

## Potential Barriers to Utilization of Maternal Health Services in Public Health Facilities in Rural and Remote Communities: A Qualitative Study

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**Abstract:** Maternal health services utilization is essential in improving the health status of women and children. Utilization of maternal health service increases women's likelihood of accessing quality maternal services, thereby reducing maternal and infant mortality rates. The government of Kenya introduced several measures toward enhancing maternal health services utilization with specific focus on low socio-economic and rural communities. Despite the implementation of these measures, maternal health services utilization in many rural and remote areas in the North Eastern Province remained low. This paper describes the consumers' perspectives on potential barriers to utilization of maternal health services in public health facilities in rural and remote communities in the North Eastern Province of Kenya. The study adopted a qualitative descriptive design using focus group discussions. Purposive sampling was carried out to select the participants. A total of nine FGDs were held with 81 participants who met the inclusion criteria for this study. The researchers used thematic content analysis to process the data. Ten potential barriers emerged from the focus group discussions and classified as: (1) users related barriers, (2) providers related barriers, and (3) user-provider interaction barriers. These potential barriers are interrelated and can play an important role in the decision of women in rural and remote areas to seek, or to delay seeking, maternal health services when needed. This study highlights the importance of integrating the socio-cultural dimension in our understanding of maternal health services utilization in Africa. Potential barriers to maternal health services utilization must be addressed within the socio-cultural context of the consumers if there is going to be any significant improvement on maternal health services utilization in rural and remote communities of the North Eastern Province of Kenya.

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### 1. Introduction

Understanding the consumers' perspective on factors that may negatively influence maternal health services utilization is critical in strengthening the interventions aimed at enhancing women's utilization of health services in the province. The Ministry of Health of the Government of Kenya adopted a sector-wide approach under the National Health Sector Strategic Plan (NHSSP) with the view of promoting and improving the health status of all its citizens (Kenya Ministry of Health-Kenya, 1999). Central to these strategic plans is the Kenya Essential Package for Health (KEPH). The KEPH focuses on increasing equitable access to health services by targeting interventions at the community level and poor deprived areas and groups (poor districts, sub-districts, pastoralists); addressing barriers to access; integrating the different programmes towards the client; enhancing the promotion of individual and community health; and improving the quality of service delivery by improving the responsiveness of health workers and changing their prevailing attitudes towards clients (Kenya Ministry of Health, 2006).

Despite the implementation of these measures, maternal health services utilization in many rural and remote areas like in the North Eastern Province (NEP) remained low. Ninety nine percents of the deliveries take place at home compared with 59.0% countrywide; only 6.0% of 1,600 mothers who attend antenatal care (ANC) per month deliver in the hospital. Maternal mortality rate stands at 1,000 – 1,300 per 100,000 live births against the national rate of 414/100,000 live births (Kenya Ministry of Health, 2007). Authors (Scheppers, van Dongen, Dekker, Geertzen & Dekker, 2006) argued that clients can experience barrier to health care use if their expectations or beliefs are not in line with what is proposed by the healthcare providers. They define a potential barrier as the one that affects clients under certain circumstances or affects only some clients. For this study, potential barriers refer to factors or conditions that restrict or prevent women from using public health facilities during pregnancy, childbirth and the postpartum period. While utilization of health services refers to the process of seeking and submitting oneself to professional health care during

the same period, with the purpose of prevention or treatment of health problems or delivery.

This paper describes the consumers' perspectives on potential barriers to utilization of maternal health services in public health facilities in rural and remote communities in the North Eastern Province of Kenya.

## 2. Material and Methods

### *Design*

The study adopted a qualitative descriptive design using focus group discussions (FGDs). Qualitative research is based on understanding that fact is both multifaceted and active, and can be found by studying persons as they intermingle with and within their socio-historical settings. The qualitative descriptive design is useful when the researcher is interested in depicting a comprehensive summary of a phenomenon in a real-life situation without extensive interpretative deduction and in providing baseline information for further study (Polit & Beck, 2012).

### *Sampling*

Qualitative studies make use of participants who are knowledgeable and experienced about the phenomena of interest (Bryman, 2012). The study used a purposive sampling to recruit the participants from the health facility management board from four districts. Members of the health facility management boards represent the various social strata of the communities at each district. They have more insights into the health problems affecting their communities and entrusted with the responsibility of monitoring the implementation of health policies and programmes at the district level. The inclusion was based on the following criteria: length of membership in the board (at least 12 months), attendance of board meetings in the past 12 months (at least 80% of the meetings), and willingness to participate in the study.

### *Data Gathering*

A total of nine FGDs were held with 81 participants who met the inclusion criteria for this study. Each group was made of 9 participants. Of the nine groups, five were held with men (two in the largest district and one each in other three districts) and four with women (one in each district). This gender distribution was done to ensure that members express themselves freely. One open-ended question was used to trigger group discussions: 'from your experiences, what restrict or prevent women of your community to use the available health care services during pregnancy, childbirth and the postpartum period?' Probing questions were used when appropriate to enhance the richness of data. The discussions were audio-recorded to facilitate retrieval for analysis. Each FGD had one moderator and one

assistant moderator. The assistant moderator was responsible for capturing the group dynamics and emotional feelings underlying informants' views. Each FGD lasted between 60 to 90 minutes.

### *Data Management and Analysis*

The facilitator of each group transcribed the discussions verbatim at the end of the session. The transcribed manuscripts were supplemented with the field notes taken by the assistant moderator. The manuscripts were marked according to the area where the discussions took place, the date and time of the discussions, and the type of the group in term of gender. The transcribed manuscripts were reviewed by the transcribed manuscripts before capturing them into the computer using the Microsoft Word. Each transcribed manuscript was entered with a five digit code, which comprised four letters (MFGD or FFGD), followed by a numerical number (from 1 to 9). The last three letters: "FGD" in the digit stands for Focus Group Discussion, while the first letter represents the gender composition of the group (M for male and F for female). The numerical number represents the order of the focus group discussion, which was assigned according to the date and time the discussion took place.

The researchers used thematic content analysis to process the data. Thematic content analysis is a method for the subjective interpretation of the textual information through the systematic classification process of coding and identifying themes, in which coding categories are derived directly and inductively from the raw data (Creswell, 2013). The first researcher developed a coding scheme in which the themes and sub-themes were labeled, categorized and summarized, followed by charting, which involved rearranging the data within sub-themes. The coding scheme and the preliminary report were reviewed by the other two authors. The emerged sub-themes were organized and interpreted to draw relationships between codes to aid easy presentation.

### *Scientific rigor*

Scientific rigor was established through credibility, dependability, and transferability (Patel, 2008). Credibility was achieved through reflexivity and triangulation of data, using independent coding, and peer evaluation. To ensure dependability, the coding process was evaluated at different phases by two of the three authors. Transferability was observed by providing detailed descriptions of the participants' characteristics, the informants' description of the phenomenon, as well as the researchers' observations in reporting the findings.

### *Ethical Considerations*

The researchers adhered to all ethical principles related to research involving human subjects. The study received ethical clearance from the Ethics

Committees of the University and the Provincial Health Authority of the North Eastern Province. Participants were informed about the study, their rights to free participation, confidentiality, privacy, and to withdraw from the study at any time. Informed consent and confidentiality binding agreement were signed by the participant before the FGDs. No coercion was used during the FGDs and all procedures including the use of the tape recorders were explained to the informants. Data collected were treated with confidentiality and anonymity throughout the management and analysis processes.

### 3. Results

Of the 81 participants, 45 were males and 36 were females. All 81 participants were married and living with their spouses. The participants' age ranged from 25 years to 66 years. Fifty seven successfully completed their high schools and twenty four were university graduates. Seventy one participants served on the facility management board for more than 26 months and ten participants served on the board for at least 14 months. The attendance rate of the facility management board meetings in the 12 months preceding the date of FGD ranged from 80 % to 93% of the scheduled meetings (one meeting per month).

Ten potential barriers emerged from the focus group discussions. These barriers were classified under three main themes as: (1) users related barriers, (2) providers related barriers, and (3) user-provider interaction barriers. Table 1 presents the three themes with the corresponding barriers.

**Table 1. Potential Barriers to Utilization of Maternal Health Services in Public Health Facilities in Rural and Remote Communities**

Themes	Subthemes
<b>Users' related Barriers</b>	Limited knowledge Lack of money Cultural and religious practices
<b>Providers related Barriers</b>	Geographic inaccessibility Limited services at the nearest facility Shortage of medication and basic equipment Shortage of health personnel Long waiting hours
<b>User-Provider Interaction Barriers</b>	Poor communication Lack of respect and privacy

#### **Theme 1: Users related Barriers**

Limited knowledge, lack of money, cultural and religious practices emerged as potential barriers to maternal health services utilization.

##### Limited knowledge

The lack of knowledge, precisely, knowledge about the importance and benefits of maternal health services was viewed as a barrier among uneducated women. Participants felt that uneducated women were reluctant to use maternal health services compare to educated women. This reluctance was attributed to their lack of knowledge regarding the importance and benefits of maternal health services for the mother and the baby. It was well captured by the extracts below from one of the female groups:

*Our main problem is with the uneducated women. Most of them experience problems during pregnancies but they still don't go to the hospital mainly because of lack of knowledge about the importance and benefits of those services (MFGD4).*

##### Lack of money

Lack of money was viewed as a major barrier to maternal health services utilization by women. Utilization of maternal health services and health services in general was not seen as a priority due to poverty. This view was shared by most participants. It was best illustrated in the following statement:

*There is no need to think of maternal health services utilization while people cannot even afford food or transport fare (MFGD9).*

##### Cultural and Religious Practices

Female participants viewed maternal health services provided in public health facilities as incongruent to their cultural norms. The most cited examples were related to the respect for the elder and being attended by male health workers. They found it culturally unacceptable for women to be examined by male nurses and young doctors.

*Most of the times we shy away from the hospital because the doctor is of the same age than our sons and we cannot be examined by o them. It is culturally wrong to be exposed to them (FFGD 7).*

Another female participant lamented as follow:

*Why in the history of this health facility, no single female nurse has been posted? How then do you expect pregnant mothers to go to the clinic and be seen by male staff? (FFGD5).*

Some practices were identified as potential barrier to postnatal services utilization. For example, women are not expected to go out for a period of 40 days following the delivery as illustrated below:

*Some women understand the importance of postnatal check-ups but still can't use the services as expected because they believe that women and infants should not be exposed to people during the first 40 days post-delivery (MFGD8).*

**Theme 2: Providers related Barriers**

Five factors: geographic inaccessibility, limited services at the nearest facility, shortage of medication and basic equipment, shortage of health personnel, and long waiting hours were identified as providers' related barriers.

**Geographic inaccessibility**

Distance to between the health facilities and the residential areas combined with poor road conditions, and lacks of transport were attributed to non-utilization of maternal health services. Most facilities are not situated within the reach of the communities.

*The distance between the residential areas and the health facilities is a challenge for most of our members. They live far from health facilities (MFGD 6).*

The situation compelled some women, more precisely those in remote areas to use alternative services.

*My division is far from any health facilities and our women are forced to use the Traditional Birth Attendants (MFGD 9).*

Poor road conditions and lack of transport system were frequently cited by male participants as reasons for underutilization of maternal health services.

*Transport is one of the main barriers to maternal health services. Our nearest health facility does not have a single ambulance. We face serious problems, especially with pregnant ones. It discourages pregnant women to go to the hospitals (MFGD 8).*

Some participants associated the inadequacy of the transport system with maternal death in their communities.

*We had several cases of women dying on their way to the hospital because they did not have transport to take them on time, except the Camel (MFGD 2).*

**Limited services at the nearest facility**

The services provided at the nearest facilities did not meet the expectations of the communities. This view was predominant among female participants. It was often expressed with a lot of underlying frustration and helplessness.

*We do not go there (referring to the health facilities), because you never get the service you need when you need it. For example, our nearest facility does not provide any maternal health services or immunization. How do you expect mothers to go there? (FFGD1).*

**Shortage of medication and basic equipment**

Chronic shortage of medication supply and lack of basic equipment emerged from all nine groups as barriers to maternal health services utilization. Medication supply was viewed as a permanent

problem within the public facilities. Participants felt neglected by the government and frustrated by the situation.

*We cannot talk about going to the hospitals because our only source of medical treatment which is the government died long ago as far as we are concerned. Drugs are always not there, no bed linen, very old infrastructure (MFGD 6).*

**Shortage of health personnel**

The shortage was expressed in terms of number and quality of professionals. The shortage in term of number was well captured by the extract from one male participant.

*People want to go to government facilities but the biggest barrier is the number of health personnel, which is too small to attend to them timely (MFGD 9).*

The quality of health personnel as a barrier was expressed with great concern by female participants.

*Can you imagine that in my town, the main health centre does not have a single qualified health professional? Why should you go there? (FFGD7).*

**Long waiting hours**

Waiting hours before being seen by a health professional was viewed as unacceptable and demoralizing.

*It takes hours before you are seen by a health professional in most of these facilities. Same things happen at the pharmacy before you collect your drugs. You know, as mothers, we also have household chores but you spend most of our time waiting to be seen. It demoralizes most mothers to go to the hospitals (FFGD 3).*

**Theme 3: User-Provider Interaction Barriers**

Poor communication and lack of respect and privacy were identified as potential barriers from all four female focus groups.

**Poor communication**

Some women avoided using maternal health services at public health facilities because of poor communication and attitudes of health workers. They felt that information is not timeously provided or when it is provided, and when it is communicated, it was often poorly communicated.

*We are discouraged by the way some health workers communicate to us. For example, when you go to the hospital, they made you wait for long hours just to be told to go home and come back the following day without any explanation. When you come back home, you don't even think of going back there again (FFGD1).*

**Lack of respect and privacy**

The lack of respect and privacy during the provision of care restricted women from using maternal health services. Being interviewed and examined in the presence of other patients were felt



by women as disrespectful and degrading. It was expressed with disbelief and well captured in the quote below:

*Yeah, I don't go to deliver in the hospital because of my dignity. You know, people want their health problems to remain between them and the health workers or any other significant member of the family. But in the hospital, they ask you sensitive questions about your conditions while other patients are listening. They ask you to undress while lying on your bed for physical examination in view of other patients..very, very bad (FFGD 3).*

#### 4. Discussion

This study identified ten potential barriers to utilization of maternal health services in public health facilities. As indicated in Table 1, these potential barriers were classified into three main themes: (1) users related barriers; (2) providers related barriers; and (3) user-provider interaction barriers. These potential barriers are interrelated and can play an important role in the decision of women in rural and remote areas to seek, or to delay seeking, maternal health services when needed. In general, the findings of this study should be interpreted within the socio-economic and cultural context of the province, Andersen behavioral model of health services utilization, and the quality of care framework. The North Eastern Province is one of the poorest provinces of Kenya, with the lowest Human Development Index (estimated at 0.413 against 0.783 for the highest province in the country). The province is predominantly inhabited by Somali communities of Muslim faith (Kenya Ministry of Health, 2010). Andersen (1995) behavioral model is a multi-disciplinary model that brings together economic, health care-related, socio-cultural, and psychological factors. The model assumes that there is a sequential relationship between three sets of determinants on which the use of services depends, namely: (1) the predisposition to use services (predisposing factors), (2) the ability to obtain services (enabling factors), and (3) medical need.

The behavioral model suggests that certain predisposing characteristics (demographic, socio-structural, and attitudinal-belief) can facilitate or hinder the utilization of health services irrespective of the need for care (Andersen, 1995). The quality of care framework is based on the assumption that the existence of health services including maternal health services does not guarantee their use. Neither does the use of health services including maternal health services guarantee optimal outcomes for consumers (Hulton, Matthews, & Stones, 2000).

The users' related potential barriers identified in this study have been reported in studies conducted in

South Asia and Sub-Saharan African countries (Tey & Lai, 2013). Qualitative studies conducted in a small village in Northern India (Bredesen, 2013) and three districts in Indonesia (Titaley, Hunter, Heywood, & Dibley, 2010) identified lack of knowledge regarding the importance and benefits of maternal health services, lack of money, and cultural and religious beliefs as barriers to utilization of maternal health services by women. From Andersen (1995) behavioral model of health services utilization, it can be deduced that the triad: *lack of knowledge-lack of money-cultural and religious practices* inhibits women's abilities to seek maternal health services in public health facilities.

However, these factors alone cannot explain the under-utilization. The actual decision of women to use maternal health services is influenced by a combination of more than one barrier or other barriers from the providers' side or from the interaction of the users with the providers. For example, the lack of money to pay for transport would not necessarily lead to non-utilization if a health facility with comprehensive health services was at the walking distance. Therefore, enhancing maternal health services utilization in these communities will require multi-level interventions.

The five providers' related potential barriers to maternal health services utilization: geographic inaccessibility, limited services at the nearest facilities, shortage of medication and basic equipment, and long waiting hours have been reported in the literature as supply-side barriers to health services utilization (Ensor & Cooper, 2004; Jacobs, Ir, Bigdeli, Annear, & van Damme, 2012). Geographic inaccessibility as expressed by the participants in this study is more than a simple location of the health facility. It includes many other factors such as poor conditions of roads, poor public transport system, and lack ambulance services. A qualitative study conducted in Southern Malawi identified geographic inaccessibility (long distance) and shortage of qualified health professionals (lack of midwives) as barriers to maternal health services utilization by women (Kambala, Morse, Massangwi, & Mitunda, 2011).

Shortage of medication and basic equipment at the nearest facilities, lack of maternal health services, long waiting hours were identified as barriers to maternal health services utilization in qualitative studies conducted in two informal settlements in Nairobi (Essendi, Mills, & Fotso, 2010), and in rural Cambodia (Matsuoka, Aiga, Rasmey, Rathavy, & Okitsu, 2010). These barriers are interrelated. For example, the long waiting hours before being attended by health professionals can be explained with the shortages of both personnel and equipment.

Geographical inaccessibility coupled with any of the users' barriers (lack of money, cultural and religious beliefs, and low level of awareness regarding the importance and benefits of maternal health services use) can pose serious restrictions on women ability to use maternal health services.

The findings of this study revealed that poor communication and lack of respect and privacy during the provider-user interaction act as barriers to utilization of maternal health services in North Eastern Province of Kenya. These findings are supported by studies conducted in Southern Malawi (Kambala, Morse, Massangwi, & Mitunda, 2011), in rural Cambodia (Matsuoka, Aiga, Rasmey, Rathavy, & Okitsu, 2010), and in Gambia (Cham, Sundby, & Vangen, 2009). In many African countries, the client-healthcare provider interaction in maternity care facilities is often experienced by women as disrespectful, confusing (due to poor communication), and culturally insensitive. These negative experiences are attributed to non-utilization of maternal health services (WHO-Afro, 2005).

## 5. Conclusion

Public health facilities remain the main sources of maternal health care delivery in rural and remote communities in most African countries. It is acknowledged that utilization of health services including access to skilled professionals during pregnancy, childbirth, and postnatal period is beneficial for the mother and the pregnancy outcome. Therefore, the importance of identifying and addressing any barriers to utilization cannot be overemphasized. The findings of this study provide an insight into the consumers' perspective regarding factors that restrict women in rural and remote communities from using maternal health services in public hospitals in the North rural Eastern Province of Kenya. Besides the service-related barriers described under themes 2 and 3, which are well documented in the literature, this study highlights the importance of integrating the socio-cultural dimension in our understanding of maternal health services utilization. Interventions aimed at enhancing maternal health services in public health facilities should take into consideration the socio-cultural context of the consumers. Potential barriers to maternal health services utilization must be addressed within the socio-cultural context of the consumers if there is going to be any significant improvement on maternal health services utilization in rural and remote communities of the North Eastern Province of Kenya.

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