“…This facility has all that is Required for Safe Baby Delivery in Case of An Emergency There is a Theater…” Exploring Experiences and Perceptions of Quality of Maternity Care in a Rural Sub-County. A Qualitative Study

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Abstract

Background Maternal mortality still remains a big health system challenge in Kenya. Free maternity policy resulted in an increase in Facility-based delivery. However, this has not been accompanied with a reduction in maternal mortality. This research aims at establishing women’s experiences and perceptions with regard to the quality of maternal health services received at health facilities during delivery. This contextual knowledge will assist policy makers to better understand patterns of health system utilization critical for forging strategies for reducing inequities and providing high quality maternal care.

Methods Women aged between 18 and 49 who had recently delivered and were attending six-week immunization clinics were purposively selected at six different health facilities and focus group discussions were conducted with the women. The data was analyzed using thematic content analysis. Verbatim excerpts from the women were provided to illustrate the themes identified. The WHO vision for quality of care was used to assess the themes on experiences of care described by the women.

Results Six themes were identified as facilitators to access maternal health services 1) Perceived quality of delivery services 2) Financial access to delivery services 3) Referrals to public tertiary health facilities 4) Social influence 5) operation times at public primary health facilities 6) Distance to the health facility. A few barriers were identified under the perceived quality of services most prominent been the mistreatment of women by night-shift nurses and the operation time at the primary health facilities.

Conclusion The findings suggest that the rural women tend to prefer tertiary maternity health facility and there are a number of factors related to quality of care based on their experiences that predispose their choices. Most prominent was the availability of equipment such as theatres for obstetric complications. Another emerging issue was respectful care during maternity services. Auxiliary costs still present a challenge despite the free maternity services. Future studies need to focus on ensuring in depth contextual understanding of women’s perceptions of the experience of care with regard to patient-centered care. Understanding these aspects will help in forging strategies to reduce inequities that are leading to high maternal mortality.

Background Maternal health is one of the greatest health system priorities globally. The global maternal mortality ratio has been progressively reducing due to efforts directed at increasing the proportion of births attended by a skilled birth attendant (Alkema et al., 2016);(WHO, 2019). The number of women delivering in health facilities has greatly increased in the developing world and sub-Saharan Africa. (Montagu et al., 2017);(Doctor et al., 2018). The WHO recommends skilled birth attendance with facility-based delivery and access to obstetric care as measures to reduce the risk of dying during childbirth (WHO, 2004);(Ronsmans & Graham, 2006). Global recommendations also suggest that there is a need to increase women’s access to high quality care (Koblinsky et al., 2016).

Countries such as Kenya have had a recent increase in access to facility-based delivery. This laudable increase has occurred for several reasons. First, there has been expansion in the numbers of facilities offering skilled delivery services in Kenya making distance to health facilities a minor challenge (NCAPD, 2011). Second financial access to skilled delivery had a major boost in June 2013 when a presidential decree removed user fees at public delivery facilities (Bourbonnais, 2013). Early evidence shows that this free maternity policy has led to a substantial increase in health facility utilization particularly public health facilities (McKinnon et al., 2015); (Calhoun et al., 2018);

The implementation process of the free maternity services in Kenya has however been accompanied with challenges, including weak referral systems, poor supply chains, unclear coverage of services and compromised quality of care at health facilities (Lang’at & Mwanri, 2015); (Wamalwa, 2015);(Tama et al., 2018) (Gitobu et al., 2018). Uneven utilization patterns have also been observed, with other counties reporting higher utilization rates.
for county referral (tertiary) than primary care facilities. In addition there are also reports of women opting to use low-cost private health facilities as opposed to public facilities (Njuguna et al., 2017). Other studies in sub-Saharan Africa have also reported this phenomena and postulated that when women perceive services are of low quality they bypass facilities that are closer and opt to deliver at higher level health facilities further away (Kruk et al., 2009).

That said, there is a limited contextual understanding of what specific aspects of quality of maternity care drives the women’s decision making on delivery health facility. The aim of this study is to understand what phenomena influence women’s perceptions of quality of care and how their perception of quality drives their choice of a facility for delivery. Understanding what women want will assist in development of context relevant approaches at facilities so that perceived quality is improved. Having a patient centered perspective combined with improved quality of maternity care will help Kenya achieve the ultimate goal of reducing preventable maternal mortality.

Methods

Study Setting

Naivasha sub-county is located in the Rift Valley of Kenya with a population of approximately 253,224 people. The sub-County is within Nakuru County. The health system includes a referral hospital in Naivasha town, several public primary health centers, private health facilities, and faith-based health facilities. Around 70% of the births are delivered in a health facility in Nakuru County (Kenya National Bureau of Statistics, 2015) The data are from a larger mixed-methods project aimed at understanding women’s decisions regarding place of delivery and their perceptions of the quality of care that they receive. The health facilities where recruitment of women occurred were selected to represent the full spectrum of facilities available in this context and included a mix of primary, tertiary as well as private, public and faith-based health facilities.

The study setting was purposively selected because of persistence high rates of maternal deaths within the county. Recent evidence from the UNFPA report rank ordered counties by contribution to the burden of maternal deaths and Nakuru County was ranked fourth (UNFPA, 2014). Generally rural areas in Kenya are also known to have high maternal mortality rates. The same report identified six rural counties as contributing to half of all maternal deaths in Kenya (UNFPA, 2014).The study site also represents three groups of people that reflect significantly at-risk populations within Kenya (pastoralists, rural agrarian, and residents of informal settlements next to commercial flower farms).

Study Participants And Data Collection

Women aged between 18 and 49 who had recently delivered and were attending six-week immunization clinics were purposively selected at six different health facilities. Two research assistants using a focus group discussion guide (See additional file 1) conducted interviews. They obtained consent from the women and proceeded to conduct the interviews at a private space within the health facility where confidentiality was upheld. The data were collected in October and November of 2016. The data were collected in English, Swahili and Kikuyu languages. Interviews were audio recorded and transcribed. Ethical approval to conduct the study was provided by Strathmore University’s institutional review board and permission to conduct the study was obtained from NACOSTI and the County Director of Health.

Data analysis

All the transcribed data were read and categorized into codes. These were then entered in Nvivo software. (QSR International). We then analyzed the data applying emerging codes and comparing codes from the interview guide. We followed Braune and Clark’s (2006) thematic content analysis to analyze the data (Braune and Clark, 2006). This consists of six steps; familiarization with the data, generating codes across the data, grouping the codes into categories, searching for themes, reviewing themes, defining and naming the themes identified. Lastly producing an analysis memo with relevant quotes to support the described themes. When there was
disagreement on the themes two coders compared them and discussed until a resolution was reached. We compared the themes obtained from the analysis to the three domains of the experience of care that are utilized by the WHO vision for maternal and newborn care (Tuncalp, 2015).

### Results

**Characteristics Of The Respondents**

We conducted a total of six focus group discussion with a total of 52 women across six different health facilities. The characteristics of the respondents are contained in Table 1.

| Variable                          | Rural setting |
|-----------------------------------|---------------|
| Age (Years): mean (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 tertiary facility          | 7 (13.5)      |
| Public primary facility           | 30 (57.7)     |
| Mission health facility           | 8 (15.4)      |
| Private facility                  | 7 (13.5)      |
| **Total (%)**                     | 52 (56.5)     |

The results are organized according to the themes that were established to be facilitator to the choice of a tertiary maternity and those that were barriers. The following five themes were identified as facilitators 1) Perceived quality of services at the tertiary maternities 2) Financial access to delivery services 3) Referrals to public tertiary health facilities 4) Social influence 5) operation times at public primary health facilities 6) Distance to the health facility. These are discussed below in more detail;

**Perceived quality of services at the tertiary maternities.**

Some women described the quality of services at the tertiary maternities and made their decision based on the quality of care they received. They particularly mentioned that the services were good and cheaper than most private health facilities. They also mentioned that the quality of clinical services was good and they delivered their babies well without any undue complications and would be happy to deliver their babies again at these
health facilities as seen in the quote below;

...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...

(FGD respondent who delivered at a public hospital)

Some also specified services such as antenatal services and child welfare services as been good at the public tertiary maternity in comparison to other public health facilities as seen in the quote below

...When I delivered my first baby, they told me that Naivasha 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 Naivasha sub county hospital, I have not thought of looking for an alternative health facility to take my babies...

(FGD respondent who delivered at a private hospital)

Some believed that the health facility had a good reputation and was known for providing good quality clinical services such as vaccinations when compared with private health facilities.

...The facility is good. There was a time I heard in the news and I stand corrected while saying this, that during the Beyond Zero campaign period, Sub County hospital A maternity A unit was one of the units that improved in services to try and meet the campaign’s goal of reaching zero maternal deaths in the country. When I come for my child’s welfare clinic, they are open and genuine to tell when the vaccine is available and when it’s not. In some private facilities, they will go ahead and inject the baby a vaccine which is not the right vaccine for that particular age just for the money...

(FGD respondent who delivered at a private hospital)

Availability of equipment for cesarean section. This sub-theme was identified under the perceived quality of services of the tertiary health facility. Women believed the tertiary maternities would provide for a safe delivery which they considered high quality because of the presence of a theatre for dealing with obstetric complications as seen in the quote below;

...I’d say this facility has all that is required for safe baby delivery. In case of an emergency there is a theater, so one is out of danger of a miscarriage. For instance, when I went to private medical center A, they don’t have a theater there and that is the reason why they referred me to this facility [Sub County Hospital A]. One gets here and is rushed to theater. That way you are served immediately and efficiently...

(FGD respondent who delivered at a private hospital)

Perceived poor quality of delivery services. The main barrier to delivery at tertiary maternity services was the perceived quality of delivery services that women received. Some women described receiving services that they perceived to be of low quality at the tertiary maternity and vowed not to use the maternities again for subsequent deliveries as seen in the quote below;

...I went to the sub-County hospital and was there for 1 week and 3 days while still in pain. A few days into the second week I started seeing discharge. I didn’t know what to expect since it was my first baby. I went and told one of the nurses and she asked me to go back to the room or take a stroll outside. This went on the whole day and the following day at around 1 pm after the third induction in a week’s time and still nothing had happened yet, I had to go for CS. They asked me to sign so that they could go ahead with the C-section but I refused and told them I will wait until I can give birth normally. They induced me again and after a long time and so much pain I delivered at around midnight. If I were to be asked, I didn’t like the services at the sub county hospital. If I ever get another baby, I don’t think I can ever go back to the sub county hospital again...

(FGD respondent who delivered at a private hospital)
Verbal abuse during delivery. The perceived poor quality of services was primarily due to the interpersonal treatment that women experienced at the hands of the healthcare workers. Women felt that they were mishandled and subjected to verbal abuse. One woman described being a first-time mother and felt castigated when she expressed pain. These experiences led them to believe that the tertiary maternity mistreated them and provided them with low quality of care as seen in the quote below

...Actually, it is the way they handled me. Whenever I was in pain and told them they would talk back rudely, saying I am not the only mother in pain and tell me off. Rather than accepting that this was my first baby I had never done this before! They’d say that I was so full of myself and I thought to myself “maybe I should have just gone to Private Hospital A.” I was so furious I even told them that...

(FGD respondent who delivered at public tertiary maternity)

Neglect during delivery. Some women experienced neglect during the delivery and even described delivering their babies on their own because of lack of attention by the nurses on duty particularly the night shift nurses as seen in the quote below;

...I went back and they told me that I was scheduled for delivery at 6.00 am in the morning. The nurse asked me to leave and not to bother them again until 6.00 a.m. When I insisted, they told me that they knew what they were doing. When I got back to the waiting room, it just happened. I delivered right there in the waiting room. They came to the room asking questions why I had delivered in that room; they even hit me. That is when I ask one of the nurses why they were scolding me, after I just went to the nursing station and informed the nurse there that I had been sent away...

(FGD respondent who delivered at public tertiary maternity)

Understaffing of maternity wards. Some women perceived public health facilities as being understaffed and hence suspected that they would receive poor quality services including physical abuse if they went to a public maternity and hence this led them to book and subsequently deliver at a private health facility as seen in the quote below

...I went to Private Hospital A because what I hear from other people is that in most government facilities they are understaffed. It’s hard to get that private attention. I also heard they beat mothers up. I am not saying I’ve seen it happen here; it could be a stereotype but I heard they do that in other places...

(FGD respondent who delivered at a private hospital)

Referrals to public tertiary maternity health facilities.

Women described being referred by the nurses to deliver at the tertiary health facilities for three reasons; first if they were first-time mothers, secondly if they had already had a previous baby via caesarean section and had a scar and lastly if the health care worker established that their last birth had complications This is illustrated by the quotes below;

...If I was asked I would have loved to deliver my baby here, but the nurses told me for a first baby I couldn’t deliver here because they are things that you would require like the theater and they don’t have one here. So I decided to go to sub county hospital A whereby if I got into troubled labor complications they’d rush me to the theatre...

(FGD respondent at private primary health facility)

Similarly, women who had previously delivered by caesarean section and had a scar were referred and consequently booked for delivery at the tertiary health facility as shown below

...My first born was through a C-Section and during my antenatal days the doctor said that I could go for C-section for this baby too. I stay in Kayole and sub county hospital A is close; the nurses here went ahead and booked me for an operation in sub county hospital A...
Women who had previously experienced severe obstetric complications explained that health care workers preferred for them to deliver at the sub-County maternity in case they had a similar delivery as shown in the quote below;

“...My first baby had some complications while I was there and they sent me here. [Referring to Sub County Hospital A]

Some women described wanting to avoid going to other primary health facilities and eventually been transferred to the sub-County hospital in the event of obstetric complications. They mentioned experiencing situations where they attempted to deliver at primary health facilities but were later transferred to the sub-County hospital and hence there was no need to go through that referral process. This experience is illustrated in the quote below

...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 mother to come to the Sub County Hospital directly and everything is done here and get discharged without going through the referral process...

Social Influence

Some women reported that their decision to deliver was socially influenced by both family and friends who advised them to deliver at the sub-County hospital. Some friends knew healthcare workers at the respective tertiary hospitals and sent their friends to them as seen in the quotes below

... I have a friend in Nakuru and when I explained to her my position, she referred me to a doctor in Nakuru who booked me at tertiary hospital B...

Some women were referred to tertiary hospitals by their husbands specifically because of the convenience and ease of access to the health facilities as seen below;

...That’s right. They do not have a theater here but I know there is one at the Main hospital in Kijabe. My husband thought it is far and that we have sub county hospital right here at Naivasha. It’s a place where he’d just get on a motorbike and come every so often...

Financial Access To Delivery Services

Costs of delivery services. Some of the women who delivered at the public tertiary maternity explained that it was cheaper than several private health facilities so that is why they delivered there

...I delivered my baby right here at Naivasha Sub County Hospital. Its cost is fair compared to private facilities where it is a bit expensive...

Costs of delivery at private health facility. Many women in the FGD described private health facilities that were within their reach as expensive. They expressed the fact that the sub-County hospital was free if you had your NHIF card and mentioned that other private health facilities would have higher bills that were out of their range
of affordability as seen in the quote below;

...Since the sub county hospital is a public hospital, one can afford to pay what is needed. Imagine going to Kijabe Main hospital and you don’t have a NHIF card, one can pay almost 40,000Ksh. I think that is a lot of money for some of us...

(FGD respondent who delivered at public tertiary maternity)

Informal charges at the public tertiary maternity. Some women described been subjected to informal charges at the public sub-County maternity. They knew that maternity services were free and hence were surprised at the informal charges when they were about to be discharged as expressed in the quote below;

..To begin with, at the sub-County hospital they told me that I had to pay 4,800Ksh/ (48$)! My husband asked what it was for and they reduced it to 800Ksh. He still insisted on knowing what the charges were for since he knew at a public health institution, maternal services were free of charge. In the end, he did not pay even a single cent...

(FGD respondent who delivered at a public tertiary maternity)

**Distance To The Health Facility**

Some women delivered at the health facility that was considered closest to where they resided. Some women chose to go to the tertiary health facilities because of its proximity to the town centre which seemed to be close to the homes that were near town as illustrated in the quotes below

...I could say it is because it is close to where I stay...

(FGD respondent who delivered a public tertiary maternity)

...It is nearer to the town, Naivasha town...

(FGD respondent who delivered a public tertiary maternity)

For some women family members took them to the health facility that was closest to their home because of convenience as seen in the quote below

“...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...”

(FGD respondent who delivered a public tertiary maternity).

**Discussion**

This study aimed to establish what drives women’s decision making on delivery health facility in a rural sub-County. Our study showed that there was an overall increase in utilization of health facilities particularly the tertiary health facilities. Evidence shows that an increase in demand for delivery services related to policy may have led to the further deterioration of actual quality of care, with understaffed public health workers having increased workloads as experienced in various health facilities across settings in Kenya (Lang’at & Mwanri, 2015); (Karanja et al., 2018); (Gitobu et al., 2018);(Tama et al., 2018). Evidence from other sub-Saharan contexts have also shown that an increase in demand at health facilities due to removal of user fees might not necessarily lead to an improvement in maternal health and other outcomes;(De Allegri et al., 2011); (Dzakpasu et al., 2014); (McKinnon et al., 2015). Perceived quality of care in this setting resulted in the women opting to switch seeking services from primary health facilities, that were geographically close to them, to tertiary maternity health facilities, often in town centers. This phenomenon of bypassing close-by health facilities in the search for health facilities providing a higher quality of care has been previously documented in Tanzanian settings, where women deemed primary health facilities ineffectual for complex obstetric services(Danforth et al., 2009); (Kruk et al., 2014).
As part of perceptions of quality of care, a majority of the women mentioned process indicators, such as the interpersonal treatment of women by healthcare workers. Private health facilities in the area were described as providing a high quality of care that was respectful and caring towards the women. Public health facilities, on the other hand, were described as mistreating women and being disrespectful and abusive in their interactions with women. Our findings suggested that women identified nurses as critical healthcare providers, holding them responsible for varying modes of mistreatment. The women specifically identified night-shift nurses in public tertiary health facilities as having a bad attitude towards them and attending to them in disrespectful ways. Forms of mistreatment often included verbal abuse, neglect, and abandonment during delivery and denying them personal autonomy in the choice of their preferred delivery positions.

Quality of care standards 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 is a topic that is gaining traction and has been described in many different contexts, particularly in sub-Saharan Africa. Bohren et al. (2014) in a systematic review identifies mistreatment a barrier to women taking advantage of facility-based delivery (Bohren et al., 2014). Mistreatment of women is also described in detail within the Kenyan context, (Okwako & Symon, 2014); (Warren et al., 2017);(Oluoch-Aridi et al., 2018). Some studies have even estimated its prevalence at 20% (Abuya et al., 2015). Other studies have documented the manifestations of mistreatment.

Other recent reports in other sub-Saharan African countries have reported on mistreatment during facility-based delivery (Balde et al., 2017) Nigeria (Bohren et al., 2017), and South Africa (Jewkes et al., 1998). Urgent international calls have been made for accountability for the mistreatment of women during labor and delivery (Jewkes & Penn-Kekana, 2015);(Afulani & Moyer, 2019)). Mistreatment should be addressed during regular supervision in all facilities, and quality assessments should ensure that a functioning feedback mechanism for respectful care during delivery is in place. Policymakers and program managers need to take note and work on solutions to improve the quality of care that women face at maternal health facilities. Professional associations also need to be involved in continuing professional development to change norms. Other health policy researchers have suggested retraining health workers and including a value transformation component to promote respectful care during delivery services (Warren et al., 2017).

The availability of physical amenities at the health facility was commonly mentioned by the rural women. Women would “opt for quality” by choosing a health facility that had the equipment like a functioning theatre and ability to provide cesarean sections in the event of a complicated birth. This was mentioned by a majority of women in the focus group discussions. The information was often obtained by word of mouth from a relational network of other women who had used the health facilities. Physical amenities also mentioned by the women were adequate space in the wards, suitable beds, and bedding, availability of hot water for bathing and sufficient food for eating after delivery. Other Kenyan studies identify the same trend in different Kenyan settings, such as peri-urban and pastoralist communities and coastal Kenya, where women have mentioned a shortage of essential physical amenities at health facilities (Lang’at & Mwanri, 2015) ;(Karanja et al., 2018). These findings have been reflected in other sub-Saharan counties, particularly in rural settings (Gebrehiwot et al., 2014); (Anastasi et al., 2015); (King et al., 2015).

Referrals struggled with delays because of the lack of ambulances, poor communication or weak linkages with higher-level facilities that were part of the system. This finding suggests that referral options at some low-cost private health facilities within peri-urban settings are weak. WHO standards advocate for referrals that are conducted in a timely fashion with a pre-established plan for delivery care and with relevant sharing of information between the concerned staff at the private health facilities (WHO, 2016).

The rural women also had concerns around costs specifically informal charges during delivery services. Women described situations where public health facilities were “free,” but they were exposed to hidden direct costs during billing. Women were asked to pay extra fees at the point of discharge. Some of them mentioned incurring indirect costs after their coverage for the delivery had been exhausted and they had complications with the baby. They reported been asked to pay for these auxiliary costs out-of-pocket. Costs, both direct and indirect, have been previously identified in studies assessing factors influencing place of delivery both in Kenya and other sub-Saharan African settings (Mwangome et al., 2012);(Karanja et al., 2018). Out of pocket costs have been reported to been known to impoverish Kenyans accessing health care services (Chuma & Maina, 2012).
The women in this setting identified distance to the health facility as a facilitator to delivery at tertiary health maternities in town centers. Despite the number of health facilities increasing with increased access, women still preferred a health facility that was close to their residence, and easily accessible preferably in a town Centre that had easy access to public transportation. This has been identified in other studies examining factors influencing place of delivery in Kenya and different sub-Saharan African settings (Karanja et al., 2018; Anastasia et al., 2015). Our findings suggest that geographical access still presents a significant challenge, particularly for some segments of the rural women. The Naivasha sub-County study setting included women who hailed from pastoralist backgrounds, and the distances to a health facility were vast. Pastoralist women in Kenya continue to face long distances to care, posing a significant barrier and a threat related to obstetric emergencies, as seen in other studies (Caulfield et al., 2016; Byrne et al., 2016). Some studies suggest construction of maternity waiting homes as a solution to distance, especially in pastoralist communities, but cultural resistance continues to be a challenge to the uptake of such interventions (Karanja et al., 2018). Support for obstetric emergencies and functioning ambulances have been proposed as a solution to such challenges.

**Conclusion**

It is clear that despite the increase in coverage that has been witnessed since free maternity services launched in Kenya, challenges persist with the regard to the quality of care that women are receiving, especially at primary level public health facilities. The quality of care depends on the physical amenities at the health facility and the competent human resource available within the health system to manage high quality maternal health services. Hence it is critical for policymakers to focus on these issues in rising to the challenge of improving the quality of care and thus end preventable maternal mortality.

**Abbreviations**

FGD

Focus Group Discussions

NACOSTI

National Commission On Science and Technology and Innovation

**Declarations**

**Ethical approval and consent to participate**

Permission to conduct this research was provided by the National Commission for Science Technology and Innovation (NACOSTI) through a research permit No. P17/34367/2013 and an institutional research ethical approval form AMREF ESRC Approval No. P388/2017. We obtained written consent from study participants

**Consent for publication**

The author does not require to seek consent for publication

**Availability of data and materials**

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

**Competing interests**

None declared
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Author Contributions
JOA and MA conceptualized the study. JOA conducted the data analysis and drafted the manuscript. JOA, MA, FW and GK revised the manuscript and provided critically important feedback on the manuscript, all authors read and approved the final manuscript.

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References

1. Abuya T, Warren CE, Miller N, Njuki R, Ndewiga C, Maranga A, Mbehero F, Njeru A, Bellows B. (2015). Exploring the prevalence of disrespect and abuse during childbirth in Kenya. PLoS ONE, 10(4). https://doi.org/10.1371/journal.pone.0123606.

2. Afulani PA, Moyer CA. Accountability for respectful maternity care. The Lancet. 2019;394(10210):1692–3. https://doi.org/10.1016/s0140-6736(19)32258-5.

3. Alkema L, Chou D, Hogan D, Zhang S, Moller AB, Gemmill A, Fat DM, Boerma T, Temmerman M, Mathers C, Say L. Global, regional, and national levels and trends in maternal mortality between 1990 and 2015, with scenario-based projections to 2030: A systematic analysis by the un Maternal Mortality Estimation Inter-Agency Group. The Lancet. 2016;387(10017):462–74. https://doi.org/10.1016/S0140-6736(15)00838-7.

4. Anastasi E, Borchert M, Campbell OMR, Sondorp E, Kaducu F, Hill O, Okeng D, Odong VN, Lange IL. Losing women along the path to safe motherhood: Why is there such a gap between women’s use of antenatal care and skilled birth attendance? A mixed methods study in northern Uganda. BMC Pregnancy Childbirth. 2015. https://doi.org/10.1186/s12884-015-0695-9.

5. Balde MD, Diiallo BA, Bangoura A, Sall O, Soumah AM, Vogel JP, Bohren MA. Perceptions and experiences of the mistreatment of women during childbirth in health facilities in Guinea: a qualitative study with women and service providers. Reproductive Health. 2017;14(1):1–13. https://doi.org/10.1186/s12978-016-0266-1.

6. Bohren MA, Hunter EC, Munthe-Kaas HM, Souza JP, Vogel JP, Gülmezoglu AM. (2014). Facilitators and barriers to facility-based delivery in low- and middle-income countries: A qualitative evidence synthesis. In Reproductive Health (Vol. 11, Issue 1). BioMed Central Ltd. https://doi.org/10.1186/1742-4755-11-71.

7. Bohren MA, Vogel JP, Tuncalp Ö, Fawole B, Titiloye MA, Olutayo AO, Ogunlade M, Oyeniран AA, Osunsan OR, Metiboba L, Idris HA, Alu FE, Oladapo OT, Gülmezoglu AM, Hindin MJ. Mistreatment of women during childbirth in Abuja, Nigeria: A qualitative study on perceptions and experiences of women and healthcare providers Prof. Suellen Miller. Reproductive Health. 2017;14(1):1–13. https://doi.org/10.1186/s12978-016-0265-2.

8. Bourbonnais N. (2013). Implementing Free Maternal Health Care in Kenya. Kenya National Commission for Human Rights, November, 3. http://www.knchr.org/Portals/0/EcosocReports/Implementing Free Maternal Health Care in Kenya.pdf.

9. Byrne A, Caulfield T, Onyo P, Nyagero J, Morgan A, Nduba J, Kermode M. Community and provider perceptions of traditional and skilled birth attendants providing maternal health care for pastoralist
communities in Kenya: A qualitative study. BMC Pregnancy Childbirth. 2016;16(1):1-12. https://doi.org/10.1186/s12884-016-0828-9.

10. Calhoun LM, Speizer IS, Guilkey D, Bukusi E. The Effect of the Removal of User Fees for Delivery at Public Health Facilities on Institutional Delivery in Urban Kenya. Matern Child Health J. 2018;22(3):409-18. https://doi.org/10.1007/s10995-017-2408-7.

11. Caulfield T, Onyo P, Byrne A, Nduba J, Nyagero J, Morgan A, Kermode M. Factors influencing place of delivery for pastoralist women in Kenya: A qualitative study. BMC Women’s Health. 2016;16(1):1-11. https://doi.org/10.1186/s12905-016-0333-3.

12. Danforth EJ, Kruk ME, Rockers PC, Mbaruku G, Galea S. (2009). Household Decision-making about Delivery in Health Facilities: Evidence from Tanzania. In Source: Journal of Health, Population and Nutrition (Vol. 27, Issue 5).

13. De Allegri M, Ridde V, Louis VR, Sarker M, Tiendrebéogo J, Yé M, Müller O, Jahn A. Determinants of utilisation of maternal care services after the reduction of user fees: A case study from rural Burkina Faso. Health Policy. 2011;99(3):210-8. https://doi.org/10.1016/j.healthpol.2010.10.010.

14. Doctor HV, Nkhana-Salimu S, Abdulsalam-Anibilowo M. Health facility delivery in sub-Saharan Africa: Successes, challenges, and implications for the 2030 development agenda. BMC Public Health. 2018;18(1):1-13. https://doi.org/10.1186/s12889-018-5695-z.

15. Dzakpasu S, Powell-Jackson T, Campbell OMR. Impact of user fees on maternal health service utilization and related health outcomes: A systematic review. Health Policy Plann. 2014;29(2):137-50. https://doi.org/10.1093/heapol/czs142.

16. Gebrehiwot T, San Sebastian M, Edin K, Goicolea I. (2014). Health workers’ perceptions of facilitators of and barriers to institutional delivery in Tigray, Northern Ethiopia. BMC Pregnancy Childbirth, 14(1). https://doi.org/10.1186/1471-2393-14-137.

17. Gitobu CM, Gichangi PB, Mwanda WO. The effect of Kenya’s free maternal health care policy on the utilization of health facility delivery services and maternal and neonatal mortality in public health facilities. BMC Pregnancy Childbirth. 2018;18(1):1-11. https://doi.org/10.1186/s12884-018-1708-2.

18. Jewkes R, Abrahams N, Mvo Z. Why do nurses abuse patients? Reflections from South African obstetric services. Soc Sci Med. 1998;47(11):1781–95. https://doi.org/10.1016/S0277-9536(98)00240-8.

19. Jewkes R, Penn-Kekana L. Mistreatment of Women in Childbirth: Time for Action on This Important Dimension of Violence against Women. PLoS Medicine. 2015;12(6):6-9. https://doi.org/10.1371/journal.pmed.1001849.

20. Karanja S, Gichuki R, Igunza P, Muhula S, Ofware P, Lesiamon J, Leshore L, Kyomuhangi-Igbodipe LB, Nyagero J, Binkin N, Ojakaa D. Factors influencing deliveries at health facilities in a rural Maasai Community in Magadi sub-County, Kenya. BMC Pregnancy Childbirth. 2018;18(1):1-11. https://doi.org/10.1186/s12884-017-1632-x.

21. King R, Jackson R, Dietsch E, Hailemariam A. Barriers and facilitators to accessing skilled birth attendants in Afar region. Ethiopia Midwifery. 2015;31(5):540-6. https://doi.org/10.1016/j.midw.2015.02.004.

22. Koblinksy M, Moyer CA, Calvert C, Campbell J, Campbell OMR, Feigl AB, Graham WJ, Hatt L, Hodgins S, Matthews Z, McDougall L, Moran AC, Nandakumar AK, Langer A. Quality maternity care for every woman, everywhere: a call to action. The Lancet. 2016;388(10057):2307–20. https://doi.org/10.1016/S0140-6736(16)31333-2.

23. Kruk ME, Danforth EJ, Rockers PC, Mbaruku G, Galea S. (n.d.). Household Decision-making about Delivery in Health Facilities: Evidence from Tanzania.

24. Kruk ME, Hermosilla S, Larson E, Mbaruku GM. Bypassing primary care clinics for childbirth: a cross-sectional study in the Pwani region, United Republic of Tanzania. Bull World Health Organ. 2014;92(4):246-53. https://doi.org/10.2471/blt.13.126417.

25. Lang’at E, Mwanri L. Healthcare service providers’ and facility administrators’ perspectives of the free maternal healthcare services policy in Malindi District, Kenya: A qualitative study. Reproductive Health. 2015;12(1):1-11. https://doi.org/10.1186/s12978-015-0048-1.

26. McKinnon B, Harper S, Kaufman JS, Bergevin Y. Removing user fees for facility-based delivery services: A difference-in-differences evaluation from ten sub-Saharan African countries. Health Policy Plann. 2015;30(4):432-41. https://doi.org/10.1093/heapol/czu027.

27. Montagu D, Sudhinaraset M, Diamond-Smith N, Campbell O, Gabrysch S, Freedman L, Kruk ME, Donnay F. Where women go to deliver: Understanding the changing landscape of childbirth in Africa and Asia.
28. Mwangome FK, Holding PA, Songola KM, Bomu GK. (2012). Barriers to hospital delivery in a rural setting in coast province, Kenya: Community attitude and behaviours. *Rural and Remote Health, 12*(2).

29. National Bureau of Statistics Nairobi, K. (2015). *Kenya Demographic and Health Survey 2014 Key Indicators*. www.DHSprogram.com.

30. National Coordinating Agency for Population and Development (NCAPD)
ICF Macro
[Kenya], Ministry of Medical Services (MOMS) [Kenya], Ministry of Public Health and Sanitation (MOPHS) [Kenya], Kenya National Bureau of Statistics (KNBS) [Kenya]
National Coordinating Agency for Population and Development (NCAPD). [Kenya], Ministry of Medical Services (MOMS) [Kenya], Ministry of Public Health and Sanitation (MOPHS) [Kenya], Kenya National Bureau of Statistics (KNBS) [Kenya], & ICF Macro. (2011). Kenya Service Provision Assessment (SPA) 2010. *Kenya Service Provision Assessment Survey, 1–695*. https://esaro.unfpa.org/sites/default/files/pub-pdf/Kenya%20Service%20Provision%20Assessment%20Survey.2010.pdf%0Ahhttp://dhsprogram.com/pubs/pdf/SPA17/SPA17.pdf.

31. Njuguna J, Kamau N, Muruka C. Impact of free delivery policy on utilization of maternal health services in county referral hospitals in Kenya. BMC Health Services Research. 2017;17(1):1-6. https://doi.org/10.1186/s12913-017-2376-z.

32. Okwako JM, Symon AG. Women’s expectations and experiences of childbirth in a Kenyan public hospital. *African Journal of Midwifery Women’s Health*. 2014;8(3):115–21. https://doi.org/10.12968/ajmw.2014.8.3.115.

33. Oluoch-Aridi J, Smith-Oka V, Milan E, Dowd R. Exploring mistreatment of women during childbirth in a peri-urban setting in Kenya: Experiences and perceptions of women and healthcare providers. *Reproductive Health*. 2018;15(1):1-14. https://doi.org/10.1186/s12978-018-0643-z.

34. Ronsmans C, Graham WJ. Maternal mortality: who, when, where, and why. *Lancet*. 2006;368(9542):1189–200. https://doi.org/10.1016/S0140-6736(06)69380-X.

35. Tama E, Molyneux S, Waweru E, Tsota B, Chuma J, Barasa E. Examining the implementation of the free maternity services policy in Kenya: A mixed methods process evaluation. *International Journal of Health Policy Management*. 2018;7(7):603–13. https://doi.org/10.15171/ijhpm.2017.135.

36. UNFPA. (2014). *Summary Report of the Assessment of UNFPA ’s Advocacy Campaign to End Preventable Maternal and New-Born Mortality in Kenya List of Abbreviations*.

37. Wamalwa EW. Implementation challenges of free maternity services policy in kenya: The health workers’ perspective. *Pan African Medical Journal*. 2015;22:1–5. https://doi.org/10.11604/pamj.2015.22.375.6708.

38. Warren CE, Njue R, Ndewiga C, Abuya T. Manifestations and drivers of mistreatment of women during childbirth in Kenya: Implications for measurement and developing interventions. *BMC Pregnancy Childbirth*. 2017;17(1):1–14. https://doi.org/10.1186/s12884-017-1288-6.

39. WHO. (2016). Standards for improving quality of maternal and newborn care in health facilities. *World Health Organization*, 73. https://doi.org/978 92 4 151121 6.

40. WHO. UNFPA UNICEF, BANK W, & UN. (2019). Trends in Maternal Mortality 2000 to 2017: Estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division. In Geneva: *World Health Organization*.

41. World Health Organization, department of reproductive health and research. (2004). Making pregnancy safer: the critical role of the skilled attendant. A joint statement by WHO, ICM and FIGO. Geneva, Switzerland: *WHO*, 1–18. https://doi.org/http://whqlibdoc.who.int/publications/2004/9241591692.pdf.

42. World Health Organization, department of reproductive health and research. (2004). Making pregnancy safer: the critical role of the skilled attendant. A joint statement by WHO, ICM and FIGO. Geneva, Switzerland: *WHO*, 1–18. https://doi.org/http://whqlibdoc.who.int/publications/2004/9241591692.pdf
