

# Home delivery and associated factors in an urban context: A qualitative study in Hawassa City, Southern Ethiopia

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## Abstract

**Background:** Pregnancy and childbirth are mark of identity for women. These important processes, however, entail challenges that are of public concern. Despite endeavors to improve maternal health in Ethiopia, still majority of women tend to deliver at home with life threatening consequences. The problem becomes more pronounced when urban women who are relatively aware of maternal health problems and who have relative access to services tend to deliver at home.

**Objective:** The study aims to explore why women in Hawassa City prefer to deliver at home and identify associated reasons.

**Methods:** An exploratory study was carried out in Hawassa during mid-2012, using qualitative method. Women who delivered their recent child at a health facility and at home, health professionals at management and service delivery levels, local opinion leaders and husbands participated in the study. Data was collected by trained research assistants and analyzed by classifying the findings into themes and sub-themes, guided by the objective of the study. Findings from different sources were triangulated, interpreted and presented.

**Results:** Research participants believe pregnancy and delivery are normal processes in marital life. However, visit to health facility is recognized to be triggered by unusual ill feelings during pregnancy or labor. Even those who delivered their recent child assisted by skilled attendants at health facility reported to have done so due to health concerns. Decision on maternal health service utilization is found to be determined by individual, community and facility level factors. At individual level, socio-demographic characteristics, recognition of pregnancy and delivery as normal process and previous experiences were found to determine the decision to use available services. Similarly at community level, the understanding that pregnancy and delivery are normal and natural processes and recognition of home as a natural environment for delivery was widespread. Consolidating such understanding and justifying women's decision to deliver at home was caused by unfriendly service providers at health facilities and associated cost of services.

**Conclusions:** Despite endeavors to improve maternal health services and ensure skilled delivery at all levels, women as well as members of the community still preferred home delivery. Individual, community and institutional factors work in tandem to affect women's decision to deliver at home. Ameliorating these problems requires comprehensive approaches that address the wide ranging factors at the same time. [*Ethiop. J. Health Dev.* 2015;29(1):3-12]

## Introduction

Pregnancy and childbirth constitute a mark of identity for women and are determinants of her status in the community (1). These natural processes, however, entail severe life-threatening consequences in the course of pregnancy, delivery and postpartum (2). Such consequences extend to affect family life, the community, as well as the country at large.

Multi-agency report on trends of maternal mortality estimated maternal deaths as low as 160,000 and as high as 290,000 for the period 1999-2013. The same report estimated global lifetime risk of maternal mortality (probability of a 15-year-old woman dying from maternal cause) to be 1 in 190 (3). The problem is much serious in sub-Saharan Africa where risk of maternal death is estimated at 1 out of 38 (3). The same report documented that Ethiopia is one of the countries with high maternal death, with an estimated lifetime risk of 1 woman out of 52 dying in connection with pregnancy, delivery and

postpartum (3). It is well documented that maternal mortality can be addressed by ensuring use of structured care and treatment during pregnancy, labor, delivery, and postpartum (3-5). Yet, majority of women across sub-Saharan Africa and Asia still tends to deliver at home.

Globally, home delivery as an alternative resort and its consequences are well documented. Conservative estimates show that from 2011-2014 between 130 and 180 million births (90% being in rural areas) were assisted by non-skilled birth attendants in South Asia and sub-Saharan Africa (6, 7). Women's educational achievement, access to health facilities, residence and women's position in society were found to determine utilization of maternal health services (8-17). The consequences of home delivery are far reaching. In addition to maternal and neonatal mortality, family life can be jeopardized. A qualitative study from Tanzania has summarized the consequences of maternal mortality to include compromised health care, nutrition, and

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education of maternal orphans in general and exacerbated risks on girl orphans and family dissolution (7).

Although Ethiopia has taken multi-pronged approaches to improve maternal health by promoting delivery assisted by skilled attendants (18-21), evidences reveal that still a great majority of women deliver at home (22-24). National data show that six in ten women did not consider delivering in health facility as necessary while three in every ten women felt delivering in health facility is not customary (22). A recent study has identified various factors that determine preferences of traditional birth attendants over health facilities in Ethiopia. These factors include but not limited to cultural acceptability of local support, poor quality of care and previous negative experiences as well as women's low awareness of the advantages of having skilled attendants at delivery (23). Despite endeavors by the government, recent studies show that maternal mortality did not show significant decline in Ethiopia during the last thirty years (22, 25).

Available evidences show that urban women in Ethiopia access and use maternal health service relatively more than their rural counterparts (8-11, 13). Yet, still majority of women tend to deliver at home (22-24). In Southern Nations, Nationalities and People's Region (SNNPR), maternal health indicators were found to be the lowest in the country. ANC, institutional delivery, home delivery and PNC in the first two days of birth has continued to be low estimated at 27.3%, 6.2%, 93.5% and 5.5% respectively (22).

This particular study aims to explore why women in Hawassa City fail to deliver in health facilities assisted by skilled attendants despite relative access to information and services as compared to their rural counterparts. Although there are few studies that employed qualitative method to determine why women fail to use available services, urban focused studies were scarce at best. The result from this study is believed to shed some light on factors that anchor poor utilization of maternal health services in urban settings and may help to design urban focused sound interventions to improve the level of skilled delivery in health facilities.

### Methods

Background to the study area: Hawassa City is one of the fast growing cities in Ethiopia. It is the capital of Southern Nations and Nationalities and People's Region (SNNPR), a region where 92% of women were reported to deliver at home (22). The City is located 275 kms south of Addis Ababa. For this particular study, excluding the rural annex of the city, Tula sub-city which is about 10 kms further south, Hawassa is organized into seven sub-cities and 19 *kebeles* (the lowest administrative unit). Based on 2007 national census, the total population of the City in 2013 was estimated at a little over 300,000. During the study, the City had four public health centers and two hospitals, five private and three non-governmental health facilities that provided maternal

health services, among others. Health services were distributed within an average of 30 minutes-walk for every resident in the town. Furthermore, in every kebele, there were two urban health extension workers and at least five Health Development Army leaders (HDA)<sup>1</sup>.

### Study Design:

An explorative study was conducted in Hawassa City during May-June 2012.

### Study Population:

Women in Hawassa City who gave birth to a child 12 months preceding the study were targeted for the study. In addition, health professionals including Urban Health Extension Professionals at service delivery and management levels, husbands and opinion leaders in the community including husbands were involved in the study.

**Study participants:** Study participants were chosen from each of the six sub-cities of the City except for Tula. Kebeles under sub-city exhibited by and large similar socio-economic and residence patterns that one kebele per sub city was randomly chosen for the study. Accordingly, a total of six kebeles were selected for the study. List of women, who delivered during the last twelve months was generated from existing health file compiled by urban health extension professional nurses at kebele level. Women participants were categorized into two as those who delivered the last child at health facility and those who delivered at home. From each category 3-4 women were interviewed at their home to determine reasons for choice of place of delivery. In addition, opinion leaders, husbands, urban health extension professionals, health development army leaders, health professionals at service delivery and management levels were interviewed on why some women deliver at health facilities while others deliver at home. While opinion leaders and health professionals were identified using snowball technique and interviewed at home or at their work-place, husbands, Health Extension Professionals and Health Development Army leaders were purposefully selected and brought to a health center for focus group discussions. A total of 24 women who delivered at health facility and 23 women who delivered at home, 10 opinion leaders, 10 health professionals at management and service delivery points were interviewed. In addition, two sessions of focus group discussions with 17 husbands and two FGD sessions with 19 urban health extension professional nurses and health development army leaders were completed.

<sup>1</sup>HDA is constituted by 30 women who were trained on health, especially on hygiene and sanitation, HIV and AIDS, and maternal and child health services. The group identifies a leader who will facilitate routine discussions among the group. They also play important role in identifying and referring pregnant women to the Health Extension Professional

**Method of Data Collection:**

Shared views regarding maternal health problems, maternal health service delivery at facility level, preference of place of delivery and associated factors determining the decision to use services were collected using FGDs. On the other hand, in-depth interviews were conducted with women, health professionals at management and service delivery points, opinion leaders at community level to explore why women prefer a specific delivery point. Four research assistants, who were trained for two days, collected information using checklists developed in reference to the objectives of the study.

In-depth interviews took 45 minutes to an hour and 15 minutes while FGD lasted an hour and 20 minutes to an hour and 35 minutes. In order to ensure data quality facilitated discussions were held and notes were exchanged at the end of every day between research assistants and investigators.

**Method of Data Analysis:**

Data from different sources were transcribed by research assistants. Transcribed notes were read and re-read to develop themes and sub themes following the objectives of the study. Accordingly, three themes and sub themes were defined. Factors that could explain why women prefer to deliver at health facility or at home were categorized under individual, community and health facility related factors. Such factors at individual level were further summarized under socio-demographic characteristics, awareness and recognition of the need for service, previous experience, comfort from home delivery and lack of time and money to seek services at health facility. Community related factors were categorized under local understanding of pregnancy and delivery and established support at home for women during labor and delivery. Health-facility related factors were summarized under mistreatment by providers, referral of mothers to private health facilities for laboratory and medicines and confidence in the competence of service providers. Data so reduced was triangulated and interpreted to address the question as to why women in urban setting where services are believed to be relatively accessible and awareness of risks

associated with pregnancy and delivery is relatively high deliver at home.

**Ethical Considerations:**

Before the field work started, ethical clearance was obtained from the SNNPR Health Bureau, purpose of the study was explained to every selected individual involved and data was collected after oral consent has been obtained. During data collection, names of participants were not collected to ensure anonymity of participants. In the report, source of data (in-depth interview or FGD) and age of participants was maintained in verbatim to provide references.

**Results**

Factors that affect preference of health facility or home delivery were categorized into three themes with detailed sub themes as detailed below.

**1. Individual Related Factors:**

The finding shows that individual characteristics were found to have evident relationship with preference of delivery points.

**1.1. Socio-demographic characteristics:** Although it is not the intention of this article to quantify the findings in terms of socio-demographic characteristics, findings show the age, educational status and source of livelihood as well as respondents' preference of delivery points (table 1).

According to the findings over 80% of those who delivered in health facilities were aged 18-29 while 29% of those who delivered at home were found to be over 30 years of age. In terms of the level of education, 50% of those who delivered at home did not have formal education while over 85% of those who delivered at a health facility were found to have completed at least primary education. The finding shows that 70% of the women who delivered at health facility were engaged in regular and sustainable economically gainful activities while those who delivered at home were either housewives or engaged in petty activities with no reliable and regular income.

Table 1: **Demographic characteristics of research participants**

Demographic characteristics	Women users (n=24)	Women non users (n=23)	TBA's (n=7)	Opinion leaders (n=7)	Health professional (n=10)	CHWs (UHE-Ps + HDA) (n=30)	Husbands (n=7)
<b>Age</b>							
< 18 years	8%	4%	--	--	--	--	--
18-23 years	24%	25%	--	--	--	45%	--
24-29 years	60%	42%	--	--	--	17%	--
>= 30 years	8%	29%	100%	100%	100%	38%	100%
<b>Educational level</b>							
No formal education	14%	50%	43%	14%	--	--	29%
Primary education	66%	38%	57%	43%	--	27%	57%
Secondary education	15%	12%	--	43%	--	13%	14%
Tertiary level education	5%	--	--	--	100%	50%	--
<b>Religion</b>							
Orthodox	32%	25%	14%	29%	40%	23%	14%
Muslim	8%	8%	--	29%	--	12%	14%
Protestant	60%	67%	86%	42%	60%	65%	72%
<b>Number of live children</b>							
Currently pregnant							
1	18%	15%	--	--	--	40%	--
2-4	24%	28%	100%	57%	70%	37%	--
>=5	46%	37%	--	43%	30%	40%	29%
	12%	20%	--	--	--	23%	71%
<b>Occupation</b>							
Self employed	32%	8%	57%	--	20%	--	14%
Daily laborer	12%	21%	--	--	--	--	71%
Civil servant (Go/NGO)	28%	4%	--	--	20%	--	15%
Unemployed (H. wife)	28%	67%	43%	--	--	--	--
Retired	--	--	--	14%	--	--	--
<b>Number of years lived in Hawassa</b>							
Less than five years	68%	54%	14%	29%	71%	60%	43%
Permanent resident	32%	46%	86%	71%	29%	40%	57%

**1.2. Awareness and recognition of the need for services:** Data generated from women who delivered in health facilities and at home was found to vary in terms of what is perceived to constitute maternal health services. Two out of three women who delivered at health facility described maternal health services as including "... family planning, HIV testing and vaccination services during pregnancy, support provided to laboring women during delivery including operation in case of complications when labor persists" (Facility delivered, 29 years old). Similarly, one out of three women who delivered at home argued that "maternal health service includes checking the health and position of the fetus and that of the mother during pregnancy and easing labor during delivery" (Delivered at home, age 30).

Opinion leaders unanimously pointed out that maternal health service include health checkup of the fetus and mother during pregnancy and delivery in health facility. Opinion leaders and husbands were generally found to be less informed about what maternal health service constitutes. Most argued that maternal health is women's issue that they were often not informed about it. Men unanimously argued that "maternal health is an issue of women and men do not know details of what the services

includes and nobody has told us. Normally, when a woman's condition during pregnancy or during delivery worsens, we are told and we take her to the nearest health facility. We do not know if we are expected to do more?" (Husband, 43 years old).

Husband's role during pregnancy, labor and delivery was found to be generally not clear. Similar opinions were flagged by participants. One of husband pointed out: "I take her to health facility when she informs me that she is sick. Otherwise, I would not and may not be able to take action" (Husband, 34 years old).

It was noted that participants hold different understanding regarding maternal health problems and actions. "For me ill feelings such as hate for odor including food, swelling of feet, headache are common for early pregnancy and this does not deserve to be taken to health facility" (Delivered at home, 26 years old).

Those who delivered at a health facility shared similar belief but specified that if the ill-feeling persists, visit to health facility is important. A participant argues that, "There is no defined time when one should go to health facility. Persistence of the problem and suggestion by my husband or neighbor would necessitate visit to health facility" (Delivered at health facility, 29 years old).

The findings show widespread feeling that visit to health facility for mere check-up<sup>2</sup> was not recognized as absolute necessity. At least one in three women, irrespective of where she delivered, believed that visit to health facility during pregnancy and delivery should not be taken as mandatory.

Nonetheless, majority of those who delivered in health facilities believed that delivering in health facility relieves mother from pain and shortens labor time. One of the participants pointed out: *“If labor takes longer and is painful, they [health professionals] take out the child by operating the women”* (Delivered at health facility, 27 years old).

Furthermore, two out of three participants feel delivering in health facility helps to avoid potential transmission of HIV from an HIV positive mother to the fetus. *“If a woman is HIV positive, she should deliver in health facility to avoid transmitting HIV to the new born”* (Delivered at home, 25 years old).

As few as one out of ten women who delivered at health facility believed that institutional delivery helps to keep the umbilicus in shape as professionals cut it with care.

**1.3. Previous delivery experience:** Previous delivery experience was found to affect the decision on where to deliver the next one. It was found that smooth delivery experience at home in previous pregnancy(ies) is important factor to maintain the practice and decide to deliver at home again. *“I delivered three children at home without any problem with support from my neighbors. If I get pregnant again, I would do the same. However, I may get checked at health facility during pregnancy so that the position of the fetus in the womb is normal”* (Delivered at home, 34 years old).

Rumor on problems a woman may have encountered at health facilities was found to influence the decision to deliver at home. One of the participants argued: *“I heard a woman died at health facility during delivery. I do not see why I should deliver at facility if death cannot be avoided even at health facility”* (Delivered at home, 38 years old).

This was a shared feeling even amongst those who delivered at health facility. *“I pray to God to save my life. I heard a woman had died while delivering in the facility. Despite this, I delivered at health facility since this is my first experience and I was very much concerned. The process however was smooth thank God”* (Delivered at health facility, 24 years old).

**1.4. Home as comfortable delivery setting:** Home delivery is anonymously recognized to be comfortable

both by those who delivered at health facility and at home. It was argued that the support women get during labor and right after delivery, the celebrations following delivery and the chores at home during labor and delivery were all attractive for a laboring woman. *“Even though I delivered my last child at health facility for fear of complications following the advice from the health extension worker, I still feel delivering at home is comfortable”* (Delivered at health facility, 25 years old).

The supporting hand from neighbors and relatives during labor was appreciated by every women involved in the study irrespective of where she delivered. *“You miss support from neighbors and relatives who have similar experiences and at times local birth attendants are at your side to encourage you. Every women around you pretend to share the pain which gives you relief”* (Delivered at health facility, 30 years old).

**1.5. Lack of regular means of living:** Precarious state of life due to poor means of living was found to affect the decisions on where to deliver. More than three quarters of those who delivered at home argued that visit to health facility is a luxury for them. It was gathered that they struggle with making life possible and cannot spare money and time to visit health facility just to check pregnancy status. One of the participants argued: *“For me going for check-ups during pregnancy is luxurious and I do not see why it is taken as mandatory. I am petty trader and cannot afford to spend time away. What would I feed those children at home if I were to waste time for check-up”* (Delivered at home, 34 years old).

Cost of maternal health service is also another reason to opt for home delivery. *“If you go to health facility, they ask you to get your blood, urine, stool, etc tested for which you have to pay. Even if I have the time, I do not have the money to spend on that. I thank God I have never had any problems with my pregnancy and delivery. I delivered both my first and second children at home safely”* (Delivered at home, 27 years old).

Health professionals including Health Extension Professional nurses were found to share common understanding that poor women who are living on irregular income and have relatively low level of education and those with previous home delivery experience tend to deliver at home. *“Even if I encourage my clients to attend ANC during pregnancy, most of them agree to my advice but do not tend to follow-up persistently”* (Health Extension Professional Nurse, 26 years old).

Women challenges those who guide them for services in connection to pregnancy. Health Development Army leader noted: *“A woman asked me what would I feed my children if I stayed in health facility for half a day for*

<sup>2</sup> Check-up is a common term used for ANC visit to health facility.

*mere check-up? I did not have answer for this”* (Health Development Army Leader, 37 years old).

It was also found that there are women who have planned to deliver in health facilities supported by skilled attendants, but end up in delivering out of health facility without support from skilled provider. A health professional at health center substantiated that *“There are some women who attended ANC and planned to deliver at a health facility assisted by skilled attendants. At times, labor intensifies and she may deliver at home and there are still there are some who delivered in a taxi on their way to health facility”* (Head of health center, 39 years old).

## **2. Community Level Factors:**

### **2.1. Local understanding of pregnancy and delivery:**

Opinion leaders and husbands were found to share the same opinion regarding when a woman should visit health facility. They consider pregnancy as a normal process in life and women are not usually expected to complain about every inconvenience related to pregnancy. One of the opinion leaders summarized shared views: *“I do not understand why a pregnant woman should visit health facility in connection with pregnancy which is a natural occurrence. she is expected to take pregnancy to term although she may be taken to a health facility if falls sick during pregnancy and if labor takes longer?”*(Opinion leader, 57 years old).

Another opinion leader commented: *“Nowadays, pregnant women are expected to regularly visit health facilities for check-ups which in our time was not the case, unless she got sick. I think this is a new development with much pressure on every pregnant woman”* (Opinion leader, 46 years old).

**2.2. Established support at home:** It was continually mentioned that under normal circumstances every woman is given attention and support during pregnancy, labor and postpartum. *“Always pregnant women and those with children are respected and they are given priority in beneficial engagement at community level”* (Opinion leader, 57 years old).

At home, laboring women is not alone. Several women with similar experience stay with a laboring women and pretend to share her pain. Some encourage the woman to push, others plead to St. Mary to ease the labor and still others make fire. One of the women participants stressed: *“The presence of people around you, encouraging you and praying to St. Mary to make delivery easier are quite helpful”* (Delivered at health facility, 25 years old).

One of the husbands pointed out: *“At health facility I am not even allowed to be around my laboring wife and I could not follow what was going on. Besides, for her she is alone without much support and no one is allowed from the family to be with her. That is embarrassing for*

*us and more painful for the women”* (Husband, 49 years old).

All opinion leaders and husbands unanimously felt that health facilities are backups for home level support when support at home did not make delivery smooth. A 20 year old mother living about 200 meters away from the health center pointed out that *“Delivery in health facility is an option when labor is not peaceful. Thanks to Allah, for He did not let me go there. Health facility is not really inviting. I delivered my first son assisted by my mother without any problems and I would do the same in my next pregnancy too”* (Delivered at home, 20 years old).

## **3. Health Facility Related Factors:**

Participants identified health facility related reasons that affect decisions on place of delivery.

### **1.1. Doubt on competence of service providers:**

It was found out that pregnant women hold heavy doubts about health professionals’ competence both at community and health facility levels. Among others, women who attended ANC and delivered at health facility unanimously blamed providers for failure to tell them the exact date of delivery. Although health professionals believe such blames are common, Urban Health Extension Professionals (UHEP) complained that they were not able to provide such information to women. Besides, UHEPs complained that they were not well equipped with appropriate knowledge and skills on maternal health services vis-à-vis women’s expectation. One of the UHEP noted: *“We spend most of our time on sanitation and particularly issues related to cleanliness and construction of toilets while women want us to provide them with maternal health services at their home”* (UHEP, 23 years old).

Another UHEP nurse highlighted the common challenges they encounter as professionals, *“Pregnant women often want me [UHEP] to tell them the date of delivery, concerns related to prevention of mother to child transmission (PMTCT) and determine the type of family planning service a woman should use. For me, these are difficult to address”* (UHEP, 25 years old).

Similarly, Health Development Army (HDA) leaders also encountered similar problems for which they do not have relevant training. One of the HAD argued: *“I do not have relevant information and training on maternal health problems and services. Some women in my village are better informed about the problems as well as services than I do. As a result, I do not have confidence in myself to advise fellow women on maternal health”* (HDA, 38 years old).

### **3.2. Mistreatment of women by health service providers:**

It was gathered that all women are embarrassed for opening themselves to professionals be it for diagnosis or during delivery. One of the participants

explained: *“It is embarrassing to show your private parts to strangers. Now with modernization it appears normal to open your legs to health professionals which still is discomforting to me”* (Delivered at health facility, 29 years old).

This is a common opinion women participants shared. While such an experience is daunting in itself, the way providers handle women at facility level was found to affect their interest to use services at facility level. One of the women stated: *“I understand the importance of visiting health facility during pregnancy and the reason for being attended by skilled assistants during delivery. However, when a young girl who does not have pregnancy and delivery experience shouts at me, it is rather sickening”* (Delivered at health facility, 34 years old).

It was consistently complained that most providers *lack experiences and do not know how pregnancy, labor and delivery feels*. Eight out of ten women who delivered in health facility were convinced that providers lack the skills and experiences to assist pregnant and laboring women. A woman who delivered in health facility argued: *“I was admitted to deliver. My husband was asked to live and so was my sister-in-law. They left and I was in pain alone. I shouted since I could not stand the pain and a nurse who came in roared and instructed me to keep quite. I do not think she knows how to deal with pregnant women neither does she understand how a laboring woman feels”* (Delivered in health facility, 28 years old).

Another woman commented that, *“The nurses in the health center are all young without delivery experience and do not understand the pain. That is why they give laboring women an additional pain with their poor handling and rough language and tone”* (Delivered in health facility, 27 years old). A senior nurse service provider said: *“Age and experience matter in dealing with pregnant and laboring women. Current care gives are of course young and without much experience and skills. As much as technical knowledge and skill are important, care and support and friendly treatment provided to pregnant and laboring women are critical which young nurses lack”* (nurse, 54 years old).

**3.3. Perceived poor supplies:** Both hospitals and health centers were perceived to lack supplies and equipment that are necessary for diagnosis and treatment of pregnant and laboring women. Women who delivered at a health facility and husbands unanimously argued that health professionals at public facilities refer women to private health facilities for laboratory services; more particularly ultrasound was repeatedly mentioned. Although the quality and neatness of private facilities was appreciated, all participants argued that cost of services at such

facilities were expensive. One of the participants pointed out: *“You know, my friend has stopped her ANC follow up after the second visit since she was referred to a private facility for laboratory and ultrasound scans. She found the cost unbearable and she did not return to that facility afterwards and eventually delivered at home safe”* (Delivered at home, 30 years old).

At least one out of three women who delivered at health facility argued that they were asked to buy plastic sheets and gloves during delivery. One of the husbands noted: *“I followed a friend to the health center, in the evening, since his wife was in painful labor. After checking the woman, the health professional requested us to go and buy plastic sheets. It is already close to mid-night and we did not even know where to get them from. This was embarrassing”* (Husband, 38 years old).

Similarly, prescription to buy medicine from private pharmacy was common. A woman doubted if there is medicine available in the facility, *“I am wondering if health centers dispense medicine at all because they always advice clients to go and buy from pharmacies in town”* (Delivered in health facility, 27 years old).

However, health professionals at management level unanimously argued that although women may be requested to buy some medicine and could be referred to private health facilities for laboratories, this was not a regular practice. One of the participants at management level noted: *“Few times women may be asked to buy medicine or get laboratory services that may not be available at a facility during that particular time. This may happen only few times and should not be exaggerated”* (Health professional, 49).

## Discussion

Literature shows that maternal mortality is a critical public health concern across the world and it is more pronounced in sub-Saharan Africa (2-4,6). Every year unacceptably large number of mothers and newborns die due to complications that could have been managed if women had used available prenatal, delivery and postnatal services. In 2013 alone 289,000 women died in connection with pregnancy, 99% of these were from resource poor settings. Sub-Saharan Africa accounts for two-third of this death (3). Although the world has witnessed relatively declining maternal mortality by 3.3 % between 2005 and 2013, this is still far from expected annual reduction of 5.5% to meet MDG5 (3).

Cross-cultural studies documented that maternal education, awareness about maternal health problems and services, place of residence (urban/rural), accessibility and cost of services, socio-cultural factors, quality of services at facility level, husband's disapproval contribute to low utilization of available maternal and

newborn health services (8-17). Yet, awareness of maternal health services and access to health facilities may not always explain why women are not using available maternal health services including delivery at a health facility in urban settings.

Findings from Hawassa show that decision on use of maternal health services is associated with factors at individual, community and facility levels. Findings from this study concur with previous reports where women's educational accomplishment, age and means of living were found to determine preference of place of delivery. Nonetheless, it was clear that there are more factors that work in tandem to affect the decision to consider health facility place of delivery.

In a community where home delivery is cherished, awareness of maternal health problems and services, access to services, being young and educated may not necessarily warrant delivery at facility level assisted by skilled attendants. A study from Ghana has similarly documented that the tendency to use available maternal health services is an outcome of the socio-cultural interpretations of threats posed by pregnancy and delivery (28). Besides, the same study and another one from Ethiopia documented that attractiveness of service delivery point offers important basis for choice women may make (23, 24, 28). In this study, it is clear that even those who delivered at health facility still admire delivering at home since this offers more attractive opportunities as compared to health facilities. With regard to cost of services and lack of time affect the decision to use available maternal health services, those who delivered at home felt that it is normal to get pregnant and deliver and there is no reason to visit health facility as long as pregnancy and labor remain smooth. Thus, there was an inherent feeling both at women and community level that pregnancy and delivery are neither a problem nor entails a problem. There appears to be a tendency by community members to associate health facilities as resources for health problems. Contrary to such general understanding pregnancy and delivery is a normal, natural and healthy process. A study from Nigeria has also shown that decision on the use or non-use of maternal health services is a matter of choice that is informed by the underlying socio-cultural factors including understanding pregnancy and delivery vis-a-vis the role of health care facilities. In view of this attributing failure to use services to mere lack of information or limited educational status of women is unfair. The same report noted that no woman who has serious health problems in connection with pregnancy and labor would remain at home and prefer to die (29). Thus, ill-feelings during pregnancy and severe and prolonged labor trigger the decision to seek maternal health services. In addition, concern over transmitting HIV to the newborn by a positive mother compel women to delivery at health facility.

While individual and community level factors working in tandem determine the decision on where to deliver, the context at facility level was another important factor to reinforce such decisions. Supply related factors at facility level is widely documented to affect decisions to use available maternal health services (30-32). Findings demonstrated widespread perceived limitations in availability of medicine and equipment at public health facilities as explained by continued referral to private health facilities for laboratory services and medicine. Although health professionals at management levels did not consider such referrals as usual and persistent, women participants casted doubt on whether public health facilities had required supplies and equipment. A study has also documented that despite government's extensive endeavor to provide maternal care services free of charge, 65% of health centers charge for some maternal health care services (32). This complements women's complaint of cost of services and consequent failure to use available maternal health services.

Women who sought maternal health services from health facilities commonly argued that care givers were young, lack skills and experiences and were rather aggressive in the way they handled pregnant and laboring woman. Although women expect friendly care, they complained they had been reproached by young nurses. Efforts have been underway to ensure skilled birth attendance throughout the developing world, including Ethiopia, by training care givers, increasing access to health facilities and allocating health resources (3). Yet, there are service providers at health facility level in Hawassa who were perceived to be unfriendly towards service seekers and limited availability of supplies and equipment that compromises utilization of services. This was found to push away even those who tend to use the services. A study from one of the regions in Ethiopia complies with this argument where 34 maternal deaths occurred in health facility over a period of two years where 35% of these deaths could have been avoided (33). This complements reported perceived weaknesses of the health facility, limited competence and friendliness of care givers and dearth of supplies and equipment (32, 33). Such perceptions conversely compromises decisions to use available maternal health services.

#### **Conclusions:**

This study has generated useful evidence that could complement previous study reports. The findings here depicted the fact that different factors work in tandem to determine utilization of available maternal health services. Even if educational level, age, income and residence are important individual level determinants of maternal health service utilization, community and facility related factors work in tandem with individual level characteristics to determine maternal health service utilization.

Individual level determinants may be culturally triggered where pregnancy and delivery are generally considered normal life processes and not associated with health problems compromising the decision to visit facility. Even if those who delivered at home tend to prefer home as comfortable place of delivery, those who delivered in health facilities shared the same view that maternal health service utilization should result from complications during pregnancy and during labor.

As was found from the study, such realities at individual and community level are further jeopardized by the fact that health facilities lack required equipment and supplies at all times on the one hand and care givers were not friendly on the other. Women who came a long way for maternal health services were not welcomed and are referred to private facilities for laboratory services and medicine. This, as it was pointed out, affected not only future decisions on place of delivery but also spread the word that public health facilities are not well equipped both in terms of supplies, equipment and care givers.

**Limitations:** This study focuses on Hawassa city, the capital of Southern Nations Nationalities and People's Region of Ethiopia. The study employed qualitative method which helped to illicit evidence from women and community members. In as much as useful evidences were generated, the findings may not necessarily apply to the rural outskirts of Hawassa as well as other urban settings of Ethiopia due evident contextual variations. Besides, the fact that Health Development Army leaders were engaged in FGDs together with Health Extension Professional nurses, they may have been influenced to be as open and frank during the discussions given the former are their supervisors.

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