Strategies to Improve Facility-based Attendance of Skilled Birth Among Slum Residents, Addis Ababa, Ethiopia: a Qualitative Study.

Endalew Gemechu Sendo (endalewaau2012@gmail.com)  
Addis Ababa University  
https://orcid.org/0000-0001-7768-0196

Motshedisi E. Chauke  
University of South Africa

M Ganga-Limando  
University of South Africa

Research

Keywords: Health facility-based delivery, focused antenatal care, slum residents, Ethiopia

DOI: https://doi.org/10.21203/rs.3.rs-276995/v1

License: ☺️ This work is licensed under a Creative Commons Attribution 4.0 International License.  
Read Full License
Abstract

**Background:** Global strategies to target high maternal mortality ratios are focused on providing skilled attendance at delivery along with access to emergency obstetric care. Research that examines strategies to increase facility-based skilled birth attendance among slum residents in Addis Ababa, Ethiopia, is limited.

**Objective:** The objective of the study was to explore women’s views on measures needed to enhance the utilization of health facility-based delivery services.

**Methods:** A qualitative exploratory and descriptive research design was used. The design was contextual. Participants in the study were women in the reproductive age group (18-49 years of age) living in the slum areas of Addis Ababa, Ethiopia. A purposive sampling strategy was used to select study participants. Four audio-recorded Focus Group Discussions [FGDs] were conducted with 32 participants from the three public health centers chosen and one district hospital. The number of participants in FGDs was between 6 to 10 women. Data were analyzed simultaneously with data collection. Thematic analysis was done for the study. The qualitative data were analyzed in three phases: exploring and creating initial codes; searching for themes by collecting coded data addressing particular themes, and identifying and naming themes found. To explain the study results, verbatim excerpts from participants were given. The researcher used Techs’ eight steps of qualitative data analysis method for analysing the data. The analysis involved the use of both a priori codes (from the question guide) and emergent inductive codes. A multi-level life-course framework of facility-based delivery in low- and middle-income countries (LMICs) 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:** The Focus Group Discussions included a total of 32 participants. The mean age of the overall sample was 32.6 years (±SD = 5.2). Participants’ educational characteristics indicate that the majority (24 out of 32) was found to have no formal education, and two-thirds of participants were found to have one to five children. Three-fourths of them attended the ANC twice and they all gave birth to their last child at home. Two themes emerged from the analysis of focus group interviews data, namely provision of quality, respectful and dignified midwifery care, and increased awareness of FANC. These themes were described as a rich and comprehensive account of the views and suggestions made by FANC participants on measures required to improve the use of delivery services based on health facilities. The findings of the study raise concerns about the effectiveness of FANC in encouraging facility-based deliveries since FANC participants had not used health facilities for their last childbirth. According to the findings of the focus groups, women who took part in this study identified measures required to increase the use of health facility-based delivery services among FANC participants in Addis Ababa’s slum residents. It is to be expected that diligent counseling during antenatal care about birth plans would facilitate prompt arrival at facilities consistent with the desires of women.

Plain English Summary
Global strategies for targeting high maternal mortality levels are based on ensuring eligible delivery attendance along with access to obstetric emergency care. Research examining strategies to increase facility-based skilled birth attendance among slum residents in Addis Ababa, Ethiopia, is minimal. The aim of the study was to examine women's perspectives on measures needed to improve the use of health facility-based delivery services.

A qualitative research design, both exploratory and descriptive, was used. Women in the reproductive age group (18-49 years of age) living in the slum areas of Addis Ababa, Ethiopia, participated in the study. The study used a purposeful sampling method. Four audio-recorded Focus Group Discussions [FGDs] were conducted with 32 participants. In FGDs, the number of participants was between 6 and 10 women. Data was analyzed in conjunction with data collection. For the research, thematic analysis was performed.

The mean age of the participants was 32.6 years (±SD = 5.2) in the total sample. The educational characteristics of the participants’ show that the majority (24 out of 32) were found to have no formal education and that there were between one and five children in two thirds of the participants. The ANC was twice attended by three-fourths of them, and they all gave birth to their last child at home. Two issues arose from the review of data from focus group interviews, namely quality care provision, respectful and dignified midwifery care, and improved FANC awareness. These themes were identified as a detailed and comprehensive account of the views and suggestions of FANC participants on steps needed to enhance the use of health facility-based delivery services. According to the results of the focus groups, among FANC participants in the slum residents of Addis Ababa, women who took part in this study identified steps needed to increase the use of health facility-based delivery services. It is to be expected that diligent counseling during antenatal care about birth plans would facilitate prompt arrival at facilities consistent with the desires of women.

Background

Pregnancy and childbirth-related maternal mortality remain a global public health issue, although it decreased by 44% from 385 deaths per 100,000 in 1990 to 216 per 100,000 live births in 2015[1]. Sub-Saharan Africa (SSA) accounts for 66% of the world's annual maternal deaths, regardless of the substantial decline in maternal mortality worldwide. In developed regions, the 2015 regional the Maternal Mortality Ratio (MMR) ranged from 12 deaths per 100,000 live births to 546 deaths per 100,000 in sub-Saharan Africa [1]. The MMR stays high in Ethiopia with 412 for every 100,000 live births in 2016[2]. The Federal Democratic Republic of Ethiopia (FDRE) [3] expects to decrease the maternal mortality to 199 for every 100,000 live births in 2020 and 70 or less by 2030 per the objective set by the World Health Organization (WHO). The objective set by WHO is feasible because the greater part of maternal deaths are preventable if admittance to Antenatal Care (ANC) in pregnancy, skilled care during delivery, and care and support in the weeks after childbirth were expanded [2,4].
The proportion of Ethiopian women who received ANC from a professional provider was 62 percent, while institutional delivery was 28 percent in 2016, according to the Central Statistics Agency, CSA[2]. The low use of health facility-based delivery services seems to be one of the reasons for the slow rate at which MMR dropped during the five years 2011-2016. There is a need to accelerate the drop in unskilled home deliveries and surge in facility-based deliveries to achieve the sustainable development goal 3.1 [4]. Key measures to enhance maternal health are the availability of a qualified birth attendant (SBA) during childbirth, readily available emergency services, and reliable communication and referral systems [5].

There may be an unduly higher risk of maternal mortality among women living in the slums of Addis Ababa, the capital city of Ethiopia [6]. The breach between more than 62 percent of FANC attendance and small health care facilities (1 in four women) deliveries among women in Ethiopia prompted the researcher to embark on this study with a particular emphasis on strategies to increase facilities-based skilled birth attendance. Therefore, this study aimed to explore the views of FANC participants on the measures needed to boost the use of delivery services based on health facilities among slum residents in Addis Ababa, Ethiopia.

**Methods**

**Research Design**

To address the purpose of this study, a qualitative, exploratory, and descriptive research design was used. The design was contextual. In this study, the researcher could only understand the participants’ perceptions of facility-based and home delivery as well as their actions (non-utilization of health facility-based delivery) from the participants’ perspective, stated in their own words and in the context in which they lived. The primary purpose of the study was not to generalize the outcome to other settings, as it was specific to its context.

**Study setting**

The current research was done at public health facilities in Addis Ababa, Ethiopia, between February and April 2018. Three health centers and one district hospital were purposively selected for the 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. The health facilities of Addis Ababa include 12 public hospitals (specialized, referral, and general), 86 public health centers, and about 720 private and non-governmental (NGO) health facilities at different levels [3].

A slum household is described in this study as a community of people living under the same roof who lack one or more of the following conditions: access to improved water, living on small business/daily labor, access to improved sanitation, adequate living space, and durability of housing. The study included Ketchne and Kolfe Keraniyo slum dwellers, who are primarily low-income residential residents [6].

**Participants and sampling method**
The participants in the study included women in the reproductive age group (18-49 years of age) living in the slum areas of Addis Ababa, the capital of Ethiopia. The purposive sampling strategy was used to select women who, because of their FANC experience and home delivery, were able to provide rich information that adequately answered the research questions. The women who met the requirements for eligibility have been contacted.

The researcher ensured that the necessary information about the interviews was provided to all women who agreed to take part in the interviews and that they were followed into the communities where the health facilities are located.

Participants had to be women who attended FANC in selected health facilities and gave birth to babies at home in the previous year of data collection, interact well in Amharic (local language), reside in Addis Ababa for at least 6 months, and in the reproductive age group (18 to 49 years) to be included in the sample. Exclusion criteria comprised women who attended FANC but had not experienced home delivery.

Data Collection

Focus group discussions (FGDs) were conducted by the leading author with the qualified female research assistant to address the purpose of the study, namely to gain insight into the views and perceptions of FANC participants on measures needed to increase the use of health facility-based delivery services. An interview guide was used to plan the open-ended topics in English and Amharic. The interview guide used in this study was attached as 'Annex 1'.

The women who met the eligibility criteria were contacted to discuss the purpose of the research, the study activities, and the request for participation in the study through the midwives/nurses in charge of the maternal and child health units of the selected hospitals and health centers.

The investigator performed FGDs with women who attended FANC and delivered live babies at home in the previous year before the study’s data collection. The objective was to ask questions that elicited answers and produced maximum discussions and opinions within a given period among the study participants. Of the three selected health centers and one district hospital, four FGDs were conducted involving 32 participants. In FGDs, the number of participants was between 6 and 10 women. There were ten participants in the first FGD, eight participants in the 2nd and 3rd FGDs, and six participants in the 4th FGD.

A central topic was included in the interview guides, as well as additional questions aimed at exploring and delving deeper into various aspects of the research phenomenon. The probing questions were focused on the responses of the participants to the issue. The researcher used questions such as "please tell me more..., what do you mean by..." for questioning.

The participants were seated in a circle so that each participant had a complete and fair view of others to allow efficient contact in the FGDs. The key question for focus group discussion was: 'what do you think should be done to increase the use of health facility-based delivery service among FANC participants?"
Additional questions included: Why do women prefer home delivery to facility-based delivery service? What are your views regarding the advantages of facility-based delivery? What were the benefits of attending antenatal care for you? What information did you receive from the health care providers about health facility-based delivery? Focus group discussions were continued until data saturation was reached, and the investigator used data saturation by group, which was the point in coding where no new codes existed in the data.

During the interviews, the interview process was clarified by a favorable, non-threatening, and comfortable atmosphere when the researcher introduced himself to the participants. In the private rooms of selected health facilities, the interviews took place. The FGDs were audio-recorded with the consent of the participants and notes were written during the interview to capture the original accounts of the responses of the participants and to validate their explanations by going back to the original answers. In a quiet and private space, free of distractions, and where they felt safe, the investigator conducted the interviews in Amharic. The FGDs sessions lasted approximately 60 minutes on average.

Data Analysis

Descriptive statistics have been used to summarize participants' socio-demographic characteristics. All FGDs were transcribed from the audio-recordings and notes made during the interviews and translated into English. Data were analyzed in conjunction with data collection. All transcribed information was read and classified into meaningful units, which were subsequently manually coded by the principal investigator. Both a priori codes (from the query guide) and emerging inductive codes were used in the study. Thematic analysis was done for the study. In three phases, qualitative data were analyzed: exploring and creating initial codes; searching for themes by collecting coded data addressing particular themes, and identifying and naming themes found. To explain the study results, verbatim excerpts from participants were given. The researcher used Techs' eight steps of qualitative data analysis method for analysing the data.

Trustworthiness of the study

To ensure the trustworthiness of this report, a variety of processes were used. Concurrent analysis ensured that in subsequent interviews, emerging concepts were evaluated to obtain a complete understanding of the themes. For all the study participants, the same interview guide was used. In order to ensure the authenticity of the transcripts, interviews held in Amharic were discussed with experts in this language. The themes produced were discussed by the research team and ensured that no part of the data was left out. Detailed field notes were held that allowed the results and study processes to be checked. To support the results, direct verbatim quotes were used and this gave voice to the women in this research.

Ethics approval and consent to participate
Ethical clearance was obtained from the Research Ethics Committee of the Department of Health Studies, University of South Africa. The Addis Ababa City Government Health Bureau granted permission for the study to be carried out.

To perform the interviews, the authors received informed written consent from all participants. It underlined the voluntary nature of participation in this report. The Confidentiality of the identification and other personal details of all interviewees were ensured. The collected data were preserved electronically as audio recordings to be used as a backup format, and the transcripts and notes were stored as MS word files. To guarantee confidentiality, the MS word files were password secured.

**Research Findings**

The results of FGDs were presented below, the aim of which was to explain the views of women on measures required to increase the use of delivery services based on health facilities.

**Characteristics of participants in the study**

The Focus Group Discussions included a total of 32 participants. The mean age of the overall sample was 32.6 years (±SD = 5.2). Participants’ educational characteristics indicate that the majority (24 out of 32) were found to have no formal education, and two-thirds of participants were found to have one to five children. Three-fourths of them attended the ANC twice and they all gave birth to their last child at home.

**Themes**

Two themes emerged from the study of interview data from FGDs. These themes were described as a rich and comprehensive account of the measures necessary to increase the use of facility-based delivery from the perspectives of the participants by FANC participants.

**Theme I: Provision of Quality, Respectful and Dignified Midwifery Care**

The first theme that emerged from data analysis was the *provision of quality, respectful and dignified midwifery care*. Within the theme, 4 (four) sub-themes, namely perceived incompetence of staff, negative attitudes of health professionals, effective referral systems, and provision of adequate resources emerged. Sources of data from FGDs were as shown in table 1.

**Table 1** Theme I: Provision of quality, respectful and dignified midwifery care
## Theme

| Sub-themes | Data Source: FGDs |
|------------|------------------|
| Provision of quality, respectful and dignified midwifery care | FGDs 1, 2, 3, 4 |
| I. Perceived incompetence of staff | FGDs 1, 2, 4 |
| II. Negative attitudes of health professionals | FGDs 1, 2, 3, 4 |
| III. Effective referral systems | FGDs 1, 2, 3, 4 |
| IV. Provision of adequate resources | FGDs 1, 2, 3 |

### Perceived incompetence of staff

The results of FGDs uncovered health care providers' perceived incompetence, lack of experience, expertise, and acceptable attitudes to care for pregnant women during pregnancy and childbirth as reasons why women do not go for delivery based on health facilities. To this effect, the participants suggested that competent staff (capable of providing quality care, characterized by respect and preservation of patients’ dignity) should be made available at the health facilities. The focus group participants suggested skills development programs which may include training, retraining, in-service education, and refresher courses to enable nurses/midwives to manage not only childbirth but also to provide respectful care to patients.

Sample responses included:

“Further education and in-service training opportunities will help the staff to update their skills and knowledge to manage childbirth and provide respectful care to the women (FGD2, woman 1, 29 years)”.

“Exploring how best midwives/nurses can be educated, developed and supported to provide high-quality midwifery care in the facilities is needed and ensuring that in-service training for staff on obstetric care is also helpful (FGD2, woman 3, 27 years)”.

“Some of the providers indeed lack midwifery experience and skills. It seems that they weren’t trained well in school and not exposed to the clinical setting….so, the authorities should do something to improve their skills” (FGD3, woman 6, 28 years)”.

“Besides, deploying an adequate number of supportive staff in non-clinical roles suggested freeing nurses/midwives to provide more midwifery care to minimize their work burden” (FGD3, woman 1, 26 years)”.

### Negative attitudes of health professionals
The study results showed that women did not prefer facility-based delivery due to the negative views of health care practitioners. According to the participants, they [providers] subject patients to mistreatment, such as verbal abuse, neglect, or denial of services. Sample responses included:

“They (providers) have to respect their clients because human beings naturally need respect and dignity in childbirth” (FGD 1, Woman 7, 30 years).

“Indeed, staff should behave positively towards their clients and that they have to be trained ethically (FGD4, woman 3, 26 years)".

"There are several negligent workers. To get their support, we go there, but they talk and talk about their private problems. So, going there is not advisable or they must behave morally (FGD 1, Woman 2, 34 years)

"The providers will beat you, and they will shout on you without any mistakes. So, they should first stop such abusive behaviors if they want us to go there for childbirth. I mean they need to have sound professional ethics and behavioral change" (FGD2, woman 4, 33 years)

**Effective referral systems**

Patient referral is a medical judgment dependent on many variables, including the prescribing team's expertise, testing resources, the health institution's availability of specialist facilities, the level of service at the referral institution, the cost of treatment, distance, transportation, contact, patient travel, and consumer travel viability. Delays in access to referral facilities have been seen in this study as a significant contributing factor to feto-maternal deaths Sample responses include:

"Due to shortages of supplies or diagnostic facilities, some women are referred from one facility to another". The comparison should be based on the woman's condition (FGD2, woman 8, 40 years).

"You are referred here and there when you go there (HF), and finally end up with a dead baby. The authorities should work hard to improve this problem" (FGD2, woman 3, 24 years).

"It is essential to provide ambulance services with an effective referral system to district hospitals to boost facility-based delivery services because poor women cannot pay for tertiary-level hospitals" (FGD3, woman 5, 29 years).

**Provision of adequate resources**

The study results showed that the Ethiopian government encourages all women to deliver at the health facility. Therefore, it follows that medications and medical services such as ultrasound tests should be made available because some poor women cannot afford to pay for them when they are referred to other places for examination. Sample responses include:
“At present, the government encourages all women to deliver at the health facility. So, drugs, and diagnostic facilities such as ultrasound examination should be made accessible because some poor women can’t afford to pay for it when they are referred for examination to other places (FGD1, woman 1, 26 years).

“There are no or limited basic medical supplies, delivery beds and diagnostic facilities such as ultrasound exams, drugs, etc. if you visit public health facilities” (FGD1, woman 5, 32 years).

“There are no bedsheets, soaps, and other things and it should be worked on by the government” (FGD3, woman 7, 36 years).

“Due to shortages of supplies or diagnostic facilities, some women are referred from one facility to another” (FGD 3, woman 2, 38 years).

**Theme II: Increase Awareness**

The second theme to emerge from data analysis was *increase awareness*. Within the theme, two subthemes information sharing (between providers and women receiving care) and *family support emerged*. Sources of data from FGDs were as shown in table 2.

| Theme                  | Sub-themes                                                                 | Data Source: FGDs |
|------------------------|----------------------------------------------------------------------------|-------------------|
| Increase awareness     | I. Information sharing (between providers and women receiving care)        | FGDs 1,2,3, 4     |
|                        | II. Family support                                                        | FGDs 1, 2,3,4     |

*Information sharing (between providers and women receiving care)*

The results of the FGDs showed a lack of understanding among some of the women who participated in the study of the significance of facility-based births, hence the proposal to raise awareness through effective information sharing (between providers and women receiving care) and health education. According to the WHO criteria for improving maternal and new-born treatment in health facilities [1], information about their care and relationships with staff should be accessed by both women and their families. Simple and precise exchange of information should occur. Sample responses include:

'I did not receive any information about a facility's delivery. She (the midwife) just tested me and told me to come to the next appointment; I believe I have the right to that information (FGD 3, woman 4, 31 years).
"They (providers) have often not communicated about the progress of labor and childbirth with the client or her family" (FGD 1, woman 9, 35 years).

I was really upset then and cried a lot, but to whom are you disclosing such a case? I think there should be a strong mechanism to report any annoying events and physical violence; otherwise, they [staff] need close monitoring (FGD 2, woman 5, 37 years).

According to the results of the study, some women claimed that unnecessary procedures, such as caesarean section and episiotomy, were conducted at health facilities. This finding was focused on the absence of women and their families with knowledge, hence the misconceptions. Sample responses include:

"Particularly in private facilities, Caesarean section delivery is quite common.... I think they just do it without sufficient medical reasons" (FGD 3, woman 2, 39 years).

“Several women are cut and stitched for the reasons I don't know. (FGD 2, woman 4, 40 years).

"Fear of the delivery by the Caesarean section discourages us [women] from coming for delivery based on health facilities" (FGD 1, woman 2, 42 years).

**Family support during childbirth**

Most FGDs women were worried about health facility policies that prohibit family members (including their husbands) from providing them with the requisite physical and emotional support during labor and delivery. Many of them proposed that their family members [and husbands] be permitted to support them in labor wards. This finding was evident in the sample responses:

My sister lives in Europe and she tells me that her husband plays a big role in helping her through labor and childbirth. But our husbands are not permitted to see their wives in the labor unit......this needs to be changed because they [husbands] should be able to be with their wives (FGD 4, woman 2, 33 years).

[...] If my husband were allowed to accompany me to the delivery room, I would be happier because he had to share my pain and misery as well. I, therefore, hope that the facility will one day recognize this problem and permit my husband to join the labor wards (FGD 2, woman 6, 34 years).

The WHO guidelines for enhancing maternal and newborn care in health facilities [1] support this finding, noting that women can choose to have a partner of their choice present for labor and childbirth and, that they must obtain support to improve capacity during delivery.

**Measures for enhancing facility-based delivery, as suggested by women**

Below are the measures proposed by women to increase the use of facility-based delivery:

1. **Provision of quality, respectful and dignified midwifery care**
• **Increase the availability of qualified staff:** In this study, women, therefore, proposed steps such as examining how best midwives/nurses can be trained, developed, and assisted to provide high-quality midwifery treatment in the facilities and ensuring that frequent updates are carried out for in-service training for obstetric care staff. Furthermore, the deployment of ample numbers of supportive staff in non-clinical positions indicated free nurses/midwives to provide more midwifery care to reduce their workload.

• **Development of expertise:** Through in-service training, refresher courses, and continued education, the skills of service providers employed in public health facilities must be strengthened. The abilities described included communication, positive attitude, interpersonal skills, and empathy in particular.

• **Effective referral system:** Render prompt referrals for emergency treatment, ensure arrangement for ambulance service and care during travel to a higher-level health facility. Reduce women's referral to health facilities in the district of equal status (prevent delay in seeking care).

• **Adequate resources:** The results indicate that participants in the study considered that some of the health facility buildings were mainly small with minimal delivery beds (couches) and waiting rooms for women in labor. The women, therefore, propose that there should be more delivery beds (couches), medications, and medical services such as ultrasound testing.

2. Increase awareness

• **Information sharing (between providers and women receiving care)**

Both women and their families should receive and communicate with staff with details about their treatment plan. Simple and precise exchange of information should occur. Improve the understanding of health professionals about pregnant women's access to information and adequate health care.

• **Family support:** Present opportunities for women to choose to have a companion of their choice present for labor and delivery and to receive support to enhance capacity during delivery, particularly the presence during delivery of husbands or partners.

**Personal reflections as regards focus group discussions**

Through using bracketing, the researcher ensured that his beliefs, viewpoints, and experiences about the phenomena under investigation did not influence data collection and data analysis. The gender of the researcher (male nurse-midwife) and context did not influence the data collection process and data analysis for the current study in any way.

During the second focus group interviews, the researcher had to deal with a threat from dominant participants by asking questions directly to the silent members. After the interview had finished, one study participant arrived late. When the participant calmed down and resumed the interview, the researcher postponed the session. Otherwise, during the entire interview process, the study participants were cooperative and conformed to the ground rules.
Discussion

This study explored strategies to increase facility-based skilled birth attendance among slum residents in Addis Ababa. A multi-level life-course framework developed by Bohren, et al [7] for facility-based delivery in low- and middle-income countries (LMICs) was used to frame the current study and relate the study’s results to the body of knowledge.

**Perceived incompetence and negative attitudes of staff**

The results of the FGD interviews showed that women did not prefer facility-based delivery because of health professionals’ perceived incompetence and negative attitudes, as well as inadequate service at health facilities. This finding is consistent with the results of the previous study. For example, women who reported negative experiences in facilities and lacked faith in the abilities of health staff, who they perceived to be undertrained, incompetent, and inexperienced, were less likely to want delivery of facilities [7]. The results of the study showed the perceived incompetence of health care providers, lack of expertise, capacity, and acceptable attitudes to care for pregnant women during pregnancy and childbirth as reasons why women do not go for delivery based on health facilities. Providers were described in this study as verbally and physically aggressive, rude, bossy, abusive, easily angered, and lack of compassion. Similar findings were reported in previous studies [7- 12].

According to the participants, patients will not be subjected to bullying by professional employees, such as verbal assault, incompetence, or denial of services. To this end, the participants suggested that competent personnel (capable of providing reliable, distinguished care and safeguarding the dignity of patients) should be put at the disposal of health facilities.

**Provision of adequate resources and Effective referral systems**

Inadequate access to travel resources played a critical role in whether or not a woman in the labor was able to attend a health facility on time. Unavailability of transportation access, good roads, adequate funds, and communication networks often make it a long process to arrange referrals for obstetric problems [7, 16]. The findings show that study participants considered that some of the buildings of the health facility were mainly small with limited delivery beds (couches) and waiting rooms for women in labor. The participants ended up giving birth at home because of insufficient access to health facilities, according to the study results. The difficulty of getting transport to the health facility, in particular emergency services, especially at night, resulted in women delivering babies at home. Therefore, women recommend that more delivery beds (couches), medicines, and medical facilities, such as ultrasound exams, should be made available. The results of the research are consistent with prior studies [6, 7].

Referring a patient is a medical decision determined by many factors, including the skills of the referring staff, the tools for diagnosis, the availability of a health institution with specialist facilities, the quality of care at the referral institution, the cost of care, distance, transportation, communication, someone to travel with the patient, and feasibility of travel by the client [13- 14]. In the previous report, delays in
obtaining access to referral services were seen as a major factor leading to feto-maternal deaths [6, 15]. The same author suggests oversight of care providers and increasing transparency. Strand et al and Konganyuy et al in Singh et al [14], suggest evaluations of referrals for obstetric emergencies to strengthen obstetric care referral processes to avoid delays.

**Information sharing (between providers and women receiving care)**

The decision of women to give birth at home was influenced by a lack of knowledge about facility-based childbirth, according to the study results. Some of the participants indicated that they did not know about the facility-based delivery program at public health facilities. The findings of the study are consistent with some of the previous research that found that because of an awareness deficit about the advantages of health facility-based childbirth, women prefer home delivery. Several researchers believe that ANC workers do not properly advise women on the importance of facility-based delivery services, possibly due to heavy workload and time constraints due to intentionally complicated problems with their clients [7, 17-19]. Among some research participants, the results of the study also showed a belief that home delivery is for women with a history of normal delivery. The results of the study are consistent with Øxnevad’s [20], research on attitudes and practices related to home-based delivery, and Bedford, Gandhi, Admassu, and Girth’s [21], a qualitative study on the position of childbirth in rural Ethiopia. The birthing process was considered a natural occurrence, according to the results of the same research, and women considered home delivery first and considered facility-based delivery only if complications arose. The results of the survey conducted by Yaya et al [22] showed that one in four women in Ethiopia reported that delivery dependent on health facilities was not important considering that delivery is a normal occurrence and not an illness needing services from health facilities. Kebede et al [23] performed a comprehensive analysis on factors associated with Ethiopia’s institutional delivery service and found that women who faced difficulties during pregnancy were 2.8 times more likely than those who did not face problems during pregnancy to use health care facility-based delivery. The single most effective technique for avoiding maternal and neonatal deaths is delivery at a health facility, according to Kebede because it ensures careful treatment of childbirth complications and or prompt transfer to deliver women to higher levels where complications of childbirth can be better handled.

Some of the women had a belief, according to the study results, that unnecessary procedure are conducted during delivery at health facilities. This result is consistent with the multi-level life-course framework of facility-based delivery in low- and middle-income countries (LMICs) of Bohren et al [7], which indicates that one of the reasons women prefer home to facility-based delivery could be the medicalization of childbirth. According to the model, women may fear various undesirable treatments and procedures such as episiotomies and cesarean sections in low- and middle-income countries and may prefer to deliver at home. This fear is largely focused on the belief that birth is a "normal" process that is the "natural passage rite" of a woman without any justification for delivery at a health facility [18, 24].
A notable finding is that women who attended FANC did not make plans for preparedness for emergencies and complications, as planned following WHO [4]. The WHO advises that all pregnant women prepare a written plan to deal with birth and any unforeseen adverse events that may occur during pregnancy, birth, or the immediate postnatal period, such as complications or emergencies [25].

Birth preparedness is the process of preparing for normal birth, whereas preparation for complications refers to anticipating the required steps in the event of an emergency. Emergency preparation is the mechanism by which all the measures that need to take place immediately in the case of an emergency are identified and decided, and the specifics are known by all concerned and the appropriate preparations are made. At each FANC evaluation and one month before the planned date of birth, arrangements should be discussed with the eligible attendant [25-26].

**Family support during childbirth**

Some of the participants indicated that the presence of partners, family members, friends, and neighbors offer the required support and assistance during delivery at home. These results were consistent with the results of previous studies of urban poor in Mumbai-India and Nigeria, where more than half of them were delivered outside hospital facilities and 81.8% of those deliveries were not attended by a trained health provider [27-28]. Adinew and Assefa[29] reported similar findings that Ethiopian women involved in their study selected home-based and conventional birth attendants for facilities-based delivery and health professionals, respectively. The same authors describe that the preference was based on the familiarity, comfort, and convenience of the home setting.

The presence of a person of the woman's choice to provide social support during childbirth has shown to have a positive effect to use a facility [26, 30]. It is necessary to inform mothers and families about the usual signs of labor in planning for normal birth, with a particular focus on what to do when labor begins, and to ensure that everyone calls the facility or another eligible attendant for birth as soon as possible. In particular, these instructions must be written in the local language. All the necessary details about safe and clean delivery must be given to the woman, but her choice of the chosen place and who she wants to be during work should be respected. The strategy should include identifying sources of support during the birth and the immediate postnatal period for her and her family.

**Conclusions**

In summary, the facility-based delivery service is a multifaceted subject, which is characterized by different factors, including the characteristics of the pregnant woman herself, her close family circle, the community in which she lives, the local health facility, and her country's background.

The results of the study raise questions about FANC's efficacy in supporting facility-based deliveries since FANC participants had not used health facilities for their childbirth. According to the findings of the focus groups, women who took part in this study identified their opinions on measures required to increase the use of health facility-based delivery services among FANC participants in Addis Ababa's slum residents. It
is to be expected that diligent counseling during antenatal care about birth plans would facilitate prompt arrival at facilities consistent with the desires of women. It is imperative to use ANC visits to alert women about birth preparedness and readiness for complications, the use of facility deliveries, and the risks of home delivery for mothers and infants. It is vital to present opportunities for women to choose to have a companion of their choice present for labor and delivery and to receive support during delivery to improve capacity, especially the presence of husbands or partners during delivery. Future research can assess whether women are satisfied with the maternal care provisions at public health facilities and whether they will return for future delivery or advise others to deliver there.

**Contribution of the study**

Research examining strategies to increase facility-based skilled birth attendance among slum residents in Addis Ababa, Ethiopia, is minimal. The results of this study added to the existing body of knowledge among participants of antenatal care at selected public health facilities in the study setting, regarding the perspective of facility-based delivery services. In guiding health care practitioners, understanding women's perspectives on facility-based and home delivery are important and helpful in designing women-centered guidelines that address adverse perceptions of health facility-based delivery among slum residents, so that the number of home deliveries could decrease and the number of institutional deliveries could increase among FANC participants.

**Implications for Practice**

The researcher used the results of the study and literature as the basis for developing guidelines for improving the use of health facility-based delivery services among slum residents, in Addis Ababa, Ethiopia. The proposed guidelines have the potential to increase the proportion of underprivileged women who give birth in a health facility and to permit regular visits for future births to public health facilities. Through detailed consultations, the Federal Ministry of Health, in cooperation with the Addis Ababa Health Bureau, will adopt or adapt the guidelines and facilitate their implementation, along with the country's other prevailing policies and working procedure documents. Therefore, most of the direct obstetric complications that are the leading causes of maternal deaths would be better managed to ensure a substantial reduction in maternal mortality and morbidity in Ethiopia.

**Strengths And Limitation Of The Study**

This research is one of the first studies in Ethiopia to examine access in urban slum settings to facility-based delivery care. It should also be clear that local and global works substantiate the emerging themes. The results are also important to health agencies that need to optimize delivery services based on health facilities. Our study, however, has some limitations. The research was carried out at selected public health centers in Addis Ababa, Ethiopia. In the report, the experiences of women involved in FANC in private facilities who delivered at home were not included. The results of this research were related to similar populations in the context of the study. Criticism related to qualitative research often refers to concerns of the small sample, data interpretation, and bias. The researcher was self-aware and cognizant of his
immersion in the research process in this study, however, to allow the process to be as objective as possible. The researcher was of the view that the translucent nature of the study was revealed by the rich description of the sample, data collection methods, and data analysis procedure. It is also necessary to bear in mind that the data analyzed are based on data collected only from women who attended FANC but delivered their last child in the last 12 months at home. Such research participants have also had prior knowledge of facility-based childbirth. On the other hand, the opinions and practices of the providers regarding health facility-based delivery services were not examined.

**Abbreviations**

ANC = Antenatal Care  
CSA = Central Statistics Agency  
FANC = Focused Antenatal Care  
FDRE = Federal Democratic Republic of Ethiopia  
FGDs = Focus Group Discussions  
LMICs = Low- and middle-income countries  
MMR = Maternal Mortality Ratio  
SBA = Skilled birth attendant  
SSA = Sub Saharan Africa  
WHO = World Health Organization

**Declarations**

**Acknowledgments**

For its financial support for data collection, we are indebted to the Addis Ababa University, College of Health Sciences. We are also grateful to the University of South Africa for the technical support provided. We are grateful to the Addis Ababa City Health Bureau for permitting us to conduct a study at public health facilities. Ultimately, the authors are also thankful to the research participants who participated prominently in the study and talked and shared their experiences. Our understanding was deepened by them.

**Authors’ contributions**
Sendo, EG designed the research topic, developed the methods and materials involved in data collection, performed data analysis, drafted and finalized the manuscript. ME, Chauke, and M Ganga-Limando were involved in the study design, data analysis, interpretation and presentation of the findings, and in the final revision of the manuscript. The final manuscript has been read and approved.

Competing interests

The authors declare that they have no competing interests.

Funding

Small grant for data collection was obtained through grants provided by the post-graduate office of Addis Ababa University through the Federal Ministry of Education.

Availability of data and materials

The data sets used and analysed during the current study available from the corresponding author on reasonable request.

Ethics approval and consent to participate

Ethical clearance was obtained from the Research Ethics Committee of the Department of Health Studies, University of South Africa. The Addis Ababa City Government Health Bureau granted permission for the study to be carried out.

Consent form

I, the under signed, recognize the essence of the study, benefits, my right to voluntary participation, confidentiality and withdrawal from the study without any discrimination. I had the ability to ask questions and was replied to my satisfaction.

I hereby freely consent to take part in this study.

Name & Signature _______________

Date ____________

Your participation will be greatly appreciated.

References

1. Alkema, L., 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. The Lancet, 2016. 387(10017): p. 462-474.
2. CSA, Central Statistical Agency Ethiopia, ICF international. Ethiopia demographic and health survey. Addis Ababa, Ethiopia, and Calverton, Maryland, USA. 2016.

3. FDRE, The Federal Democratic Republic of Ethiopia Ministry of Health: Ethiopia-health-system-transformation(HSTP) 2015/16 - 2019/20. 2015. p. 1-159

4. W.H.O. Sustainable development goals (SDG). Health and health-related targets. 2016.

5. Owiti A, Oyugi J, Essink D. Utilization of Kenya's free maternal health services among women living in Kibera slums: A cross-sectional study. The Pan African Medical Journal. 2018;30.

6. Sendo EG, Chauke M, 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(12):e039189.

7. Bohren MA, Hunter EC, Munthe-Kaas HM, Souza JP, Vogel JP, Gülmezoglu AM: Facilitators and barriers to facility-based delivery in low-and middle-income countries: a qualitative evidence synthesis. Reproductive health 2014, 11(1):71.

8. Oyerinde K, Harding Y, Philip A, Garbrha-Aidoo N, Kanu R, Oulare M, Shoo R, Daoh K: Barriers to Uptake of Emergency Obstetric and Newborn Care Services in Sierra Leone: A Qualitative Study. J Commun Med Health Educ 2012, 2(5):1–8.

9. Gebrehiwot T, Goicolea I, Edin K, Sebastian MS: Making pragmatic choices: women's experiences of delivery care in Northern Ethiopia. BMC Pregnancy Childbirth 2012, 12(1):113.

10. Magoma M, Requejo J, Campbell OM, Cousens S, Filippi V: 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(13):1–12.

11. Spangler SA, Bloom SS: Use of biomedical obstetric care in rural Tanzania: the role of social and material inequalities. Soc Sci Med 2010, 71(4):760–768.

12. Duong DV, Binns CW, Lee AH: Utilization of delivery services at the primary health care level in rural Vietnam. Soc Sci Med 2004, 59(12):2585–2595.

13. Finlayson, K., and S. Downe, Why do women not use antenatal services in low-and middle-income countries? A meta-synthesis of qualitative studies. PLoS medicine, 2013. 10(1).

14. Singh, S., et al., Referrals between public Sector Health Institutions for women with obstetric high risk, complications, or emergencies in India–A systematic review. PloS one, 2016. 11(8): p. 1 - 23.

15. , S., & Pearson S Maternal referral systems in developing countries: Current knowledge and future research needs. Soc Sci Med, 2006. 62: p. 2205-2215.

16. Mirgissa K, Tesfaye B, Zergu TW, Ismael La. Sociocultural determinants of home delivery in Ethiopia: a qualitative study. International Journal of Women's Health Dovepress. 2016;8.

17. Izugbara C, Caroline W. Kabiru, Eliya M. Zulu. Public Health Report. International Observer. 2009.

18. Magoma M, Requejo J, Campbell O, Cousens S, Filippi V. High ANC coverage and low skilled attendance in a rural Tanzanian district: a case for implementing a birth plan intervention. BMC Pregnancy and Childbirth. 2010;10(13):1 - 12
19. Moyer CA, Dako-Gyeke P, Adanu RM. Facility-based delivery and maternal and early neonatal mortality in sub-Saharan Africa: a regional review of the literature. African Journal of Reproductive Health. 2013b;17(3):30-43.

20. Øxnevad M. Perceptions and practices related to home-based and facility-based birth. A qualitative study from Agemsssa, Ethiopia: University of Bergen, Norway; 2011.

21. Bedford J, Gandhi, M, & Admassu, M, Girma A. A Normal Delivery Takes Place at Home': A Qualitative Study of the Location of Childbirth in Rural Ethiopia. Matern Child Health J. 2012.

22. Yaya S, Bishwajit G, Uthman OA, Amouzou A. Why some women fail to give birth at health facilities: A comparative study between Ethiopia and Nigeria. PloS one. 2018;13(5):1-11.

23. Kebede A, Hassen, K., & Teklehaymanot, AN. Factors associated with institutional delivery service utilization in Ethiopia. International Journal of Women's Health. 2016;8:463 - 75.

24. Gebrehiwot T, Goicolea I, Edin K, Sebastian MS. Making pragmatic choices: women's experiences of delivery care in Northern Ethiopia. BMC Pregnancy and Childbirth. 2012;12(113).

25. Annette, C., et al., Facility-Based Delivery Service Utilisation Among Women of Childbearing Age in Nguti Health District, Cameroon: Prevalence and Predictors. Gynecol Obstet (Sunnyvale), 2016. 6(12): p. 416

26. 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 and Childbirth 2014. 2014;14(161):1- 13.

27. Das S, Bapat U, More NS, Chordhekar L, Joshi W, Osrin D: Prospective study of determinants and costs of home births in Mumbai slums. BMC Pregnancy and Childbirth 2010, 10(1):38.

28. Olusanya B, Alakija O, Inem V: Non-uptake of facility-based maternity services in an inner-city community in Lagos, Nigeria: an observational study. Journal of biosocial science 2010, 42(3):341.

29. Adinew YA, N: Experience of Facility-Based Childbirth in Rural Ethiopia: An Exploratory Study of Women's Perspective. Hindawi Journal of Pregnancy 2017:1- 6

30. Baffour-Awuah, A., P.P. Mwini-Nyaledzigbor, and S. Richter, Enhancing focused antenatal care in Ghana: An exploration into perceptions of practicing midwives. International Journal of Africa Nursing Sciences, 2015. 2: p. 59-64.