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ORIGINAL ARTICLE

ACCEPTABILITY OF THE INVOLVEMENT OF HEALTH EXTENSION WORKERS (HEWS) IN MEDICAL ABORTION (MA): THE PERSPECTIVES OF CLIENTS, SERVICE PROVIDERS AND TRAINED HEWS IN EAST SHOA AND ARSI ZONES, OROMIYA REGION, ETHIOPIA

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ABSTRACT

Background: *Unsafe abortion remains a significant contributor of maternal morbidity and mortality in Ethiopia and other developing countries. Involvement of community based health workers, health extension workers (HEWs) in Ethiopia, is a vital step in increasing access and utilization of medical abortion and related services. In order to engage HEWs, it is important to understand the attitude of women and service providers.*

Objective: *To explore the acceptability of involvement of HEWs in medical abortion by women who seek services, by abortion service providers, and assess willingness and confidence of HEWs.*

Methods*: An exploratory in-depth interview was conducted at three purposively selected health facilities in Ethiopia; namely Marie Stopes International (MSI) Adama clinic, MSI Asella clinic and Adama Government Health Centre from July-August, 2013. The interviews were transcribed verbatim and analysis was done using Atlas ti software. Themes were abstracted from coded text segments. The findings are presented using quotations, Atlas ti networks and queries.*

Results*: Thirty eight (26 eligibility, 12 follow up) women participated in the study and 9 HEWs and 7 service providers were interviewed. Almost all of the interviewed women, service providers and HEWs accepted HEWs involvement in medical abortion services. The HEWs expressed readiness and confidence. Concerns related to the involvement of HEWs included confidentiality, privacy, over dependence on abortion rather than preventing unwanted pregnancy, quality and poor referral system.*

Conclusions: *Expansion of medical abortion services by involving HEWs can contribute to the reduction of abortion related morbidity and mortality. Concerns of the study population should be addressed by training HEWs for medical abortion, creating better awareness and advocacy among women and communities, addressing quality and referral issues with proper planning, implementing and monitoring of activities.*

Key words*: Medical abortion, Eligibility, Follow up, Health extension worker, Ethiopia*

INTRODUCTION

Although major gains have been made towards meeting the Millennium Development Goals (MDGs), maternal mortality remains high in many developing countries including Ethiopia. Among causes of maternal deaths, unsafe abortion due to unwanted pregnancy remains a significant contributor of maternal morbidity and mortality in Ethiopia (1,2). A study done on induced abortion in the country estimated that there were 330,000-435,000 cases, with the average abortion rate being 23 per 1000 live births (1).

A report of the Ethiopian Ministry of Health indicates that abortion remains to be among the top ten causes of admission to health facilities with safe and unsafe abortion contributing almost identical proportions (3). However, there are some indications that morbidity and mortality might have declined slightly (4) following the revision of Ethiopia's criminal law on abortion and Technical and Procedural Guidelines developed by the Ministry of Health, which permits abortion for a wider range of indications than before (5).

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Medical Abortion (MA), sometimes known as medication abortion, has been proved to be safe and effective. It is recommended for pregnancies of gestational age up to 9 weeks (63 days) and was found to be highly acceptable by women in various settings (6 -9).

A study reported that thousands of lives could be saved if medical abortion coverage equals family planning coverage of 31% in Ethiopia (10). The technical and procedural guidelines mentioned above developed criteria for the provision of safe abortion services including medical abortion and defined roles at different levels including community levels, thus the much needed improvement of access to improve abortion related morbidity and mortality (5). In Ethiopia, community level health service is provided by health extension workers (HEWs) trained under the Health Extension Program (HEP). The HEP was launched in 2003 with the aim of having two HEWs in each village of the country. Two high school complete female candidates were selected from every village and trained at centers in various parts of the country. Their training included 16 packages covering the areas of maternal and child health, reproductive health/family planning, environmental health, nutrition and some first aid. There are about 34,000 HEWs (rural) deployed throughout Ethiopia (11,12).

HEWs are therefore well positioned to provide a potentially important role in reducing unsafe abortion. Including these cadre in the provision of medical abortion is in keeping with the 2004 Consensus Statement on Medical Abortion which states that "the emphasis should be on providers who are closest to women geographically and socially" (13).

Recently, the World Health Organization (WHO) piloted a toolkit for use by community health workers to assess pregnant women's eligibility for medical abortion and also check their follow up care needs in Ethiopia, India and South Africa with the aim of developing and evaluating a toolkit of algorithms for medical abortion. In Ethiopia, the study was conducted in partnership with the Ethiopian Public Health Association (EPHA). While validation of the tools in different contexts has been a major undertaking to implement the tools, assessment of the acceptability of CHWs and actions to be taken to improve it is an important first step in applying the tools.

The main objectives of this study are to explore the acceptability of involvement of HEWs in MA by women who seek services, abortion service providers, and assess willingness and confidence of HEWs to be involved in medical abortion referrals in Ethiopia.

METHODS AND MATERIALS

This is an exploratory in-depth interview conducted at three purposively selected health facilities in Ethiopia namely; Marie Stopes International (MSI) Adama clinic, MSI Asella clinic and Adama Government Health Centre from July to August, 2013. The study facilities are located at 100 (Adama) and 170 Km (Assela) east of Addis Ababa, and were purposefully selected based on client caseload seeking safe abortion care. The facilities are found in one of the nine regions of the country which has the largest population size (36%). They serve a mix of urban and rural women. The study populations were women who sought medical abortion during the study period, HEWs and service providers who participated in the WHO toolkit validation study.

Three experts with graduate training and work experience in the area of reproductive health and conducting qualitative studies undertook the interview of women, HEWs and providers after receiving orientation by the investigators.

Women's interviews were carried out after validation tools were applied by both HEW and the service provider and were scheduled for a time that is convenient for eligible cases, but two weeks after performance of medical abortion for follow up cases. Depending on the women's preference, Oromiffa, the most widely spoken language in Oromia Region where the study was conducted, or Amharic, the official language in Ethiopia, were used. The HEW and service provider interviews were conducted at the end of their participation in the study.

The interviews were translated into English and transcribed verbatim by the experts who moderated the interview. Based on the main source of data for the research, two Hermeneutic Units (HU) were created by loading the interview texts into ATLAS. ti software. The first HU contains 38 primary documents from women's interview transcripts and 16 primary document families were created for comparison purpose. The second HU includes 16 primary documents gleaned from interview transcripts of service providers and health extension workers. The analysis started by reading all the data and then data segments or units were initially coded by an expert in qualitative data analysis and qualitative software use (AS). This and subsequent steps of the coding process were presented to the team of investigators (MF, HY, SB,AG) and consensus was reached at each stage. The codes were developed inductively as the coder

moved through transcripts and discovered new themes of interest. At the beginning 189 and 205 first level descriptive codes were created under the first and second HU respectively.

Once all the text has been coded, themes were abstracted from the coded text segments. By looking at the data with the research questions in mind and after several processes of recoding, renaming and deleting, 67 code families/themes from the first HU and 55 code families from the second HU were created. Subsequently substantive connections by associating categories or linking data were done. Links between different categories were established and a variety of networks were created. The findings are illustrated using quotations, Atlas ti networks and queries.

The study was conducted after obtaining ethical clearance from the WHO Ethics Review Committee and the Institutional Scientific and Ethical Review Committee (ISERC) of the Ethiopian Public Health Association. Informed consent was obtained from all study participants and privacy and confidentiality was maintained at all steps of the research process.

RESULTS

Characteristics of the study population: Overall, 38 (26 eligibility, 12 follow up) women participated in the study. Socio-demographic characteristics of the women are summarized in Table 1. Twenty four women were between 20 to 30 years of age, 8 were below 20 years of age. Twenty (14 eligibility and 6 follow up cases) women were urban and the rest were rural residents. More than half of the respondents (n=22) were married women. Twenty one of the interviewed women were Orthodox Christians and 16 women were Muslim. Regarding educational status, 29 of them had completed at least grade 6 while 7 were illiterate. Sixteen respondents were housewives, 9 were students, and 5 were petty traders.

Nine health extension workers and seven service providers (three diploma nurses, two degree nurses and two health officers) participated in the study. All of the service providers had work experience of five years and above. All of the HEWs were in the age group of 20 - 30 years and four of the service providers were above 30 years. Among HEWs, five had 5 years and more working experience in the community where they were based at the time of interview.

Table 1: Background characteristics of women who participated in medical abortion eligibility and follow up study, July -August, 2013

Characteristics	Number		
	Eligible women	Follow up women	Total
Age			
< 20 years	6	2	8
20 – 30 years	15	9	24
>30 years	5	1	6
Residence			
Urban	14	6	20
Rural	12	6	18
Marital Status			
Married	15	7	22
Not Married	11	5	16
Religion			
Christian Orthodox	14	7	21
Muslim	11	5	16
Protestant	1	0	1
Educational Status			
Illiterate	5	2	7
Grade [1 – 5]	2	0	2
Grade [6 - 10]	14	8	22
Above grade 10	5	2	7
Number of living Children			
None	14	7	21
[1 – 2]	5	3	8
≥ 3	7	2	9
Occupation			
Housewife	11	5	16
Petty traders	4	1	5
Privately Employed	4	0	4
Student	3	6	9
Housemaid	3	0	3
Study site			
Adama	14	4	18
Asella	12	8	20

Acceptance of involvement of HEWs in medical abortion by women who sought medical abortion services

Most women accepted and supported involvement of HEWs in providing medical abortion related services in their community. One of the participants stated *"I strongly support it, because rather than traditional and unsafe methods of terminating pregnancy like putting different materials into their uterus which can cause death, it is good to get the service from health extension workers," a 29 year old urban resident.*

A woman who does not read and write from a rural area explained her acceptance of the involvement of HEWs in medical abortion by saying: "*I surely accept and appreciate it (MA). It is very important for women in rural area because they don't have awareness about such service and where the service is available. There are women who suffer a lot in their homes or go to traditional abortionist or attempt to abort by themselves unsafely. I support HEWs if they provide the service and the community will also appreciate this*".

In order of frequency, the main reasons given by women for provision of medical abortion service by HEWs include community acceptance of the service,

increased accessibility of the service, reduction of costs and time saved. A study participant who was a college student stated her reasons as follows:
"*HEWs are the one on whom the community members have developed trust and confidence. The community can use the service if accessible in their vicinity. But first creating awareness about the service is important, and then nothing could hinder the community from using the service*".

Another woman who was a housewife further strengthened the HEWs acceptance by the community. "*The community members have good attitude and will accept them (HEWs) if they start to provide this service for those women who are in need. For example, I have many children and if I will have another child, it is a risk for my health and my life eventually. I think the community also supports this idea*".

A 30 year old participant from a rural area raised a time and cost related reason for acceptance. "*Why should I spend my time and money if the service is available in my locality? I myself spent a lot of money for transport but if the service were available in my kebele I would not come here. So to minimize cost women may go to health post."*

Comparing medical abortion service provision by HEWs with services in the clinics that are mostly found in urban areas, most respondents preferred health extension worker to provide medical abortion in their community. A 34 years old urban resident said
"*I would prefer to be assessed by health extension worker who is nearby. Why should I take the extra burden of coming to town? For example, today I spent 20 birr for transport. I might use it for other things for my children. I will be very happy, if they provide service, even terminating the pregnancy. Because as humans, we may face unwanted pregnancy by mistake*".

A concern women raised in relation to provision of community based medical abortion service was misuse or overuse of the service. That is, it may disincline women to prevent unwanted pregnancy. A 23 year-old rural resident said:
"*It is better to avail such type of safe service rather than the traditional way. But, it needs careful attention and supervision because it may introduce unnecessary use by women. If the service is known to be available at a health post, women might come for abortion service frequently. Women as well as HEWs might not give due focus for prevention of the root cause of abortion* ".

However, there were some respondents who preferred service providers at health center or clinic for their assessment: An 18 years old respondent from a rural area said *"I want to go to a known clinician rather than health extension worker because in clinics there are enough equipment and adequate skill to offer the service. In addition I think health extension workers may not have adequate knowledge and skill to terminate pregnancy".*

Similarly, fear of being seen by family members or relatives while receiving the service from HEWs, and desire to conceal *their secret* that they are pregnant and want to have abortion were also mentioned as reasons for not wanting to consult HEWs for MA. Two women reported that their preference is based on approach and service quality provided rather than the place where the service is delivered. One of them said: *"I just want to go where there is good service and their approach is attractive".*

The network view illustrated in Figure 1 indicates the reasons for preferring HEWs or service providers as well as service sites for medical abortion services.

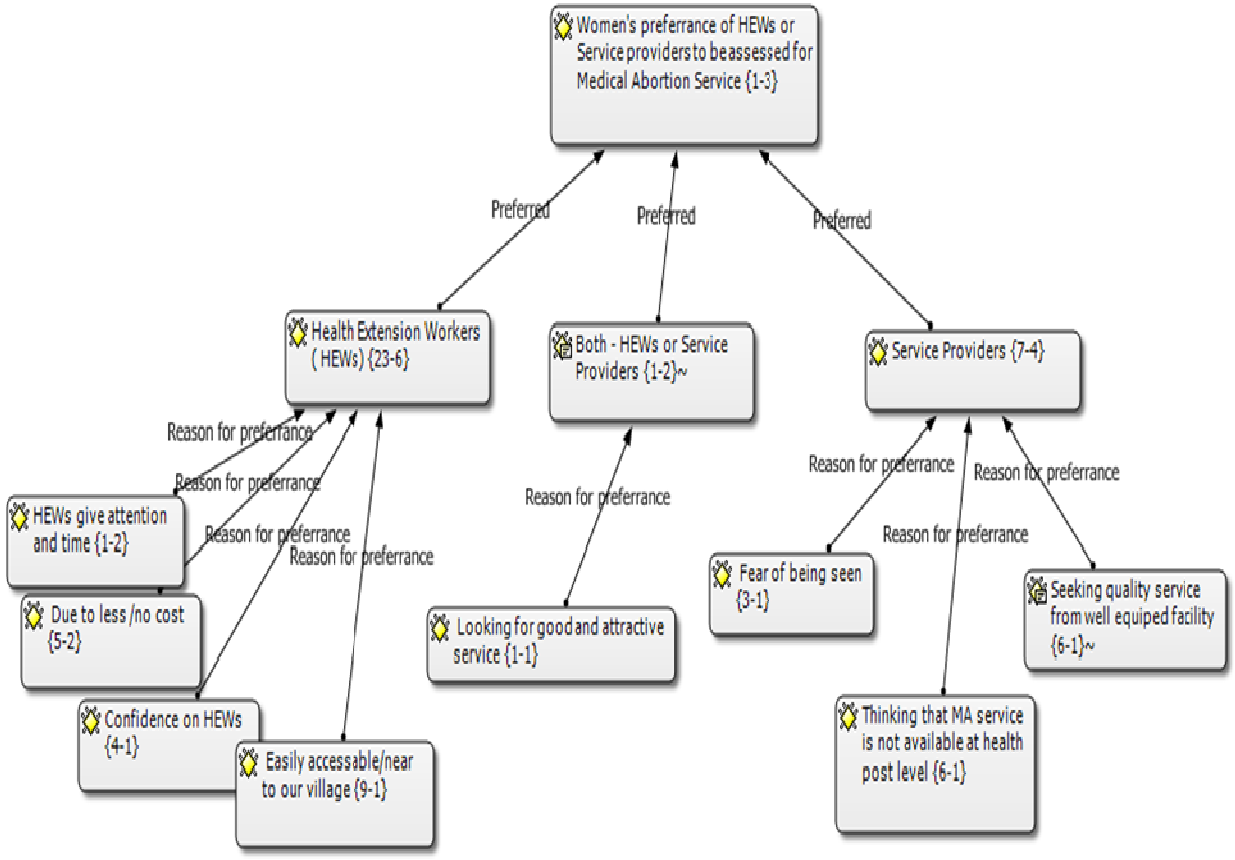

Figure 1: Atlas Ti Network View on women's preference of health extension workers or service providers to be assessed for medical abortion service in health facilities in Adama and Assela, 2013.

Note: The first number in the parenthesis indicates the number of quotations to which each code is connected and the second number indicates the number of other codes linked to each code.

The involvement of Health Extension Workers in medical abortion service and its acceptance by service providers:

Almost all service providers accepted and appreciated the involvement of HEWs in screening women for medical abortion eligibility during home visit and referring women who seek the service to health facilities where abortion service is provided, although some expressed concerns. A female service provider with 25 years of experience said:
"*I am very comfortable and very happy. Particularly those women in rural areas do not know about abortion service and where the service is provided which put them at risk. With this approach HEWs will have new opportunities to meet women and talk about safe abortion service including medical abortion. While practicing medical abortion eligibility and follow up assessment privacy and confidentiality is important".*

Similarly, service providers explained that the participation of HEWs in providing follow up advice and referral for women who had medical abortion during home visit practical and providing a good opportunity. Pertaining to this, one of the service providers expressed his reaction as follows: *"I strongly support the medical abortion follow up assessment by health extension workers because a woman needs post abortion service after termination of pregnancy and she needs to be sure whether the pregnancy is terminated successfully or not. In addition, she may develop complications after termination of pregnancy. Thus follow up assessment has equal importance as eligibility assessment". (Male service provider, 30 years old)*

Figure 2 shows the network output view on concerns that service providers had regarding the involvement of HEWs in assessing women eligibility for medical abortion and referring to clinics where the services

are provided. These include weak referral system, difficulty of maintaining the privacy and confidentiality of woman seeking this service, over utilization of medical abortion service. A service provider expressed the following concern: "*Problem with referral is nationwide. We refer a client but nobody knows whether she gets the treatment or not. Often we don't get feedback. Strengthening the referral network is very important to avoid such problems"* (50 years old female service provider).

On the other hand, a service provider did not accept HEWs provision of advice and care for women who need MA doubting the confidence and the skills of health extension workers. She remarked:
"I think follow up assessment is even more complicated than assessing eligibility. In fact if women see their menses after medical abortion and HCG becomes negative, it is successful so there is no problem. But sometimes the women might have not seen their menses due to use of contraceptive and HCG might be false positive, this one will confuse them".

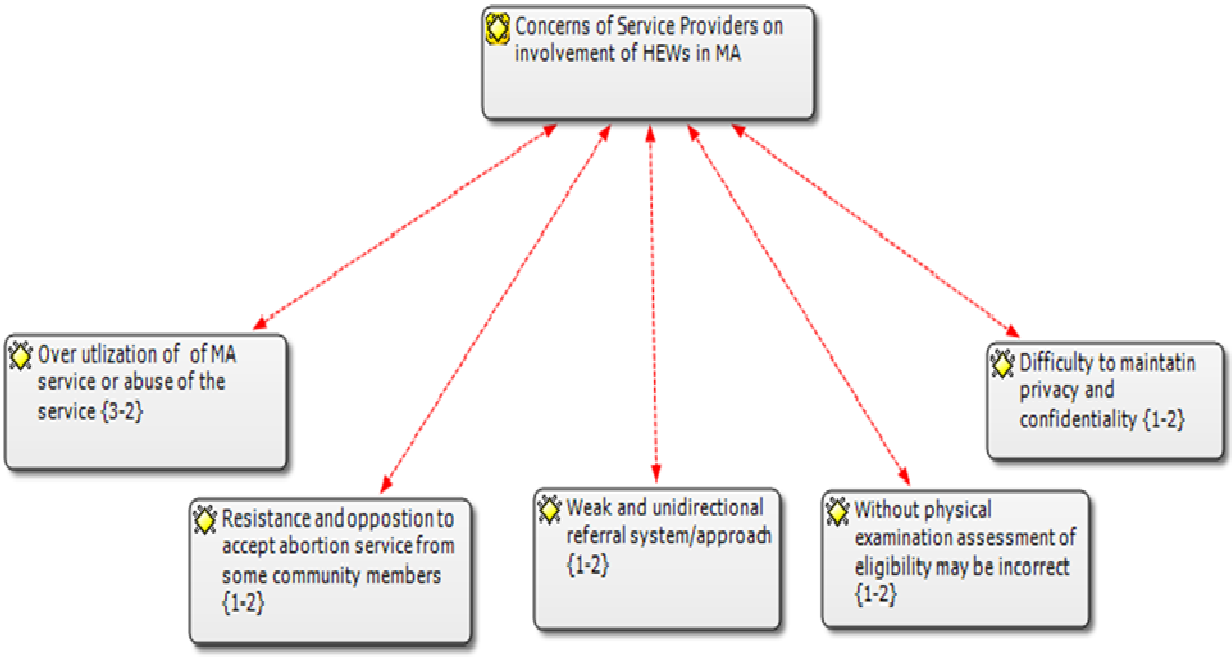

Figure 2: ATLAS.ti Network View showing the concerns of service providers on involvement of Health Extension Workers in medical abortion service provision in health facilities in Adama and Assela, 2013 .
Note: The first number in the parenthesis indicates the number of quotations to which each code is connected and the second number indicates the number of other codes linked to each code

HEWs opinions on their involvement in MA:
Generally, HEWs appeared to be willing and felt comfortable regarding their involvement in providing eligibility assessment, referral and appropriate guidance on medical abortion in the community. Some HEWs even requested the inclusion of this service as one of the components of the primary health care package they provide.
"Previously I was referring them (women who opted for abortion) without any assessment and advice but now I can assess who is eligible or not and I also know where to refer. So, using this knowledge and skill I am ready and comfortable to serve my community". (HEW with four years of experience)**.**
Another HEW said: *"I am very happy and comfortable to provide medical abortion assessment and referral service for women who are really in need of the service". (HEW with five years of experience).*
The main points raised by health extension workers for successful implementation of this service in the community include; the importance of involving community leaders and influential persons to minimize resistance from some community members, means of avoiding overuse of the service by women

like by creating awareness among the community, and availability of the required equipment and supplies at health post level.

Concerning post medical abortion follow up, HEWs remarked that it is highly acceptable as one of their routine activities and they feel comfortable and will gladly carry it out. The opinions of HEWs are shown in the query report in figure 3.

Important concerns health extension workers pointed out on providing follow up advice after medical abortion and referring them for follow up care to health facilities was the shortage of materials and supplies to provide the service, women's unwillingness to come for follow up care, and lack of sufficient knowledge and skill to manage complications that may follow abortion.

Figure 3: Atlas Ti. Query Report on HEWs acceptance to provide follow up advice for women after medical abortion and their opinions

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HU: WHO EPHA Medical Abortion study
File: [C:\Users\Vostro154032bit\Desktop\Codes and code families
Date/Time: 2013-09-28 18:07:20

P 1: A-HEW 1.docx - 1:36 [Would you feel comfortable pro..]
Codes: [Acceptability by HEWs- Comfortable for providing medical abortion follow up]
"Would you feel comfortable providing medical follow-up advice on medical abortion during a home visit".
P 2: A-HEW 2.docx - 2:45 [yes I don't have any problem.]
Codes:[Acceptability by HEWs- Comfortable for providing medical abortion follow up]
"*Yes, I don't have any problem".*
P 4: C-HEW 3.docx - 4:45 [I am ready to help women who a..]
Codes:[Acceptability by HEWs- Comfortable for providing medical abortion follow up]
"I am ready to help women who are really in need of this service".
P 5: C-HEW 4.docx - 5:44 [I am very comfortable to asses..]
Codes:[Acceptability by HEWs- Comfortable for providing medical abortion follow up]
"I am very comfortable to assess women and refer for follow up after they have undergone medical abortion".
P 6: C_HEW 1.docx - 6:42 [I am happy and comfortable to ..]
Codes:[Acceptability by HEWs- Comfortable for providing medical abortion follow up]
"I am happy and comfortable to serve my community in rural area who is in need of the service".
P 7: M-HEW 1.doc - 7:35 [Yes. I am very comfortable as ..]
Codes:[Acceptability by HEWs- Comfortable for providing medical abortion follow up]
"Yes. I am very comfortable as I mentioned above it is part of the service".
P 8: M-HEW 2.docx - 8:42 [I am comfortable]
Codes:[Acceptability by HEWs- Comfortable for providing medical abortion follow up]
"I am comfortable"
P 9: M-HEW 3.doc - 9:40 [I am comfortable and happy]
Codes:[Acceptability by HEWs- Comfortable for providing medical abortion follow up]
" I am comfortable and happy".

DISCUSSION

Almost all of the interviewed women accepted health extension workers involvement in medical abortion services substantiated with reasons related to prevention of resorting to unsafe traditional abortion, cost, and time saved because of the presence of the services in the vicinity. This is similar to the finding of a pilot project in Tigray Region, north Ethiopia where HEWs provided medical abortion with misoprostol. Women in the project preferred medical abortion to surgical abortion (14). Concerning the acceptability and preference of medical abortion in general, studies in Ethiopia and elsewhere reported medical abortion to be the preferred method compared to other methods of abortion (8,9,15).

Reasons for not preferring HEWs for MA by some respondents included fear of being identified by community members as abortion service seeker and concern about the quality of advice and service provided by HEWs. Similarly some women expressed concern about possible overly encouragement of abortion, privacy and confidentiality. These issues need to be considered in organizing the services, if HEWs are to be involved in the provision medical abortion.

Almost all service providers accepted and appreciated the involvement of HEWs in providing medical abortion related referral and follow up. However, difficulty of maintaining privacy and confidentiality of women seeking the service was one of the main concerns that service providers had. Some of these concerns are related to the presence of resistance and opposition from some community members concerning abortion services which were also expressed by them (Figure 2).

Another concern was the weak referral system between the health post and other health facilities. A national study conducted among HEWs in 2010 demonstrated that there were problems with referral of patients from the health post and feedback to health post where HEWs are working. The study indicated that some patients visiting health posts were unwilling to go to referral health facilities and majority stated lack of financial capacity as the main reason for not attending referral health facilities. Less than a quarter of health posts reported that they received feedback from the referral health facilities about the patients they referred, and only small number of patients came back to the health posts for follow-up care (16).

Trained HEWs expressed willingness, readiness and confidence in identifying women eligible for medical abortion and follow up of women who had medical abortion. This will undoubtedly enhance the acceptability of their involvement in medical abortion. Their concerns are similar to those of the service providers. On top of that they emphasized shortage of materials and supplies and possible lack of skills to manage post abortion complications.

In this study we included HEWs that serve the rural population which consists about 85% the total population of the country. This is also the population group where access to health interventions is most needed. Considering the standard training and practice of HEWs followed in almost all of the country, the results of this study are generally applicable to the whole country, except perhaps some pastoralist communities.

In conclusion, women and health service providers share view point that involvement of HEWs is generally acceptable in the provision of medical abortion services. They also share some concerns. The willingness and confidence of HEWs on the one hand and their acceptance by the community and service, providers on the other can create favorable ground for strengthening and expansion of MA abortion services and thereby contribute to the reduction of abortion related maternal morbidity and mortality. However, their concerns should be addressed during the training of HEWs for medical abortion, by creating better awareness and advocacy among women and communities, addressing quality and referral issues with proper planning, implementing and monitoring of activities.

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in the assessment and selection of sites for the study, assigning focal persons, recruitment and selection of supervisors and HEWs and providing necessary equipment, space and materials.

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