Healthcare Seeking Behaviour of Pregnant Women in rural Amhara, Ethiopia: Perception of Healthcare Providers

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Abstract

Background

Healthcare services utilization by pregnant women helps to improve the health of women during pregnancy, childbirth and even after delivery. Various literatures show the strong association between women's utilization of antenatal care services and factors such as urban residence, partners' educational status, quality and cost of services, health beliefs, exposure to mass media, family income and service accessibility.

Methods

The study was conducted in South Gondar and West Gojjam zones in Amhara region of Ethiopia. A qualitative research design using in-depth interviews was employed to explore perceptions and experiences of healthcare providers with healthcare seeking behaviour of pregnant women. Tape recordings were transcribed verbatim in Amharic (the local language in the study area) and translated back to English. Transcripts were coded and data was analyzed manually using thematic content analysis approach.

Results

Pregnant women were found to have a good relationship with healthcare providers. In spite of their good relationship with healthcare providers, pregnant women were not using healthcare services per Ministry of Health recommendation. Although counseling was part of the routine antenatal care service, food taboos, those foods which are strictly forbidden for health, cultural, and religious reasons, has affected women from getting the recommended nutritional requirements during pregnancy. According to the data generated from this study, screening for routine laboratory services such as sexually transmitted infections and Urinary tract infections was performed in health centers. This study has also revealed that women preferred individual antenatal care service over group antenatal care or any form of gatherings like monthly conferences.

Conclusion

The trust built between healthcare providers and pregnant women has impacted the healthcare seeking behaviour of women positively. Healthcare seeking behaviour of women during pregnancy, birth and postpartum was highly influenced by religious and cultural factors. The healthcare seeking behaviour of pregnant women was also highly influenced by lack of transport access to healthcare facilities.

Background

The use of healthcare services by women plays an important role in determining the health of women during pregnancy, childbirth and even after delivery. Reproductive healthcare, the care a woman receives before and during pregnancy, at the time of delivery, and soon after delivery, is important for the survival and well-being of the mother and her child (Ovikuomagbe, 2017).

A study done on pregnant women in rural India showed women's poor knowledge about complications and danger signs. They accepted vomiting and fatigue as common problems in pregnancy which did not advocate a visit to healthcare facilities (Vincent *et al.*, 2017). Every woman needs to be aware of the danger signs that occur during pregnancy, as complications can be unpredictable. These danger signs include vaginal bleeding, severe headache, vision problems, high fever, swollen hands/ face, and reduced fetal movement. These danger signs usually indicate the presence of an obstetric complication that may arise during pregnancy, delivery or postdelivery. Knowledge of these danger signs will help women to make the right decisions and take appropriate healthcare seeking actions. Eventually, taking the right healthcare seeking action means receiving immediate and appropriate care, which reduces maternal mortality and morbidity (Mwilike *et al.*, 2018).

A recent study done in Ethiopia showed that positive association was found between utilization of antenatal care and urban residence, women's education, husband's education and planned pregnancy. Exposure to mass media, family income and accessibility of the service were also found to be strongly associated with utilization of antenatal care (Tekelab *et al.*, 2019). Enrolment to mutual health insurance was also found to increase healthcare utilization of women (Tilahun *et al.*, 2018). Another study has shown that the use of healthcare services was related to the availability, quality and cost of services, as well as to the social structure, health beliefs and personal characteristics of the users (Akeju *et al.*, 2016).

Different studies justified women's late report for their first ANC in different ways. A study done in west Amhara region of Ethiopia found out that low satisfaction of clients on healthcare service provision as a major reason for reporting late to first ANC services (Derebe, *et al.*, 2017). According to a study done in Nigeria, women believed that there are no advantages in early booking as ANC is perceived primarily as curative rather than preventive (Akeju *et al.*, 2016). A study done in Southern Mozambique came up with other reasons for reporting late to first ANC. Factors that impede women from timely accessing maternal health services include societal discouragement from revealing pregnancies early in gestation, unfamiliarity with the warning signs of pregnancy among women and their partners, complex and delayed decision-making, poor transport infrastructure and fear of mistreatment at health facilities (Munguambe *et al.*, 2016). According to a study done in Jimma zone, south west Ethiopia, only 18.9% of pregnant women visited health facility during the first trimester (Dadi *et al.*, 2019).

A study done in Pakistan showed that the optimal time for ANC service uptake is trimester 1 during the early stages of pregnancy (Ahmad *et al.*, 2019). Maternal mortality is much lower for women who booked to ANC (1.2 per 1,000 deliveries) compared with those who did not (107.1 per 1000 deliveries) (Ikenna, 2015). If this takes place later, then contrary to what could be expected, maternal and neonatal mortality will increase as most women take up unattended home delivery (Ahmad *et al.*, 2019). In some cases,

most women received no ANC, even in urban areas where medical services are readily available. Even if women do attend ANC and receive health education on other health seeking behaviours such as eating a nutritious diet and resting more during pregnancy, there is no guarantee that they will follow-up on such suggestions (Ikenna, 2015).

The major challenges of maternal and child health are maternal and child morbidity and mortality in the developing world. Maternal mortality is, on the average, 10 times higher in the developing world than in the developed world (Ikenna, 2015). The major complications that account for 80% of all maternal deaths are severe bleeding, infections, high blood pressure during pregnancy, obstructed labor, and unsafe abortion (Mwilike *et al.*, 2018).

In Ethiopia, as in other low-income countries, there are high rates of maternal and newborn death, and the utilization of antenatal care is low. The high mortality rate in Ethiopia is reflective of the low utilization of maternal healthcare services. A recent study showed that utilization of antenatal care services was 63.77%. The magnitude of antenatal care utilization among women ranged across regions from the highest in Oromia 85.2% and SNNPR region 66.4% to the lowest in Amhara region 32.3% (Tekelab *et al.*, 2019). This result is almost the same as the 2016 Ethiopian Demography and Health Survey (EDHS) result, which showed that antenatal care service utilization was 62%. According to this survey, only 20% of women had their first antenatal care during the first trimester while only 32% of women had four antenatal care visits during their pregnancy.

A number of studies have been carried out in Ethiopia and sub-Saharan Africa about pregnant women's utilization of healthcare services. The main actors in providing the data for these studies were pregnant women themselves. Their healthcare seeking behaviour from the perspective of healthcare providers was not/little explored. This study intended to assess the perception of healthcare providers towards healthcare seeking behaviour of pregnant women.

Methods

Study site

The study was conducted in South Gondar and West Gojjam zones in Amhara region of Ethiopia. The region was chosen due to the low rate of antenatal care utilization (32.3%) by women compared to other regions. South and North Achefer woredas from West Gojjam zone and Dera and Libokemem woredas from South Gondar zone were chosen. One health center was selected from each woreda. The total population size of South Gondar zone was 2.2 million while it was 2.3 million for West Gojjam. Interviews were conducted in the maternal and child health unit of health centers from October 03–14, 2018.

Study design

A qualitative research design using in-depth interviews (IDIs) was employed to explore perceptions and experiences of healthcare providers with healthcare seeking behaviour of pregnant women. IDIs were

considered to be an appropriate method as the aim of the study was to elicit detailed individual experiences and perceptions with healthcare seeking behaviour of pregnant women.

Study participants

Participants included midwives, nurses and health extension workers (HEWs). Midwives and nurses were drawn from four health centers and HEWs were selected from health posts within the catchment of the selected health centers. To keep the variety of participants, they were purposefully selected on the bases of their role in the maternal & child health (MCH) department, their academic qualification and work experience in those particular healthcare facilities.

Data Collection

The interviews were conducted in Amharic (the local language in the study area) at a place that provided optimum privacy and tape recorded after written consent was received. Interview guide was developed in English and translated into Amharic. A refined and pretested interview guide was used to explore healthcare providers' perceptions and experiences with healthcare seeking behaviour of pregnant women. The guide included questions related to knowledge and perceptions about healthcare seeking behaviour of women and experiences with providing these services to pregnant women. Probing questions were included in the interview guide in case the responses of the participants are superficial and/ or the answers are conflicting. Interviews took between 40 and 70 min to complete. Experienced research assistants, with training in public health or social sciences and who had relevant experience in qualitative data collection techniques and fluent in the local language were recruited to gather data. They attended a week training in Addis Ababa on IDI techniques of data collection. They paired themselves while conducting the interview. One of them moderated the interview and the second one was assigned to take notes. Role plays were conducted during the training week to help refine the interview guides. Daily supervision was done by researchers and daily debriefing sessions were conducted at the end of each day with the aim of troubleshooting daily challenges and encounters.

Data Analysis

Preliminary data analysis was concurrent with data collection and evolved throughout the data collection and analysis period. Debriefing was conducted at the end of each data collection day to share preliminary findings and identify areas to be explored more. Tape recordings were transcribed verbatim in Amharic and translated back to English. Further data analysis was conducted by three members of the research team. The analysis involved multiple reading of transcripts to understand the data to identify emerging themes. Transcripts were coded and data was analyzed manually using thematic content analysis approach. Daily summaries and field notes were also used during the analysis.

Ethical consideration

All participants enrolled in this study provided informed written consent before they were interviewed. The information collected in this research will be kept confidential. No individual identities will be used in any reports or publications resulting from the study.

Results

Socio-demographic characteristics of participants

Twelve in-depth interviews were conducted. Two-third of the participants were females and midwives constituted half of the participants. Nearly 58% of participants had received diploma and above. The below table provides the socio-demographic characteristics of participants.

Table 1
Socio-demographic characteristics of participants,
rural Amhara, Ethiopia

Sociodemographic characteristics	n = 12, N (%)
Age	
20–25	2 (16.7)
26–30	10 (83.3)
Sex	
Male	4 (33.3)
Female	8 (66.7)
Zone	
South Gondar	7 (58.3)
West Gojjam	5 (41.7)
Profession	
Midwife	6 (50)
BSc Nurse	1 (8.3)
Health extension worker	5 (41.7)
Level of education	
Level 4	5 (41.7)
Diploma	3 (25)
First Degree	4 (33.3)
Experience (in years)	
1–5	6 (50)
6–10	3 (25)
>11	3 (25)
Total	12 (100)

Thematic Categories

Healthcare providers' perceptions towards healthcare seeking behavior of pregnant women were clustered around the following six thematic categories. Interaction of pregnant women with healthcare providers, care and perception of mothers for their small babies, group antenatal care

preferences/acceptability and scheduling, dietary practices, infection management practices and women's ANC & PNC attendance and institutional delivery.

a. Interaction of pregnant women with healthcare providers (HEWs, nurses, midwives)

Healthcare services such as antenatal care (ANC), birth and postnatal care (PNC) were provided at health center and hospital levels. In health centers, midwives primarily provided these services to women. However, in health centers where there were few/no midwives, nurses took over the responsibility of providing the services. On the other hand, in health posts, where health extension workers were the only providers of healthcare services, services were only limited to vaccination, health education and monthly conferences. Monthly conference is a special type of meeting where pregnant women and healthcare providers meet once per month to discuss about issues around pregnancy.

Midwives, nurses and health extension workers explained the kind of relationship pregnant women had with them in slightly different ways. However, one thing they shared in common was that they have a good relationship with women.

I have been working as a midwife for the last 5 years and it has been three years since I joined this health center. I would say I have built a good relationship with pregnant women and other mothers who come to this health center to receive various healthcare services. The trust they have on us and the respect they have for us is simply amazing. Their willingness to do whatever order comes out of healthcare professionals can partly explain what I said before. They always consider us as reliable source for their information needs. We usually meet pregnant women when they come to health centers seeking services like antenatal, birth and postnatal services. In addition, they also come in between appointments whenever they have any issue including illness. In all of these contacts, we always strive to provide services in the best possible way. [Midwife, South Gondar zone]

Healthcare providers usually met with women either in healthcare facilities or at women's homes. Health extension workers mostly spent much of their time in villages where they provided services home-to-home. This interaction of HEWs with women was believed to strengthen their relationship.

Unlike other healthcare providers, our (health extension workers) contact with women is not only limited around health facilities. We usually go out of health posts and provide services home-to-home. Monthly conferences, one-to-five meetings and vaccinations are other platforms that bring us together. Due to this reason, it has now become very common to consider us as members of their families. During our daily home-to-home visits, they invite us for lunch and to have some coffee with them. Our relationship extends further and we get invited when during weddings and other bigger festivals. I think this shows the kind of intimacy we have with women. [Health extension worker, West Gojjam zone]

It was not very common for nurses and midwives to provide services outside healthcare institutions. However, in some occasions such holidays, they went out to villages and educate the community on

various topics either in a smaller group around their homes or in big gatherings around churches. In terms of strengthening their relationship with women, out-of-facility meetings were found to be more productive. One of the nurses explained the reason as follows.

If not very often, we also go to different kebeles where we provide health education to the community including pregnant women. This mainly happens during saint days like St. Michael, St. Mary, St. Gabriel etc. In this community, Orthodox Tewahdo Christians have a special kind of respect to these Saints. One way of showing this respect is by calling their close relatives to their homes so that they can have some drinks and food together. Considered as one of their relatives, I have been invited to their homes many times. In my opinion, this frequent contact coupled with our friendly approach have shaped our relationship to look more like a family than a service provider & service recipient. [Nurse, West Gojjam Zone]

b. Care and perception of mothers for their small babies

According to healthcare providers (HCPs), although some pregnant women were aware of the causes of giving birth to small babies (e.g. dietary deficiency during pregnancy, workload, poor personal hygiene etc.) and the possible preventive measures to do during pregnancy (e.g. taking balanced diet, decreasing workload, ANC follow-up etc.), others still remained highly attached to local beliefs.

During our home-to-home visits, what we have observed is that mothers of small babies are not willing to bring their children to health facilities for services like immunization on time and when we asked them the reason, they responded like 'Why would I bring a very small weight baby who is going to die sooner or later to a health facility? They will not grow anyway and are rather burden to the community and to his/her parents in particular.' What is more worrisome is that they do not even want to show us their babies while we are at their homes. I clearly see a knowledge gap here. Although we are working day and night to teach the community about such perceptions, I do not think we are even closer to our target. [Health extension worker, South Gondar zone]

Women did not bring their small babies to healthcare facilities did not mean they will just keep fingers-crossed. When they encountered such unusual incidents, they would relate the case with something, either to a supernatural power or cultural belief. If they linked it with a super natural power, they would try "tsebel". On the other hand, if they attach it with culture, they would try traditional healers. They would only seek care from healthcare providers if none of these worked out.

Women usually relate giving birth to small babies and preterm births to religious and cultural beliefs. For instance, punishment/curse from God, visiting people who are mourning, touching a dead body while pregnant, 'shotellay ' etc. As a result of this, they do not want anybody know about this and they are not willing to share this with anyone including healthcare providers. But this does not mean that they will keep just quiet. Depending on their religion, they still might look around for solutions. For instance, Orthodox Tewahdo Christians, might go to 'tsebel'. Others might prefer traditional practitioners. Only if the

traditional medicines or whatever they tried do not work, families access care from healthcare providers.
[Nurse, South Gondar zone]

According to a midwife who has been working for many years in that area, there were few conditions when women would consider seeking care from healthcare providers as the only way out for their current problem. For example, if the situation with their babies seemed very serious, they would go straight to nearby healthcare facilities.

Working for the last 10 years in different health facilities, I have learned that women do not usually seek care for their small babies and they do not have the courage to bring their children to health facilities unless their babies get seriously sick as it can be exhibited by various symptoms like stopping breastfeeding. The health education programs seem to have brought some changes in this regard but we still need to work aggressively to bring the required behavioural changes to the expected level. [Midwife, West Gojjam zone]

c. Group Antenatal Care (gANC)

Group antenatal care is a kind of healthcare service provided to pregnant women of similar gestational ages who are placed in cohorts of 8–12 women to receive scheduled care. gANC has some resemblance with monthly conferences. It is a new concept and has never been practiced in any of the health facilities where this study was conducted. Therefore, the assumption here was that women's perception towards monthly conferences could give some clue about the feasibility/acceptability of gANC. According to healthcare providers, women did not show interest in monthly conferences nor gANC for reasons outlined below.

In rural areas, people usually went to health facilities expecting drugs mainly in the form of injection. In addition, they felt that they got appropriate therapy only when they were requested to provide sample and got tested. Therefore, women's expectation was mentioned as one major reason for showing no/little interest to monthly conferences and gANC.

Pregnant women consider monthly conference as an ordinary meeting where women just gather, listen and go home when it is done. Some of them also consider this conference as irrelevant and participating in such programs is simply wasting their precious time because there is no laboratory testing, TT immunization and abdominal examination. Unfortunately, none of them are done during the conference except health education. Due to this reason a woman who has participated in one conference usually do not show up in the next conference. gANC is no exception here. [Midwife, South Gondar zone]

Schedule and topic preference were also raised as potential reasons for women to lose interest in monthly conferences. A rural woman is relatively free during holidays as there are no outdoor activities. As a result, holidays are more preferred by women to go to health facilities. Topics were also determining factors for women to participate in conferences. During conferences, there was little room for women to ask whatever complain she had. Topics were prespecified.

From what we have learned so far, unless gANC is made to fall on a holiday, number of attending mothers would be significantly low. Women also prefer to discuss more on their priority issues than topics pre-specified by healthcare providers. [Nurse, West Gojjam zone]

Privacy was another issue that made women less comfortable with conferences. They did not want to talk in public about their issues related to pregnancy.

Pregnant women did not want others know about their pregnancy issues. Women from rural areas are shy and this problem gets even worse when it comes to a group where there are more attending women. [Health extension worker, South Gondar zone]

Long waiting time was also mentioned as another reason that made women show less interest in conferences and gANC. They always wanted to get services so quickly and get back to home.

Women travel 3–4 hours to get into this health center. They want to get the service as quickly as possible so that they can get back to home before it is too late so that they can cook food for their family and take care of their children. However, for the gANC, I think she needs to wait for other women to join the group before they start getting the service. From my experience, they do not like this at all. [Midwife, West Gojjam zone]

d. Dietary practices

Nutritional counseling took place mainly during antenatal visits, monthly conferences and home-to-home visits. Each counseling sessions touched upon various points.

Nutritional counseling is one major topic during monthly conferences and ANC visits. During nutritional counseling, we advise women mainly on how taking appropriate nutrition during pregnancy is key to the wellbeing of both the mother and child, how to get and prepare balanced diet from locally available cereals and food sources, when to start breast feeding and how long to breast feed, when to start complementary feeding after birth and preparation of baby food after 6 months. [midwife & health extension worker, West Gojjam zone]

Every healthcare services demanded the face-to-face communication of both groups: healthcare providers and pregnant women. Nutritional counseling was no exception. The more women were courageous to visit healthcare facilities, the better they would be acquainted with dietary practices.

The frequency of nutritional counseling depends on the frequency of our contact with women. In other words, if she visits health facility four times throughout her pregnancy period, then she will get counseled 4 times. Every time a woman comes to health center for ANC, her weight will be regularly measured. As a woman is expected to gain weight during pregnancy, our counseling is based on her previous records. [Midwife, South Gondar zone]

Health extension workers also shared us their view about one component of nutritional counseling which had been implemented in that area: food preparation demonstration.

Although it is no longer happening now, food preparation demonstration has been conducted by two organizations which were operating in this area: ENGINE and World Vision. I can witness how productive it was to combine nutritional counseling with food preparation demonstration. It has changed the dietary practices of many women. I wish if I could keep demonstrating how they can prepare different types of food from what is available locally but we do not have the essential materials such as utensils. [Health extension workers, West Gojjam zone]

Despite the repeated counseling sessions, women poorly practiced the health education messages at home. Much of participants' opinion for the poor dietary practices by pregnant women went around religion.

During nutritional counseling, we advise pregnant women to eat additional food stuffs on top of their regular diet, to include animal products in their diet and to increase the frequency of eating compared to what they used to do before they got pregnant. However, majority of them are Orthodox Christians and they do not eat meat, egg and dairy products during fasting seasons [Midwife, West Gojjam zone]

Women's poor dietary practice was only limited to food types prepared at home. They were also very hesitant to take iron folate, a supplement freely provided to pregnant women by health centers.

Pregnant women get iron supplementation either from health center or health post. They take it daily at night until delivery. Despite its access for free in health facilities, women do not take it as expected mainly for two reasons. It frequently stocks out. On the other hand, some women do not adhere well to iron because of fear of fetal weight gain and side effects like GI irritation. [Midwife, South Gondar zone]

e. Infection management practices: UTIs/STIs

When women came to health centers, providing specimen and getting tested for any complaint they might have was their top priority. However, provision of this service was dependent on a number of factors such as presence of a laboratory professional and availability of test kits among others.

Once women arrived at health centers, they always wanted to start with laboratory testing (UTIs, STIs), otherwise they would not be satisfied. But the reality was that all treatments were not preceded by laboratory testing. [Nurse, South Gondar zone]

The types of services provided at health center and health post level were different. Health extension workers who were the sole service providers in health posts did not have the skill and training to do any kind of laboratory testing. Hence, tests for UTI and STI were done in health centers and hospitals. However, STI test using vaginal swab has never been done in any healthcare facility.

Urine and STIs tests (like syphilis and HIV) take place during ANC visits in health centers. Unlike very common specimens such as urine, blood and stool, taking one's own vaginal swab is a completely new procedure which pregnant women have never been requested before and it has never been practiced in any of the health facilities in this region as far as my knowledge goes. We do not have also prior

experience. However, if women are ordered by HCPs to collect vaginal swab by their own, they would be willing to provide the sample. Women are always very enthusiastic to provide any kind of specimen. [Midwife, West Gojjam zone]

f. Women's ANC & PNC attendance and institutional delivery

Mostly in rural communities, if a woman is in her early days of pregnancy, she did not want people know that she is pregnant. One of the participants explained the reasons as follows.

In this area women do not want to disclose pregnancy especially if she is in her early days. They believe that if they do, abortion will follow. Due to this and other reasons, they usually come to health centers very late. Others will just give birth at home. [Midwife, South Gondar zone]

There were different traditional ways to suspect pregnancy among women in the community. WDAL and district/kebele chairman were more used to these identifying mechanisms than healthcare providers.

A woman is suspected to be pregnant if she stops fetching water or her husband refrains from carrying dead body or if she does not show-up to places like religious institutions and public markets as she used to do before she got pregnant. [Midwife, West Gojjam zone]

In the health centers where this study was conducted, there was a structure in place to track and link pregnant women in villages who are not yet linked to health facilities. They also used this structure to track home deliveries. Included in this structure were HEWs, WDALs, district chairman and study nurses.

Tracking pregnant women and home deliveries is usually done by Health Extension Workers (HEWs) in concert with Women Development Army Leaders (WDAL) and district chairman. There is a 1 to 5 women structure in the community that helps WDAL identify pregnant woman and home deliveries easily. If a woman is identified to be pregnant, then she will be linked with health centers to start getting her ANC services. On the other hand, if home delivery is identified, mother will be advised to visit health facilities for any complication or to get her child vaccinated. [Health extension workers and Midwife, South Gondar zone]

Pregnant women were also tracked and linked to health facilities based on their estimated date of delivery (EDD). This worked only for those women who showed up to the health center at least once during their gestational period.

There is also a system in place where HEWs are tasked to keep an eye on those pregnant women who are in their last gestational week based on their estimated date of delivery. Those who are willing will be sent to health centers and made to stay there until they give birth. [Midwife, South Gondar zone]

There were possibilities for a woman to switch health centers. That means a woman might have her prior ANC at one health center and continue the rest of her visits at another health center. In this case, tracking this woman is very important so that she will not start her ANC from scratch.

Although not common, if we found out a pregnant woman/mother attending her ANC at a different health center, she will be tracked using her address (like kebele, got etc.) that was originally recorded in our register. In addition, pregnant women/mothers with prior ANC visits at different facilities will be linked with our facility if they bring their files/documents. However, there is very little (if not none) communication with other health centers to crosscheck whether the newly arriving woman in our health center has attended her prior ANC visit in that health center or not. [Nurse, South Gondar zone]

Discussion

These findings demonstrate the perception of healthcare providers about healthcare seeking behaviour of pregnant women. The different components of healthcare seeking behaviour are discussed below.

Pregnant women's interactions with healthcare providers have varying implications for ANC attendance, delivery and postnatal attendance. A study done in three African countries (Ghana, Kenya and Malawi) showed that delaying ANC until the third trimester led to chastisements from health workers; this was particularly the case if a woman arrived at a health facility to deliver without having previously attended ANC. Hence, women's fear of chastisement from health workers sometimes prompted ANC attendance. On the other hand, women's interactions with healthcare staff could also result in delayed ANC. (Pell *et al.*, 2013). The result of our study showed the contrary. Pregnant women/mothers have built a good relationship with healthcare providers of all levels. Although ANC visits are the major platforms that bring HCPs/HEWs and pregnant women together, monthly conferences, HEW's home-to-home visits and immunization programs also further strengthened their relationship and played a pivotal role for women to build trust on healthcare providers. Neither social factors like wealth and educational status nor fear of healthcare providers have affected the relationship between the two groups as opposed to the study done in the three African countries where communication at healthcare facilities tended to be more two-way if a woman was comparatively wealthy or well educated or had a familial relationship or friendship with the health worker(Pell *et al.*, 2013).

Good provider-patient communication is the bedrock for patient satisfaction. The more a patient is satisfied, the more likely she will utilize maternal services, follow instructions and adhere to all treatment regimens (Madula *et al.*, 2018). However, this study revealed that pregnant women were not using healthcare services per MOH recommendation in spite of their good interaction with healthcare providers. Women's attachment to religious and cultural beliefs and transport access to healthcare facilities strongly influenced women's healthcare seeking behavior. This result is in line with a study conducted in Nigeria where location of health facilities, education, patriarchal social arrangement, rural residence, poverty and religious and cultural beliefs about certain diseases strongly affected access to health services (Oyedel 2017).

This study has also revealed that women preferred individual ANC over group antenatal care (gANC) or any form of gatherings like monthly conferences. Knowledge gap, privacy issues, schedule to get such services and long waiting time until their team members join before they start getting the services were

some of the reasons that made women show little/no interest for gANC. However, findings from the US showed that gANC has been shown to improve the quality of care and maternal and infant outcomes. They also showed that implementation of group antenatal care in a context of high mortality and HIV prevalence is especially innovative because this is a comprehensive intervention that simultaneously addresses the multiple needs of women (Chirwa *et al.*, 2020).

This study also indicated that counseling women about nutrition as one major component of the health education program. Nutritional counseling usually took place during ANC visits, monthly conferences and home-to-home visits. Despite the fact that counseling was part of the routine ANC service, food taboos, those foods which are strictly forbidden for health, cultural, and religious reasons, has affected women from getting the recommended nutritional requirements during pregnancy. The findings from this study were supported by a study conducted in rural Tigray regarding women's dietary practices. Similarity of these findings might stem from the religious and cultural connectedness of the two regions. According to the study done in rural Tigray, food taboos were thought to have been established during pregnancy as a means of protecting the health of women and their babies. It also added that religious fasting as was one of the categories of dietary or food taboos, which may affect the dietary intake and nutritional status of pregnant and lactating mothers (Desalegn *et al.*, 2018). According to Desalegn *et al.*, in Ethiopia, nearly half (44%) of the whole population are Ethiopian Orthodox Christians. Religious fasting from any animal source foods and abstaining from any foods and water for some hours daily is mandatory. Fasting accounts for 49–69% of the total number of days of the year. That means, 180 mandatory fasting days for laymen and up to 252 days for clergy and the particularly observant (Desalegn *et al.*, 2018). This clearly shows the impact of religion on dietary practices.

According to the data generated from this study, screening for routine laboratory services such as STIs and UTIs was performed in health centers. However, provision of these services to women were dependent on a number of factors. Availability of test kits, presence of functional laboratory and trained laboratory personnel were identified to affect the service provision one way or the other. Findings from this study also showed that STIs testing using self-collected vaginal swab has never been practiced in the study areas as well as elsewhere in the region. Mainly due to the scope of the training health extension workers got in colleges, they were not entitled to perform any of these tests in health posts.

Another interesting finding was that Government has put in place a structure to track pregnant women either for early ANC service initiation or facility delivery or both. This structure goes from Midwife/nurse down to women development army leaders (WDALs). The communication works in both directions. If a WDAL (in their 1-to-5 women structure) identifies a pregnant woman who did not start ANC service or any home delivery, she will report it to a health extension worker who is assigned to work in that specific area. This HEW will then let midwives/nurses know about it. Finally, the woman will be linked to the nearest health center to start her ANC. If it is home delivery that is identified by the WDAL, HEWs or midwives/nurses will keep an eye on this woman for any complication that might follow. Despite all these efforts done by the government, home deliveries are still common in the area and the national rate of home delivery currently stands at the rate of 73% according to EDHS 2016. Reasons include lack of

ambulance/transportation system to health facilities, lack of awareness, cultural and religious factors etc.

Conclusion

The trust built between healthcare providers and pregnant women has impacted the healthcare seeking behaviour of women positively. This trust could be partly attributed to monthly conferences despite the fact that women were not as such interested in attending group meetings.

Healthcare seeking behaviour of women during pregnancy, birth and postpartum was highly influenced by religious and cultural factors. Regular health education programs by healthcare providers on danger signs during pregnancy, nutrition, pregnancy outcomes, family planning and benefits of institutional delivery could help improve health-seeking behaviour of women.

The healthcare seeking behaviour of pregnant women was also highly influenced by lack of transport access to healthcare facilities. It was discouraging for women to travel long distances on foot and seek service from healthcare facilities.

Abbreviations

ANC

Antenatal care

ACIPH

Addis Continental Institute of Public Health

EDD

estimated date of delivery

EDHS

Ethiopian Demography and Health Survey

gANC

group antenatal care

HCPs

healthcare providers

HEWs

health extension workers

IDIs

in-depth interviews

MCH

maternal & child health

PNC

postnatal care

SNNPR

Southern Nations, Nationalities, and People's Region

STIs

Sexually transmitted infections

US

ultrasound

UTIs

urinary tract infections

WDAL

women development army leaders

Declarations

Ethics approval and consent to participate

All participants enrolled in this study provided informed written consent before they were interviewed. The information collected in this research will be kept confidential.

Consent for publication

All participants provided informed consent to publish the data. However, no individual identities will be used in any reports or publications resulting from the study.

Availability of data and materials

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

Competing interests

FS, YB and FW declare that they have no competing interests.

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Authors' contributions

FS, YB and FW participated in the design and collection of data. FS analysed and interpreted the data and was a major contributor in writing the manuscript. YB provided all the guidance needed while wiring this manuscript. All authors read and approved the final manuscript.

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