Perspective. *Hindawi Journal of Pregnancy* 2017:1–6.
21 Gebrehiwot T, Goicolea I, Edin K, *et al*. Making pragmatic choices: women's experiences of delivery care in Northern Ethiopia. *BMC Pregnancy Childbirth* 2012;12:113.
22 Magoma M, Requejo J, Campbell OMR, *et al*. High ANC coverage and low skilled attendance in a rural Tanzanian district: a case for implementing a birth plan intervention. *BMC Pregnancy Childbirth* 2010;10:1–12.

23 Moyer CA, Adongo PB, Aborigo RA, *et al*. "It's up to the woman's people": how social factors influence facility-based delivery in Rural Northern Ghana. *Matern Child Health J* 2014;18:109–19.
24 Titaley CR, Hunter CL, Dibley MJ. Heywood P: Why do some women still prefer traditional birth attendants and home delivery ?: a qualitative study on delivery care services in West Java Province, Indonesia. *BMC Pregnancy and Childbirth* 2010;10:1–14.
25 Moyer CA, Mustafa A. Drivers and deterrents of facility delivery in sub-Saharan Africa: a systematic review. *Reprod Health* 2013;10:40.
26 Ghazi Tabatabaie M, Moudi Z, Vedadhir A. Home birth and barriers to referring women with obstetric complications to hospitals: a mixed-methods study in Zahedan, southeastern Iran. *Reprod Health* 2012;9:5.
27 Shiferaw S, Spigt M, Godefrooij M, *et al*. Why do women prefer home births in Ethiopia? *BMC Pregnancy Childbirth* 2013;13:1–10.
28 Yaya S, Bishwajit G, Uthman OA, *et al*. Why some women fail to give birth at health facilities: a comparative study between Ethiopia and Nigeria. *PLoS One* 2018;13:e0196896.
29 Oyerinde K, Yvonne Harding Y, Amara P, *et al*. Barriers-to-uptake-of-emergency-obstetric-and-newborn-care-services-in-sierra-leone-a-qualitative-study. *J Community Med Health Educ* 2012;2:2161–711.
30 Gebrehiwot T, San Sebastian M, Edin K, *et al*. Health workers' perceptions of facilitators of and barriers to institutional delivery in Tigray, Northern Ethiopia. *BMC Pregnancy Childbirth* 2014;14.
31 Izugbara CO, Kabiru CW, Zulu EM. Urban poor Kenyan women and hospital-based delivery. *Public Health Rep* 2009;124:585–9.
32 Øxnevad M. *Perceptions and practices related to home based and facility based birth. A qualitative study from Agemssa, Ethiopia*. Norway: University of Bergen, 2011.
33 Bedford J, Gandhi M, Admassu M, *et al*. A Normal Delivery Takes Place at Home': A Qualitative Study of the Location of Childbirth in Rural Ethiopia. *Matern Child Health J* 2012.
34 Story WT, Burgard SA, Lori JR, *et al*. Husbands' involvement in delivery care utilization in rural Bangladesh: a qualitative study. *BMC Pregnancy Childbirth* 2012;12:28.
35 Spangler SA, Bloom SS. Use of biomedical obstetric care in rural Tanzania: the role of social and material inequalities. *Soc Sci Med* 2010;71:760–8.
36 Annette C, Wung B, Ivo K, *et al*. Fon N: Facility-Based delivery service utilisation among women of childbearing age in Nguti health district, Cameroon: prevalence and predictors. *Gynecol Obstet* 2016;6:416.
37 Tarekegn SM, Lieberman LS, Giedraitis V. Determinants of maternal health service utilization in Ethiopia: analysis of the 2011 Ethiopian demographic and health survey. *BMC Pregnancy Childbirth* 2014;14:1–13.
38 Bohren MA, Vogel JP, Hunter EC, *et al*. The mistreatment of women during childbirth in health facilities globally: a mixed-methods systematic review. *PLoS Med* 2015;12:e1001847.
39 Ishola F, Owolabi O, Filippi V. Disrespect and abuse of women during childbirth in Nigeria: a systematic review. *PLoS One* 2017;12:e0174084–17.