

# Understanding Women's Choices: How Women's Perceptions of Quality of Care Influences Place of Delivery in a Rural Sub-County in Kenya. A Qualitative Study

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## Abstract

**Background** Maternal mortality is still unacceptably high in Kenya. The Kenyan Government introduced a free maternity service to overcome financial barriers to access. This policy led to a substantial increase in women's delivery options. This increase in coverage might have led to a reduction in quality of care. This study explores women's perceptions of quality of delivery services in the context of the free policy and how the perceptions lead to the choice of a place for delivery.

**Methods** Our study site was Naivasha sub-County in Kenya, a rural context, whose geography encompasses pastoralists, rural agrarian, and high population density informal settlements near flower farms. Women from this area are from the lowest wealth quintile in Kenya. We conducted a qualitative study to explore the women's perceptions of quality of care based on their experiences during maternity care. The participants were women of reproductive age (18–49 years) attending antenatal care clinics at six health facilities in the sub-county. Six focus group discussions with 55 respondents were used. For inclusion, the women needed to have delivered a baby within the six months preceding the study. Interviews were recorded with consent, translated and transcribed. The interviews were analyzed using a thematic content approach.

**Results** Four broad themes that determined the choice of health facility for delivery were identified: women's perceptions of clinical quality of care; the cost of delivery; distance to the health facility and management of primary health facilities. An unexpected theme was the presence of home deliveries amongst pastoralist women. These findings suggest that in this setting both process and structural dimensions of quality of care and financial and physical accessibility influence women's choices for place of delivery.

**Conclusion** This study expands our understanding of how women make choices regarding place of delivery. Understanding women's perceptions can provide useful insights to policy makers and facility managers on providing high quality patient centered maternity care necessary to sustain the increased utilization of maternity services at health facilities under the free maternity policy and further reductions in maternal mortality.

Keywords Women · Choice · Perceptions · Quality of care · Rural Kenya · Qualitative study

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# Introduction

The global maternal mortality ratio (MMR) has fallen by 35% since the year 2000, however in least developed countries (LDC's) the MMR is still 40 times higher than in Europe (WHO, 2019). The situation is even worse in sub-Saharan Africa (SSA), with an average MMR maternal mortality ratio of 542 per 100,000 live births (WHO, 2019). The MMR in Kenya currently stands at 362 per 100,000 live births (Kenya National Bureau of Statistics, 2015). This figure is way above the target of 70 deaths per100,000 live births set under the sustainable development goals (SDGs) (United Nations, 2015a, 2015b). Most maternal mortalities are a consequence of complications during pregnancy and the immediate delivery and post-partum period. These complications are preventable with high quality maternal health care services which include delivery with a skilled birth attendant and proper management of obstetric emergencies (Filippi et al., 2006; Ronsmans & Graham, 2006; World Health Organization, 2004).

Kenya adopted a new constitution in 2010 based on a devolved system of government that created 47 units called counties. Under the new decentralized approach, the central government was responsible for the national referral hospitals and development of regulations of standards and health policy (Constitution of Kenya, 2010). Health services provision and promotion was devolved to the counties beginning in 2013 (Williamson & Mulaki, 2015). Like other low and middle income countries (LMIC), huge disparities exist within the country, with reports suggesting that 15 of the 47 Kenyan counties contribute 98% of all maternal deaths (Ministry of Health Kenya, 2016; UNFPA, 2014).

In an attempt to address the high MMR, the Kenyan Government introduced the free maternity services policy in 2013. This policy expanded the national health insurance fund (NHIF) coverage making deliveries at gazetted private facilities free, and abolished user-fees for delivery service in all public health facilities (Chuma & Maina, 2012). This resulted in a substantial increase in the utilization of maternal health facilities especially in public health facilities (Calhoun et al., 2018; McKinnon et al., 2015). The surge in demand for free services at health facilities raised concerns over quality (Gitobu et al., 2018b; Lang'at & Mwanri, 2015; Tama et al., 2018). Women also increasingly bypassed smaller primary health centers and chose to deliver at larger referral hospitals (Njuguna et al., 2017). Poor quality of care can both directly and in directly contribute to maternal mortality through the poor identification of complications during delivery and a reduced demand for the utilization of maternal health services (Bohren et al., 2014; Miller et al., 2016).

Previous studies on maternity services in Kenya mainly focused on sociodemographic factors influencing women's place of delivery (Chea et al., 2018; Karanja et al., 2018; Kitui et al., 2013). Studies across different countries have found that high coverage of essential services, on its own, may not be sufficient to improve maternal health outcomes, and that improvement in quality of care was vital (Kruk et al., 2016; Souza et al., 2013). Most studies assessing quality of care have been conducted at the health facility level and did not seek to understand quality of care from women's user experiences (Diamond-Smith et al., 2016; Kruk et al., 2016; Lee et al., 2016; Leslie et al., 2017). Quantitative studies have shown poorer, unemployed illiterate and unmarried women receiving lower quality of maternal services (Afulani et al., 2018; Sharma et al., 2017). At the same time, major disparities in levels of quality of care have been established across different geographic areas (Arsenault et al., 2019). However, most of these studies assessed technical quality of care using quantitative methods. What is poorly understood is women's own assessments of quality of care based on their user experience of the health system. Health-seeking behavior models postulate that individuals who perceive themselves to be at a higher risk take action to mitigate risk (Rosenstock, 1974). We sought to assess how women's perceptions of quality of care gleaned from their experiences influenced their choices of place of delivery using qualitative methods. This will complement studies that have assessed technical quality of care. It will also support policy makers to better understand women's perspective and inform strategies to improve the quality of care at health facilities to sustain the increased utilization of maternity services.

### Methods

### **Study Design**

We conducted a qualitative study to explore women's perceptions based on their experiences of maternity care in a rural Kenyan setting. We sought to understand women's experiences and perceptions of quality of care during childbirth and how these perceptions influence their decisionmaking process on choice of health facility. The qualitative study approach was phenomenology design that is an approach concerned with understanding social and psychological phenomena from the perspectives of people involved using descriptions (Groenewald, 2004).

#### **Study Setting**

The study was conducted in Naivasha sub-County, Nakuru County, Kenya. Naivasha has a population of over 250,000 inhabitants, served by health facilities that include a sub-County Referral Hospital in Naivasha town and several public, faith-based and private primary health facilities. Roughly 70% of the births are delivered in a health facility in Nakuru County (Kenya National Bureau of Statistics, 2015). Naivasha is characterized by low-income populations, spread between a few peri-urban settings dominated by flower farms and rural pastoralist and agricultural populations. The region is ranked 4th in terms of maternal deaths in Kenya (UNFPA, 2014).

#### **Data Collection, Management and Analysis**

The data was collected in October and November 2016. Eligible women were recruited from child welfare clinics at six health facilities with the help of facility staff and community health volunteers. The facilities represent a mix of public, private and faith-based and primary health facilities such as health centres and sub County hospitals. Six focus group discussions (FGDs) were conducted by a trained female medical officer and a research assistant with backgrounds in public health. Both researchers were local investigators and conducted the FGDs in English, Swahili and Kikuyu for some women. Each FGD had between six to eight women and lasted 45-60 min. A total of 55 women who had delivered in the six months preceding the FGDs were interviewed. Data was collected until saturation was reached. The questions sought to understand the women's birth experiences, their perceptions of quality of care, and the drivers of choice of a place of delivery. Further probing was done to explore what they considered most important for safe delivery. The FGD process was an iterative one and the FGD guide was adjusted based on the responses from the women. The FGD interviews were translated and back translated to ensure consistency in meaning (See additional file 1 for FGD guide).

A thematic approach using the Braune and Clarke (2006) was used in the data analysis. This approach followed the six key steps, first, reading the transcripts for familiarization. Two coders JOA and CM then generated an initial set of codes through an iterative process. They then grouped the codes into emerging themes, where there was disagreement one of the authors MA resolved the differences. The codes were then compared to the codebook and reviewing and adjusting by naming the themes. The analysis was done using the Nvivo software version 10. Finally, the findings were written into memos that were finally summarized into a report (Braun & Clarke, 2006). We used the health belief model to try and understand the themes related to the women's perceptions of quality of care at the individual level (Rosenstock, 1974). We have followed the COREQ criteria for reporting the results of the qualitative research.

### **Ethical Considerations**

All FGD's were conducted at a private location within the respective health facility premises. All women were informed of possible benefits and risks of involvement in the study. Verbal, rather than written consent, was obtained for all participants, on advice from the ethics reviewers, based on concerns over literacy and fear of losing confidentiality when asked to sign a document. Ethical approval was granted by the Strathmore University's Ethics Review Committee, and permission to conduct the study given by the national council for science, technology and innovation (NACOSTI) and the health department leadership of Nakuru County.

#### Results

The demographic characteristics of the respondents in our study are shown in Table 1.

Data analysis revealed four major themes that explain women's choice of a place for delivery (i) women's perceptions of clinical quality of care. This theme had two sub-themes; availability of qualified medical Doctors and interpersonal treatment at the health facility. The other themes were (ii) the cost of delivery services (iii) distance to the health facility and (iv) management of the primary health centres. An unexpected finding was the presence of home deliveries amongst certain sub-groups of women. The themes are summarized in Table 2. (Additional file 2).

#### Women's Perceptions of Clinical Quality of Care

Almost six out of eight women during the focus group discussions said they believed that the larger public hospitals had the necessary facilities and equipment for a safe delivery, including the ability to handle obstetric and neonatal emergencies. The equipment mentioned included theatres for cesarean section and incubators for pre-term babies. The availability of the equipment and capacity to handle potential emergencies gave them a sense of security, and led them to believe that they would be handled well in case of obstetric emergencies. This was cited as a major reason why they preferred the larger hospital over smaller health centres. The women also reasoned, citing their personal experiences and of other women, that it was pointless for them to attempt to deliver at the smaller facilities (including private facilities) because they would eventually end up with a referral to the sub-county referral hospital in case of an emergency.

Table 1 Characteristics of the women who participated in the FGDs

Participant characteristics	Percentage N=55 (%)
Age (SD)	26 (0.5)
Age of children-months (SD)	2.1 (3.0)
Parity N (%)	
Primiparous	12 (23%)
Multiparous	40 (77%)
Delivery facility N (%)	
Public hospital	7 (13%)
Public health centre	30 (58%)
Faith-based health facility	8 (15%)
Private facility	7 (13%)
Home	3(1%)
Total	55

...What I feel is that when one goes to other facilities in case of any complications with your baby, they only take care of what they can and then later refer you here to sub-County Hospital A. Rather than passing through all that, it is easier for a woman to come to sub-County Hospital A and everything is done here and get discharged without going through the referral process... (Woman in FGD #1)

The women also cited the availability of key medicines as a reason for preferring the sub-County hospital. They observed that most private facilities did not stock certain commodities, and often referred them to external pharmacies. Some of the commodities were essential for surgery and this led them to choose health facilities where they believed that the availability of these commodities was assured as seen in the quotes below.

...You know in some health facilities, if one has to undergo CS, they send them to the chemist to buy surgical blades, drugs, but as you know in government hospitals Yes, they don't send patients outside to buy such things. If patients require to be taken to the theater, they just take them...

(Woman in FGD #5)

...I had come here to health Centre C (primary health facility,) but the nurse in charge told me that they did not have anti-D and they asked me to go to sub-County hospital A (secondary health facility) and have the anti-D injection there. My wish was to deliver here at the health Centre C but I delivered my baby at sub-County hospital A...

(Woman in FGD#6)

## (i) Availability of qualified medical doctors

Most women who delivered at larger public hospitals believed that qualified doctors (defined in their view as those able to handle obstetric emergencies) were available. They also believed that the hospitals had specialist doctors including both obstetricians and pediatricians to attend to them. They felt that such skills were unlikely to be available at primary health facilities that they had attended earlier during antenatal care. Presence of a qualified medical Doctor drove the perception that larger public hospitals provide higher quality services and would be present as a major reason for their choice.

...In other health facilities around here you won't find as much as they have here at the sub- County hospital. Be it the equipment, the doctors, you name it they can't match what you find here...

(Woman in FGD #5)

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(ii) Interpersonal treatment at the health facility

Women's perceptions of clinical quality of care included interpersonal interactions with health care workers. Some women talked of having experienced good treatment at larger public hospitals, saying that the staff had been attentive and responsive. The experience made the women trust these larger hospitals.

...They helped me remove my clothes when I went to deliver this baby I am holding. I couldn't support myself, they helped me. I have no negative comments about them. All I know is that they are good nurses and doctors...

### (Woman in FGD#2)

...When I delivered my first baby, they told me that sub-County hospital is a good place for child welfare clinics and antenatal clinics and I decided to come here. It is a public hospital, but offers good services than other facilities around here. Since I moved here and tried sub-County hospital, I have not thought of looking for an alternative health facility to take my babies...

### (Woman in FGD#3)

On the other hand, there were several reasons why women chose not to go back to the larger public hospitals. A common reason given by women against delivering at the larger public hospitals was mistreatment during delivery. This was sometimes attributed to the higher demand due to the free maternity services that saw more women have deliveries at the sub-county hospitals. Several women described several incidences where they were subjected to forms of mistreatment such as overt neglect during delivery.

... The reason I decided to come to health Centre E is that I had delivered my third born at the larger hospital and I did not like the experience. My husband's brother's wife helped me get there. I was examined. I was bleeding but not in pain and they would not admit me. I stayed outside the whole time while still bleeding. A doctor who was passing by looked at me and admitted me right away. By the time I delivered at around 3 pm I had gone through so much. I thought to myself I'll never return to the larger hospital. Other doctors in other facilities come with personal stress to work. They are abusive. For instance, at some point at the larger hospital I called out loudly "God" and one of the nurses told me to stop calling God and call my husband, and at that time I was bleeding profusely. I even told my family even when that time comes, they shouldn't take me to the larger hospital because of what I went through when I delivered my third baby ... (Woman in FGD #5)

Some women felt that night shift nurses were lax and unresponsive to their needs. Others thought that the general understaffing at the health facility contributed to long waiting time (for care), and in some cases, some women delivering without assistance at the facilities.

...They command patients, all the time, maybe you are experiencing labor pain, they tell you go there or there, even when you mess up your beddings, they tell you to change them, or take them out and all that. And maybe all this time you are experiencing labor pains... (Woman in FGD #5)

The waiting times for admissions at the larger public hospitals eventually led to some women changing their delivery health facility from public to private.

...And remember you are not admitted yet. So, when it took too long to get me admitted in the larger sub-County hospital, I decided to go to a private health facility. I'd rather look for money and go elsewhere than to go there [Referring to the larger hospitals] and are kept waiting...

(Woman in FGD #4)

Some women described experiences where they were denied food in the evenings. Health care workers asked them to purchase food from a nearby canteen that they described as expensive. This made their delivery experience negative.

...My experience at the larger sub county hospital was not good at all. I went to the facility at around 6pm. I was not served up until 9 pm that is when I got admitted. I did not eat that evening neither did they provide breakfast the next morning. I only got something to eat the following day after I delivered my baby at around 12 noon. They told us to buy food outside the maternity unit. They have a canteen where they sell a plate of rice at 100Ksh which is quite expensive.... (Woman in FGD #4)

The lack of privacy within the labor wards and experiences where they were forced to share beds led them to say they would not return to the health facility again in the future.

...Tell me what would lead you to go back to a place where you share beds and yet you are in labor! When you deliver, you must give up the bed for the babies to sleep on before you get discharged. That time you are so tired and you just wish you could have a place to lay your head and catch a nap. You are only left to sit down while the babies take up the bed. If your baby is not well you are forced to stay and you only have a seat since you all can't share a bed with your baby and with another mother with her baby too on the same bed... (Woman in FGD#6)

#### The Cost of Delivery Services

Women who delivered at public hospitals appreciated the fact that delivery services were free, despite being forced to pay for some items such as diapers for the baby at the nursery. They felt that the costs of the delivery were minor compared to a private facility.

...For me it's the services. Over here their services are good. The cost is fair. Having one of my babies admitted to the nursery would have been unaffordable for me if it were in a private hospital... (Woman in FGD #3)

There were isolated incidences of women being asked to pay for extra costs during delivery services at some public facilities. One woman complained of an administrator trying to obtain informal payments.

...To begin with, at the public hospital they told me that I had to pay 4,800 Ksh (48 USD) for the delivery. My husband asked what it was for and they reduced it to 800 Ksh (8 USD). He still insisted on knowing what the charges were for since he knew at a public health institution, maternity services were free of charge. In the end, he did not pay even a single cent... (Woman in FGD #5)

Women who delivered at private facilities complained of high costs. This included women who had the National Hospital Insurance Fund (NHIF). They complained about being forced to pay for items such as prescription drugssometimes sourced at external pharmacies, food and various baby essential items such as diapers, soap and buckets. They were also asked to co-pay for more expensive services such as ambulance referrals in the case of complications when they were referred to other public secondary maternity hospitals.

...Yes, but I had reservations too about going to the larger private health facility. My neighbors and friends had told me that in case of a baby complication that would need a C-section, one must pay for an ambulance that will transfer you to sub-County hospital A for the operation....

#### (Woman in FGD #4)

...For me my first baby was delivered in private health facility C. In that health facility, the NHIF card covered just a small amount. The rest of the costs you have to pay...

(Woman in FGD 3)

All these experiences with the inadequacy of the NHIF coverage and the co-payments that were required for certain maternity services led women to believe that the costs of delivery at public health facilities was affordable and preferable to the private health facilities. This consequently led to the choice of the public hospitals for delivery.

# **Distance to the Health Facility**

Women generally preferred delivering at facilities that were in close proximity to their homes, which would allow easy access for family members.

...I delivered my baby right here at sub-County hospital A. As for my first baby, it was in a private facility, because when my labor pains started, my family members thought of taking me to the closest health facility so they brought me here. For my second baby, I delivered here, and so it is when it was time for this one, I knew where I was going to deliver... (Woman in FGD#2)

The sub-County hospital was seen as very convenient to women living near town. Some health facilities were described as being further out and hard to access by the existing means of transportation. Women residing further away from the town Centre saw the sub-County hospital as a long distance. They instead preferred primary health centers that were closer to their residences and made the choice to deliver in them.

...The first time I came to dispensary A for my ANC I found it too crowded and I decided to go to sub county hospital A instead. I had seen their advertisement poster that they had maternity services and that is what led me here. When I started experiencing labor pains sub-County hospital A is a long way so I came here dispensary A. I got here around 11am and later that evening I delivered my baby at around 8pm. I spent the night here in the postnatal ward and they discharged me the following day...

(Woman in FGD #3)

However, this experience of distance was not the same for all women. Some of them who resided near the primary health facilities chose to bypass them and go to the health facilities in town because of their perceptions that the larger sub-County hospital was further away providing better quality delivery services.

...As I told you earlier on my baby was not in right position. [Sarcastically] Would the operation process go well if I came here? ... (Laughter) (Woman in FGD #4)

# **Management of the Health Care Centres**

Most women expressed concern over the operations of the small health centres close by to their residences that offered maternity services. They described insufficient hours of operation at these health centres, noting that most health facilities listed that they were 24 hour facilitiesbut most of them would close by 5.00 p.m. Some complained of having been sent away at health facilities that had recently being upgraded from clinics to health Centre level three to offer uncomplicated child birth services.

...But sometime back when I knew they had a maternity unit; I knew the maternity unit operated differently. You can go there in the morning, and in the evening of the same day you can be told to go back home. Now you see, if I come here then later told to go back home...in light of that, I decided to go to sub-County hospital A because when I go there, I will be admitted, you might deliver at night, all that is the reason I decided to go deliver in sub-County hospital A.

(Woman in FGD #3)

In addition, they feared that such facilities lacked the capacity to handle obstetric emergencies due to poor staffing or unavailability of staff. The women mentioned that it was common to find no one present at the health centres during working hours. Also, it wasn't clear to the women who was supervising the health care workers stationed at the primary health facilities.

...My first [reason] is when you come here, you don't find a nurse or doctor to attend to you. Second, their postnatal rooms are also very cold... (Woman in FGD#3)

They went on to say that when they tried to call the health workers at these primary health facilities at night, they were unresponsive and therefore the women reconsidered their delivery and made the decision to deliver at the larger sub-County hospital in town.

...Here? They're not around at night. You can come and call them and no one answers and because of that I decided to go to sub county hospital A. (Woman in FGD #5)

Women described experiences of care where they were constantly asked to come back another day possibly because of the miscalculation of their estimated delivery dates (EDD) or subsequently referred them to the larger sub- County hospital because of the lack of theatres to deal with complicated pregnancies.

...At times you have labor pains and when you come here, (referring to the primary health facilities) they observe you and later send you back home and request that you come back the following day. And also, if one needs to go for an operation that becomes a referral...

Woman in FGD #5)

#### **Home Deliveries**

Three women reported home deliveries, but continued attending antenatal clinics at health centers. They all had different reasons for their home deliveries. One woman from a pastoralist community and she mentioned that home delivery felt more comfortable for her. She mentioned that the decision was made by her mother who also assisted with the delivery. She had no intention of delivering at a facility.

...I delivered at home, my mother and another woman assisted me with the delivery... (Woman in FGD#3)

The second woman, also a pastoralist, informed us about her challenges with transportation to get her to the health facility and how she subsequently delivered her baby at home with the help of another woman who was an unskilled birth attendant.

... I delivered my baby at home because I had no means of transport to the hospital...I was helped by another woman ... (Woman in FGD #4)

The third woman who was not from a pastoralist community. She cited her sister's negative past experience as the reason for avoiding health facility delivery and went on to describe how she always would deliver at home.

...No, it was not a lack of funds. I have never delivered any of my other children in a health facility. I attend the antenatal clinics but for deliveries they are at home. I won't say I would like because of my small sister. She delivered her baby in a health facility through CS. She went through the operation and got her baby that was in public Hospital A. The person who stitched her up didn't do it well, she later had complications. Since then, I grew a phobia of hospital deliveries. I told my God that I will never go to any health facility.... (Woman in FGD #6)

These findings confirm that sociocultural access to health facilities still present a challenge for certain sub groups of women. Additionally, other close women's previous experiences of childbirth also shape the perceptions on place of delivery for women.

### Discussion

This study examined how women's perceptions of quality of delivery care determines their choice for place of delivery. In this rural context, the main choices were between the levels of care such as hospitals and health centers and between public and private health facilities. We identified four key themes; women's perceptions of clinical quality of care, the cost of delivery services, the management of the health facilities and the distance to the health facilities. We also identified an unexpected theme of home deliveries predominantly amongst pastoralist women.

We used the health belief model to contextualize the results. The health belief model is defined as how individual perceptions, modifying factors and variables affect the likelihood of an individual initiating actions to either bolster their benefits or reduce their risks. The health belief model states that people will respond and make decisions based on the perceived benefit that they receive (Rosenstock, 1974).

Most of the themes identified in this study were related to the perceived benefit. Women chose to deliver at the larger hospitals because of the perceived belief of the quality of clinical care. They assessed this dimension through both their personal experiences and observations of the availability of medical equipment and the availability of higher-level clinicians such as specialist doctors and the presence of the medications at the pharmacy within the health facility. Studies assessing the quality of care received by rural women have demonstrated that women in rural areas in Kenya often receive poor quality care (Sharma et al., 2017), and lower level public health facilities often have poorer access to equipment with only 69% of the equipment required to provide services (Chen et al., 2014).

Despite the free maternity services policy greatly increasing utilization of health facilities, costs continue to act as a significant barrier for women who choose to use private health facilities. Women continue to perceive private health facilities as expensive, with most costs attributed to services that were billed above the insurance coverage benefit package, the women we interviewed chose the public hospitals largely because of lower cost. This finding is congruent with other recent studies that suggest that women chose public hospitals due to costs (Calhoun et al., 2018). This finding has an implication towards the design of the NHIF coverage for free maternity services. Policy makers need to clarify the benefit package for the free maternity and ensure that the users understand the extent of coverage and exclusions, and possible co-payments. This information should be provided to health care providers particularly in the private health facilities to share with their patients, Previous studies conducted after the introduction of free delivery services have identified cost as a factor influencing the choice of place of delivery, with about 43% of respondents reporting cost as a major impediment to facility-based delivery (Kinuthia et al., 2015).

Distance to the health facility has been identified in other studies (Escamilla et al., 2018; Karanja et al., 2018) as a key deterrent to access to maternity services. Not surprisingly, our findings suggest that geographical access still presents a significant challenge, particularly for rural women. The study setting included women who hailed from pastoralist backgrounds, who have typically continued to face long distances to care, posing a significant barrier and a threat related to obstetric emergencies (Byrne et al., 2016; Caulfield et al., 2016).

The main barrier to use of primary health centres closer to women was the management of these health facilities. Several challenges ranging from their operations time, staffing and response to emergencies were identified, despite the health facilities identified as providing 24 hours services, some of these facilities were reported to be consistently closed by 5.00p.m. The health workers were also consistently absent and unresponsive to women. The supervision of health workers at these health facilities was not clear, this created a perceived risk of delays that could be fatal in case they had any complications during delivery and had to be transported to a higher level health facilities is key in influencing the operations of health facilities (Hanefeld et al., 2017).

One of the key sub-themes under women's perceptions of quality of clinical care by the interpersonal interactions with the health care workers. Some women identified health workers who were responsive and described good treatment at both smaller primary and larger secondary hospitals. Studies assessing women's satisfaction with quality of maternal health services have identified that during the free maternity services women were satisfied with aspects of the delivery experience such as good communications by health care workers, staff availability in the wards and delivery rooms, drug supplies availability, however they were dissatisfied with the consultation time, cleanliness and privacy in the wards. These findings concur with our findings in this study where long waiting times, complaints around the privacy at wards with sharing of beds was mentioned at larger health facilities and was a key factor that led women to change their delivery health facility (Gitobu et al., 2018a).

However, a good majority of women who delivered at larger hospitals described overt mistreatment. Forms of mistreatment included verbal abuse, lack of privacy and neglect and abandonment during delivery. The Women specifically identified night-shift nurses as treating them with disrespect and abuse. This has already been described in similar studies in Kenya where night-shifts were found to be associated with higher levels of verbal and physical abuse (Abuya et al., 2015a, 2015b). The WHO standards for quality of care for pregnant women and newborns require that women be treated in a respectful manner and in a way that upholds their dignity (WHO, 2016). Mistreatment at health facilities by healthcare workers has been described extensively (Bohren et al., 2015) including in diverse settings such as Guinea (Balde et al., 2017), Nigeria, (Bohren et al., 2017) and South Africa (Jewkes et al., 1998). Mistreatment continues to be

recognized as a barrier to utilization of delivery care in Kenya (Lusambili et al., 2020; Okwako & Symon, 2014; Oluoch-Aridi et al., 2018). Abuya et al., (2015a, 2015b) estimated that 20% of women experienced mistreatment while accessing health services (Abuya et al., 2015a, 2015b). Urgent international appeals have been made for health system accountability structures to prevent the mistreatment of women during labor and delivery (Afulani & Moyer, 2019; Jewkes & Penn-Kekana, 2015). Some studies have suggested retraining health workers and including a value transformation component to promote respectful care during delivery services (Warren et al., 2017).

Lastly, an unexpected findings was that some women from pastoralist communities still deliver at home. Some of the women perceive a health facility as unnecessary for a delivery while others were advised by their friends and family that home deliveries were better than health facilities because of adverse experiences by friends at health facilities. Recent evidence from similar settings indicate that perceptions of quality of care at health facilities has been identified as socially constructed from women' perceptions of other women's experiences (Moyer et al., 2014).

### **Limitations of the Study**

This study has some limitations. First, we did not collect data on the socioeconomic background of the respondents this might slightly bias the responses. Secondly, we recruited women exclusively from antenatal health care clinics. It is likely that women who utilize these clinics are of lower socioeconomic status and thus this limits the generalizability of our results to a broader set of women within this rural context. In our study we also discovered that a woman's choice of health facility was sometimes made by friends or family. Women who had sudden onset of labor reported that their decisions were overridden by the person accompanying them. Social context and norms greatly influence women's choices and hence should be taken into account when designing interventions (Hanefeld et al., 2017; Moyer et al., 2014).

Positive response bias is a potential concern in this type of qualitative study. Potential for bias was mitigated by appropriate assurances of confidentiality and member checking with women and a validation of the findings at a one-day meeting with both facility in charges and Ministry of Health management team.

Lastly recent studies in Kenya have raised doubts around women's ability to accurately assess certain aspects of quality such as technical quality of care. The study goes on to elaborate that women's perceptions of patient misinterpretations that leading them to use health facilities that are of lower quality (Siam et al., 2019). However this study was done in a peri-urban setting which may differ with the rural setting where our study was conducted.

## Recommendations for Policy Makers for Service Provision

Policy makers need to ensure strategies to improve the quality of clinical care by providing the necessary equipment for obstetric emergencies, medication and staffing at primary health facilities. Initiatives to improve patient centered maternity care that is responsive to interpersonal aspects between women and health care providers need to put in place. Anonymous ways of reporting mistreatment during labor and delivery need to be instituted at larger hospitals to facilitate accountability. The management of the recently upgraded primary health centers through supportive supervision for the health care providers. Additionally, these facilities should be provided with adequate resources such as housing and emergency transportation as needed to manage women's expectations of their status as advertised as 24-h health facilities. Upstream management policies that influence the management of primary health facilities should be strengthened to ensure availability and supervision of competent health care workers and operation times that are reliable to women. Access factors such as cost and distance continue to remain critical in influencing women's choices of place of delivery. The extent of coverage of NHIF particularly for maternity services need to be clarified so that women have sufficient information on coverage, exclusions and co-payments. Strategies to increase geographical access such as maternity homes need to be considered. Lastly, home deliveries especially amongst pastoralist women driven by lack of perceived need should be addressed by targeted interventions towards this group by policy makers.

## Conclusion

Interventions aimed at sustaining utilization of maternal health services for delivery services and improving quality of care at health facilities need to focus on the structural technical and process aspects of quality of care. Understanding women's perceptions can provide useful insights on how women make choices about where they deliver and hence policy makers and health facility in charges can respond by providing high quality maternity care that is patient-centered to sustain the increased utilization of maternity services.

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#### Declarations

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