

Original Research Article

Qualitative Study of Factors Associated with Home Deliveries and Practices in Kilifi County-Kenya

Rodgers O. Moindi¹, Charles Mbakaya², Venny Nyambati³, Michael Habtu¹

¹Institute of Tropical Medicine and Infectious Diseases, Jomo Kenyatta University of Agriculture and Technology, P.O. Box 62000-00200, Nairobi, Kenya

²Center for Public Health Research, Kenya Medical Research Institute, P.O. Box 20742-00200, Nairobi, Kenya

³Biochemistry and Zoology Departments, Jomo Kenyatta University of Agriculture and Technology (JKUAT), P O Box 62000-00200, Nairobi, Kenya

Corresponding Author: Rodgers O. Moindi

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ABSTRACT

Background: Maternal morbidity and mortality is a global health challenge and majorities are associated with lack of trained supervision at delivery especially in sub-Saharan Africa. In Kenya, according to the demographic health survey of 2008/09 indicates a high maternal mortality ratio (MMR) of 488 per 100,000, attributed to the high proportion of home deliveries which accounts 56%.

Objective: The main objective of this study was to explore and describe factors associated with home deliveries.

Methods: Data were gathered using focus group discussion (FGD) and in-depth interviews (IDIs) among mothers seeking immunization services in selected health facilities within Kilifi County. The participants were selected purposively. The data was put under themes consistent with the research objectives and then analysed thematically.

Result: The predominant factors associated with home delivery identified by this study were Human Immunodeficiency Virus (HIV) testing, vaginal examinations, degree of pain, sudden onset of delivery, husband's consent, lack of transport and cost of delivery. There were no major cultural factors associated with home deliveries except administration of herbs during labor to relieve pain. Most of the participants were comfortable with home deliveries once the mother's and fetus's health are perceived in good condition.

Conclusion: The findings provide vital information on the factors associated with home deliveries and practices in the county. Policy makers, health administrators, managers and caregivers should put in place relevant and effective strategies to mitigate the barriers described above in order to increase facility-based deliveries.

Keywords: Barriers, Delivery practices, Home delivery, Perceptions.

INTRODUCTION

According to World Health Organisation figures, 585,000 women throughout the world die each year due to problems related to pregnancy and delivery and sub-Saharan Africa and South Asia accounts nearly 85% (WHO, 2012). Facility-based delivery rates remain

disappointingly low in several regions, including 48% in sub-Saharan Africa, 44% in South Asia, and 71% in the Middle East and North Africa (UNICEF, 2014). Furthermore, majority of maternal deaths in sub-Saharan Africa are associated with birth complications related to lack of trained supervision at delivery, with only

10% of maternal deaths attributable to infection or disease (Hogan et al., 2010).

The progress of maternal health in Kenya has tragically been in the opposite direction. This is a matter of great concern, as deaths arise from well-known preventable causes. All of these complications are treatable and with skilled health care during pregnancy and delivery, provided in an adequately supplied and equipped health facility, these premature deaths can be prevented (NCPDA, 2010). The 2008-09 Kenya Demographic and Health Survey (KNBS and ICF Macro, 2010) reports that more women are dying of pregnancy and childbirth related causes than was the case in 2003 (CBS, MOH and ORC Macro, 2004) 488 versus 412 per 100,000 live births .

Moreover, one of the factors associated with maternal and foetal mortality is the occurrence of home deliveries in developing countries as they are largely unplanned, accidental and unhygienic (Sheiner et al., 2004; Almeida et al., 2005). Most women in the coast region especially in Kilifi County-Kenya usually deliver at home. Though there is lack of documented data, hospital statistics approximate that only a third of all deliveries take place at the health facilities. This concern has also been raised by the Ministry of Health, rating the region as one of the regions with high mortality rates largely attributed to home deliveries. Interestingly it has been observed that though a greater proportion of these women attend antenatal care clinics, the same proportion delivers at home and then take their children for immunization at the health facilities. The reasons for this are still unclear.

Despite the measures put in place to reduce home deliveries, it is still an issue that needs to be addressed in the region. The factors that lead to persistent association with home deliveries in the region have not been extensively studied.

Therefore this study aims at assessing the reasons of home deliveries, social cultural beliefs and practices, health facility factors, individual knowledge and attitudes and perceptions of the mothers on home deliveries in Kilifi County.

MATERIALS AND METHODS

Study setting

The study was carried out within Kilifi County in three main locations namely Kilifi District hospital, Ganze health centre and Bamba sub-district hospital. These locations are chosen because they offer maternal care and delivery services within the area under study. They represent the three main levels of health facilities in the area; level 4, 3, 2 respectively.

Kilifi County is one of the counties in coast region. Based on 2009 National Census, Kilifi County has a population of 1,109,735 in a surface area of 12,610km². It has 11 urban towns with a share of urban population of 25.7%. The population density is 88 per km² with poverty rate of 71.4%. In service coverage; the proportion delivered in health centre is 13.6%, proportion of qualified medical assistance during birth 13.4% and vaccination coverage of 66.4% (KNBS, 2010; HMIS, 2010).

Study design and population

Qualitative methods were used in six focus group discussions (FGDs) to gather data from forty eight women and 10 in-depth interviews (IDIs) from key informants. The target populations for the study were women who had delivered and reported to the clinic for immunization of their children. Eligible participants include those that have consistently delivered at home, those that have delivered in the hospital, those that have delivered both at home and hospital, those that have assisted with home deliveries and TBA if present.

Sample size and technique

Six (6) FGDs of 8 participants were conducted giving a sample size of 48

and 10 IDIs were also conducted. The forty eight (48) participants for the FGDs and ten (10) for the IDIs were selected purposively. Purposive sampling is the most common method for selecting informants for focus-group discussions. It is a non-probability sampling method also known as 'judgmental sampling' that is used to select participants based on the researchers personal judgment about which ones will be most representative or informative.

Focus group discussions (FGDs)

An FGD guide was developed. The guide was designed to gather information on the perceptions, attitudes and opinions towards home delivery, delivery practices, barriers for delivery places and other cultural factors related to pregnancy and birthing process. Before the discussion commenced, the moderator (principal investigator) along with a research assistant (note-taker) explained the general topic of discussions, and let participants know that everyone should contribute their ideas and experience. The discussions lasted for about forty-five minutes to one hour. The FGDs were recorded using an MP3 voice recorder. All discussions commenced after written informed consent was granted by each member of the group.

In-depth interviews (IDIs)

An IDI guide was developed to help focus the interview and to gain increased knowledge on factors and practises associated with home deliveries. The IDIs was comprised of fathers, community health workers, traditional birth attendants and nurses in the maternity department. After consenting, they were interviewed about socio-cultural practices of home deliveries and factors contributing to home deliveries. The principal investigator probed the issues related to the factors and practices associated with home deliveries for 30-45 minutes while the field assistant was recording and taking summary notes.

Data management and analysis

The audio-taped FGDs and IDIs were transcribed to Swahili which was the language employed during the interview and later translated to English. Data was read through several times in a slow and very thorough manner to familiarize with the data and identify emerging and recurrent themes. Transcripts were also thoroughly reviewed to note the main themes which were listed down in a word document. Coding of the content was then done so as not to miss relevant pieces of information. The themes were rearranged according to the appropriate part of the thematic framework to which they relate and placed in charts for discussions and interpretation.

Ethical considerations

Participation was completely voluntary. Written consent was sought from each individual participant before the commencement of each focus group discussions session. The study was cleared by the Ethical Review Committee of Kenya Medical Research Institute (KEMRI).

RESULT AND DISCUSSIONS

Reasons of home delivery

Although majority of the participants agreed that health facilities or hospitals were the safest place to deliver, a range of factors influencing women to deliver at home were identified.

These included: Human Immunodeficiency Virus (HIV) testing, vaginal examinations, degree of pain, sudden onset of delivery, husband's consent and lack of transport and cost of delivery.

HIV testing

The participants cited fear of hospital as a reason for delivering at home. This appeared to be partly a fear of not wanting to know their own status, or having others find out that they are HIV positive. They specifically cited the fear of

HIV testing during antenatal visits and deliveries.

“Some women also don’t like attending antenatal clinic. This is because during the first visit they are to be tested everything including HIV testing. Now as you line up to test suddenly they disappear due to fear...I really trust myself but it’s my husband I don’t, therefore I fear testing for HIV. What will I do if I test positive? Therefore they don’t come to the clinic and eventually deliver at home” (Focus group discussion 1).

Studies have demonstrated that HIV testing is a barrier to attendance at ANC, resulting from a fear of being tested because of involuntary disclosure to others, fear of stigma, and fear of finding out that they have the disease (Sande et al., 2010; Turan et al., 2012). These reasons were similarly important in this study, although some participants also reported HIV testing as a reason for attending for care.

“In the hospital there is a lot of services, like prevention of diseases and especially HIV...in the hospital they have ways of preventing transmission of the virus to the new-borns. This is different from delivering at home because of the blades they use, the strings and the general handling can lead to transmission” (Focus group discussion 2)

Vaginal examinations

The participants cited dislike of the frequent hospital examinations during delivery especially vaginal examinations as the reason for home delivery Quote:

“During the labouring process, there are many doctors who will come to do vaginal examinations every now and again. They just insert their fingers (into the vagina) now and then say not yet.....not yet” (Focus group discussion 2)

“Most women don’t like the examination by use of fingers (vaginal examination)...they are shy and hence refuse to open the legs...” (IDI 1-traditional Birth Attendant)

“It’s worse if the one attending is a male.....they become shy and refuse to open the legs, its better if female...” (Focus group discussion 6)

Vaginal examinations during labour and delivery is often viewed and expressed as painful, frequent and often cited as a factor inhibiting the use of health facility for delivery. This finding is in agreement with a qualitative study conducted by Francis (2013) in Northern Ghana.

Degree of pain

Participants mentioned that they wait in their homes until the pain gets severe and this is just to avoid waiting in the hospital. As a consequence delivery occurs eventually before reaching the hospital. Therefore, pregnant women should be advised to go to the hospital immediately when the labour pain started. The quotes are as follows:

“Sometimes it depends on the pain, the level of the pain. We don’t come to hospital just to wait to deliver. We wait till when we are almost...when the pain is severe” (Focus group discussion 5)

“They wait for pain to come and be severe before coming to the hospital.....eventually delivery occurs before reaching the hospital not because of choice but due to the waiting..... So they wait for pain to come and be severe before coming to the hospital” (IDI 5-Nurse)

Sudden onset of delivery

The timing of the onset (sudden or short labour) and the unpredictability of labour was also mentioned as a barrier to deliver at a health facility in this study. This was mentioned in almost all of the participants. In addition, hospital delivery was considered to be desirable for prolonged labour.

‘When a woman experiences sudden onset of labour she usually gives birth at home’. (Focus group discussion 3)

‘Most of those who deliver at home are not aware of their dates; they don’t go to the clinic thinking they will deliver next month

when the date of delivery is this month'. (Focus group discussion 1)

Similarly, it was reported that the dominant reason for not delivering in a health care facility was that the labour/delivery came too fast (Lerberg et al., 2014).

Lack of transport

Poor infrastructure and lack of fare to the nearest health facility featured as a common reason for home delivery. Utilisation of health services has generally been influenced by many factors including distance to a facility, availability of transport and cost of receiving care. For example, it was reported;

"There are no vehicles for transport, its worse if labour begins at night" (IDI 8-Community Health Worker)

"Most deliver at home due to poor transportation network to hospital as well as lack of funds" (IDI 7-village elder)

Likewise, lack of access to health facilities due to long distances between rural villages and health facilities, poor roads and high transport costs have been identified as a problem for hospital delivery in many developing countries (Ensor and Cooper, 2004; Shaikh and Hatcher, 2005; Onah et al., 2006).

Cost of delivery

Some of the participants believed that the cost of health facility delivery was not affordable. Similarly, in Nigeria, it was indicated that despite adequate local provision of maternity services, 65% of women still delivered at home (Brieger et al. 1994). The authors pointed out that this was mainly because of fees for delivery services, level of income, cultural beliefs and education. Quote:

"There is no need to pay a lot of money and she can't afford and therefore she opts to deliver at home so as to incur minimal expenses" (Focus group discussion 4)

It was also reported that cost was a barrier to delivery in a formal healthcare setting in numerous studies (Hill et al., 2012;

Essendi et al., 2010; Mwangome et al., 2012; Magoma et al., 2010).

Practices

Assistance during delivery

The participants reported Traditional Birth Attendant (TBA, *mkunga*) and neighbours as the common individuals who assist during home delivery. In addition, majority of those who delivered by the TBA report no hospital experience hence no comparison the vice versa is also true.

"Sometimes those that assist have no experience or skill of delivering" (Focus group discussion 1)

"I have never delivered in hospital...I don't know what happens there..." (Focus group discussion 2)

"All my pregnancies have always delivered at home" (Focus group discussion 3)

"I trust them (TBA) so much, they encourage well, sensitive, kind and warmly...and readily available" (Focus group discussion 5)

"TBA begs and treats me so well, they have all the time to massage your back gently while saying encouraging words.....in hospital they(health care providers) are a bit harsh...they are not interested in pleasing you..." (Focus group discussion 2)

The Participants with experience of delivering at home reported after-delivery care from the TBA for days till when she is able to do things by herself

"She will make sure she bathes you with warm water and gives you a massage till you fully recover and gain strength.....even if it's a whole week...she will wash your clothes and take care of the new-born till you get better" (Focus group discussion 6)

However, some have reported that TBAs are not using any protection material when assisting with home delivery. It is also indicated that delivery at home takes place anywhere and on any surface and even on the ground especially if it occurs on the way to the hospital.

“Not many TBA’s use gloves.....only a few...majority use their bare hands” (IDI 2-Clinician)

“During delivery the mother is put on amkeka (a mat) where delivery takes place...” (IDI 10-Mother)

“When labour pain became severe... I lied on the floor and gave birth there” (Focus group discussion 4)

Traditional and cultural practices

The participants reported no major cultural belief or practice that can make the women of to deliver at home. However, inability to use traditional things (herbs) during labour and restrictive policies in health care facilities and not being culturally sensitive or competent were viewed by women as deterrent to using health facilities for delivery. Further the participants reported that the placenta should be buried not thrown away as they do on the hospital.

“During labour they are given traditional herbs (mjnanajivu) to hasten the delivery process and also to reduce the pain and help placenta come out” (Focus group discussion 2)

“They (mothers) deliver at home so that they can bury the placenta at home with dignity..... in hospitals it’s usually thrown away” (IDI 7-Village Elder)

According to the participants, delivering at home is believed to be a sign of courage and strength by some women.

“Some women belief that they become courageous when they deliver at home.....its a sign of strength” (IDI 5-Nurse)

The “Mwenye syndrome”, a cultural practise where the husband (Mwenye) has to give consent for any treatment be given at the hospital, also plays a role in home births.

“Some deliver at home because the husband has not given consent to give birth at the hospital” (IDI 9-Father)

“We have to wait for our husbands so as to gain consent to come to hospital for delivery” (Focus group discussion 3)

Interesting to note, is the participants’ preference of health care provider’s gender during delivery. Due to some cultural and to some extent religious beliefs and practices some women deliver at home because they fear being seen naked and don’t like to be attended by male health care providers. Nonetheless majority preferred to be assisted by male health care providers.

“I appreciate a male healthcare provider....I feel good when attended by them...” (Focus group discussion 1)

“Am happy when am assisted to deliver by a male doctor/nurse...” (Focus group discussion 2)

“From my experience a female attendees are usually harsh and abusive compared to the male counterparts who are sensitive. Gentle....I wonder could it because they don’t experience the pain...” (Focus group discussion 3)

“I fear being attended by a male health worker” (Focus group discussion 2)

Perceptions

Women were aware that in cases where pregnancy complications arose, the healthcare setting was really the only place where they could deliver safely. However, most the participants have no problem with home delivery. They expressed being comfortable with home delivery as long as the mother and child’s health is perceived to be good.

“If you have no problem, and child has no problem then it’s not a big deal.....sometimes its free, you don’t pay anything especially if you are related to the TBA, however payment is usually in kind...like African kitenge (leso), foodstuffs and a bar soap” (Focus group discussion 2)

“Due to lack of finances they go to the health facility for a few visits for assurance then go to the TBA’s for further management” (IDI 5-Nurse)

“Most of them (women who deliver at home) attend Antenatal Clinic (ANC) only once in the third trimester for

reassurance” (IDI 8-Community Health worker)

“If you don’t have a problem then it’s okay to deliver at home” (Focus group discussion 5)

“Am used to home delivery and so far I have developed no issue.....if a problem arises then I can come to this hospital to deliver.....”(Focus group discussion 2)

“TBA’s are useful.....they assist a lot of women who deliver at home...infact they can be used to convince the mothers to deliver at hospital” (IDI 1-Traditional Birth Attendant)

The participants also reported that several women plan to deliver at home despite attending diligently ANC clinic at the hospital.

“They attend antenatal clinic to be checked, and immunised and plan to deliver at home.....even after delivering at home they count the days and bring their children for immunisation....they are just used to give birth at home no particular reason..” (Focus group discussion 4)

“Yes others attend clinic (ANC) to get the nets and mother child booklet so that in case of complication during home delivery they can be easily attended to..”(IDI 7-Village Elder)

However others had a different perception: “In my own opinion I don’t really like TBA, they don’t know how the baby is lying it’s better to go to hospital because they can detect abnormalities and assist.....this is because my nephew who was being attended by TBA and was massaged during pregnancy, complicated during delivery and lost the baby after undergoing surgical operation at the hospital..” (Focus group discussion 2)

“At the hospital your child will be immunised and if any complications arise you get quick treatment” (Focus group discussion 6)

“I delivered my first born at home...it was terrible...most of the time you are told to just push when it’s not yet time to push, as a result you get exhausted early and when

you are required to push you can’t..” (Focus group discussion 3)

CONCLUSION

This study offers insights about the factors associated with home deliveries in Kilifi County. This study confirms that HIV testing, vaginal examinations, degree of pain, sudden onset of delivery, husband’s consent, lack of transport and cost of delivery are important barriers for women to deliver in a health facility. Therefore, to reduce home delivery or to increase institutional delivery policy makers in the ministry of health and other concerned stakeholders should increase the awareness of the mothers on HIV testing, improving confidentiality and privacy, improving transportation, reducing the cost of delivery are vital. Community mobilization and sensitization targeting women and men who are involved in decision making on place of delivery are also equally important.

Conflict of interests

The authors declare that they have no competing interests.

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