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Choice of place of Delivery amongst Women in a Rural Community in northeastern Nigeria

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Abstract

Background: Maternal mortality remains as high as 567 deaths per thousand live births in Nigeria and 1,549 deaths per 100,000 live births in the Northern regions of the country. Despite overwhelming evidence that maternal deaths can be averted with presence of a skilled attendant during delivery, most women in the rural communities in Northern Nigeria prefer to deliver at home. This study aimed at understanding women's perception of place of delivery options and factors that influence and guide the choice of place of delivery amongst pregnant women.

Methods: A qualitative study, from a social constructionist viewpoint, was conducted in a rural community in Northeast Nigeria. Through purposeful sampling, women who recently delivered and those who were over 35 weeks of gestation participated in 12 in-depth interviews and 7 FGDs.

Results: Three themes emerged from this study: perception of facility healthcare services, especially delivery service, as less than adequate; health seeking behaviour was influenced by incidence of complications in pregnancy, husband and home environment; while social support and the opinion of the community influence women decision on place of delivery. Husband and in-laws took prime position in making key decisions; the role of the Traditional Birth Attendant (TBA) was not an important factor for making decision on place of delivery.

Conclusion: A combination of factors influenced women's decisions on where to deliver. Future intervention should be context specific; individual and cultural context in relation to maternal health of women should be taken into account before formulating interventions, while community education can change perceptions of the risk associated with deliveries and the need for skilled attendant at delivery.

Keywords: choice of place of delivery, skilled birth attendant, Nigeria.

Introduction

Maternal mortality continues to be a serious global public health problem especially in develo-

ping countries^[1]. In Nigeria, maternal mortality ratio (MMR) remains unacceptably high^[2,3] with approximately 54,000 women and girls dying each

year due to preventable pregnancy-related complications^[4]. Similarly, high perinatal mortality rate (PMR) resulting from unattended births or unskilled attendants at delivery has been documented to be a refractory problem in many parts of the country^[5,6]. MMR and PMR are key indices of public health functions of every country; they are indicators of success for both maternal and neonatal healthcare^[7].

Most obstetric complications occur around the time of delivery even in a previously normal pregnancy and thus the need for close supervision of every woman in labour^[8]. Furthermore, rapid recognition and response during and or soon after labor/delivery are essential for preventing maternal and neonatal morbidity^[9]. Supervised deliveries therefore require close vigilance to detect danger signs and prompt response by a Skilled Birth Attendant (SBA) to prevent complications that may lead to death^[8,10]. The presence of a Skilled Birth Attendant (SBA) has been reported as the “single most important factor in preventing maternal deaths”^[11]. Despite this compelling evidence however, the proportion of deliveries assisted by health professionals in Africa has remained very low^[12]. In Nigeria, like many other developing countries, unskilled birth attendants attend to deliveries at home^[13] and most of these deliveries take place in questionable hygienic conditions. Unskilled attendance at delivery puts both the mother and the newborn at risk of delivery related complications^[5,14,15]. The 2008 Nigeria Demographic and Health Survey (NDHS) reported that of all home deliveries, one in five pregnant women delivered alone with no one present^[16]. Similar studies have also documented that newborns were five times more likely to die if they had no attendance at birth, three times more likely to die if their births were attended by Traditional Birth Attendants (TBA), and four times more likely to die if they were delivered outside the health facility^[17].

The fact that SBA are mainly found within health facilities in many developing countries including Nigeria makes the choice of place of delivery of

utmost significance in these areas^[18]. SBAs being exclusively facility based in these settings leave pregnant women with no option other than to access care at a health facility to ensure skilled attendance at delivery. Despite the evidence for SBA however, many women in Northern Nigeria (over 80%) continue to deliver at home without an SBA, not minding the potential attendant risk of death or disability. This is also despite several efforts that have been put in place by the national and state governments to ensure women deliver with skilled attendants. For example, the National Primary Healthcare Development Agency (NPHCDA) introduced the Midwife Service Scheme (MSS) in 2009 to provide around the clock SBA delivered maternal services in primary health centers especially in remote and hard to reach areas in northern Nigeria. This programme re-employed and deployed retired midwives to rural health facilities and upgraded emergency obstetric care facilities in northern region of the country to increase the availability and presence of SBA at deliveries especially in the rural and hard to reach areas^[19].

Other studies have investigated why women in Nigeria still utilize unsafe delivery options. These studies identified supply factors such as weak health systems characterized by lack of infrastructure (e.g. poor or no supply of electricity) and equipment (e.g. ambulances); perennial stock out of obstetric care commodities; sub-standard emergency obstetric care (EmOC) and poor compliance with standard of practices; inadequate health worker size, mix, capacity, motivation; weak referral linkages and feedback mechanisms^[20]. Other access related factors including high user-fees, limited health facilities within reasonable commuting distance, and poor health workers’ attitude in the delivery of healthcare services have been identified by similar studies^[18]. Demand-side factors such as the woman’s educational level, husband’s occupation and age at first delivery have also been identified as influencers of place of delivery. However, most of these studies used quantitative methodologies,

which focused more on documenting gaps in the health systems that prevented pregnant women from delivering in the health facility. Most did not take the contextual socio-cultural environment of women into consideration.

This study, using a constructionist qualitative approach, aimed to examine and unravel women's perception of places of delivery and identify factors that influence them to make the choice for either home or health facility delivery in a rural community in Northeast Nigeria.

Methods

Design

This study is an exploratory qualitative study and it employed a constructionist paradigm that sought to explain a reality, which is socially constructed. This approach ensures that each individual's view of the world is brought into focus ^[21] and in this study, participants' experience and perception of place of delivery. The use of a constructionist paradigm also enabled a deeper understanding of what informed women's choices of where to deliver. Overall, the qualitative approach better expressed women views as they relate to this intimate social phenomenon.

Study setting

This study was conducted at Liman Katagum (LK) ward of Bauchi state, Northeast Nigeria. The ward, which is one of the twenty wards of Bauchi Local Government Area (LGA) of the state, is situated in the southern region of the state and is located about 45km from Bauchi, the state's capital. The ward is made up of 32 villages and has a total population of 57,000 people (2006 census). There are 12 primary schools, 2 junior and 2 senior secondary schools in the area. The main tribes are Hausa and Fulani, Hausa is the most commonly spoken language. The people have similar culture and the dominant religion is Islam with only 2% of the population practicing Christianity and other traditional religion. The source of income for most family is farming with few being petty traders and civil servants.

A total of 5 primary healthcare facilities including a Comprehensive Health Center (CHC), one Health Clinic, and three Dispensaries are located in the ward. The CHC situated about 2km from the LK village center, is the only health facility that offers delivery services; it maintains a referral linkage with 2 secondary healthcare facilities (general hospitals) that are 56km and 42km away. The CHC provides services mainly for clients from LK village, which has a total population of 5,625. Other villages in LK ward are served by other primary health care facilities in the area. The CHC has a total of 7 staff including 4 male community health extension workers, a male nurse, a cleaner and 2 midwives.

Population and sample

Sample and sampling approach

Participants were selected through purposeful sampling. The Ward Development Committee (WDC) members in the village assisted the researchers in generating a list of all potential participants living in the community. Place of residence, age of baby or pregnancy were included in the list for each participant. Eligible women (who had recently delivered or with gestational age of 36 weeks to 40weeks) were identified through the assistance of 4 female members of the ward development community (WDC) of the village. From the list generated, 26 participants who met the inclusion criteria were selected to participate in the study. One focus group discussion (FGD) and 12 in-depth interviews (IDI) were conducted. Seven women each participated in the FGD, while IDIs were conducted with 12 women. Participants were issued the participant Information sheet (PIS) and were invited to participate in the study. Verbal informed consents were taken, from the participants and they were also asked to discuss and obtain permission to participate in the study from their husbands.

Data collection methods

Four research assistants, who were trained for a period of 5 days on qualitative research methods and study methodology, served as data collectors. A pair comprising of a moderator and a note-taker conducted the ten interviews. These interviews were conducted at the participants' home. Two interviews were conducted at the venue of the focused group discussion based on the participant request. The focused group discussion took place in a classroom at the primary school located in the town of LK. All interviews were audio recorded and permissions were obtained from participants before the interviews

Ethical considerations

Ethical approvals were obtained from the ethical committees of University of Liverpool, United Kingdom, and Bauchi State Ministry of Health, Nigeria. Participants were informed that their participation was voluntary and that they could withdraw from the study at anytime during the study without any consequences. Participants were also assured that collected data (recording, jottings and analysis) would be kept secured, and confidential. Written informed consent was obtained from each participant after the objectives of the study was explained to them in the native Hausa language by the research assistants. Participants that could not write thumb printed the informed consent form.

Data analysis

Collected data were transcribed and back translated to English. Thematic content analysis was employed to analyze the data obtained. From the interviews and focus group transcripts, coding preceded identification and grouping of emerging themes. The data was thoroughly re-read without the code to comprehend its overall meaning. An integrative approach to developing code structure was used. This involved both deductive development of codes and inductive organizing framework for code types. Codes were not predefined, but emerged from the data generated

during the interviews. A theme codebook was developed; with the code and sub-code under each theme. Numerical codes were allocated to each category and theme and these codes were added into a separate column of the table. The data table was then sorted to find patterns. Code validation was performed during sorting and this provided a check on possible deviant cases and confirmation of the emerging themes. After the coding, emerging themes were grouped, further compared and contrasted.

Results

The findings from this study are presented in line with the objectives, which guided the analysis and identification of three over-arching themes. The socio-demographic characteristics of respondents are presented first and this is followed by the three identified thematic areas that influence perception and choice of place of delivery among respondents namely: women's perception of quality of services at the health facility, their health-seeking behavior, and perception of adequacy of equipment, infrastructure and physical environment of the health facility.

Socio-demographic characteristics of respondents

Respondents were all married full time housewives and aged between 19 and 39 years. None had any formal education. All had attended at least one antenatal care visit in the local health facility and had babies aged between 1 and 35 days, except one respondent who was 38 weeks pregnant at the time of the study. All 11 expectant women had between 3-9 children with an average of 5 children, with only one woman who had delivered 4 sets of twins and having a total of 13 children. Of the 12 women who participated in the IDIs, 4 delivered in the hospital by a midwife, 2 delivered at home assisted by a TBA, 1 delivered at home assisted by her mother in-law, and 4 delivered at home alone. Only 1 woman was still pregnant as at the time of the study.

Women's perception of quality of services at the health facility

This broad theme focuses on the provision and quality of maternal health services as factors that influence women decisions to deliver at home or the health facility.

Quality of service delivery at the health facility

The interviews revealed that women's perception of the quality of services at the health facility influence their decision to either deliver at the health facility or at home. Antenatal Care (ANC) attendance provided women an opportunity to assess the quality of care that the health facilities provide. In this study, all women interviewed who also attended ANC in their index pregnancies, perceived ANC attendance as a very important opportunity to assess quality of services rendered at the health facility and in reaching a decision about where to deliver. Some of the women interviewed responded thus:

"I planned to have my baby here ((in this room)). I heard of how they treat people in the hospital and I did not feel I should go there. They said that they make you stay in the room alone while your relations are outside". P1

".....So many things to do just for a normal delivery?. It's just easier to deliver at home."P11

".....Another thing was that in that same delivery, there were 3 beds which were used by women that were recently delivered and none of the bed was clean, they were all bloody and the nurse just made me lie on one of the beds. I was uncomfortable throughout; I felt like vomiting and could not breathe properly because I had to cover my nose till I delivered. It was so terrible". "P3

"Let me say. the moment I came in the staff decided to set up an intravenous line for me despite the intensity of my pains. I was struggling in pains and she was busy

trying to set up a line, I didn't know when I removed the drip from my hand. She got annoyed and left and I ended up delivering on my own again. P2

For women that chose to deliver at home, they stated that they were influenced by inadequate attention that Service providers (SPs) give to women in labour in health facilities. They further explained that women are often left to deliver alone in the health facilities, as staffs are usually too busy and impatient. Others felt that many times, staff in health facilities might not even be on duty.

Staff attitude is another healthcare service quality related factors that were very important to most women and that influenced their decision on where to deliver. Most participants agreed that they would rather deliver at home than go to a health facility if they perceived the healthcare provider as unfriendly and rude. Some participants explained that they decided to deliver at home because they were not happy with the conduct of staff at antenatal clinics in their last pregnancy. Participants also mentioned that attending ANC would give them the opportunity to assess healthcare providers' attitude and eventually making up their minds whether to deliver at home or at the health facility. On staff attitude one of the participants responded thus:

"My main issue is with the lack of communication. When the blood and urine test are conducted, they just write the results on the card for you to take to the sister (nurse). You expect that such result should be discussed but instead the sister will just write medications and tell you when next you can come back for another appointment". (P1 FGD)

"I also had same experience. I asked them about the test result but I was ignored." (P3 FGD)

Perception that delivery at home enhances women's status in the community

Most women interviewed agreed that delivering at home is desirable because it shows that the pregnant woman is strong and that this makes her to commands more respect compared to if she was helped to deliver at the health facility. Participants also agreed that it was normal for a woman to deliver at home if no problems were identified during antenatal care (ANC). These women felt that only women with complicated pregnancies or difficult labour need to deliver at the health facility. These views were captured by some women who responded thus:

“It is much more honorable for a woman to deliver in her own room.”(P10)

*“My deliveries are okay, I did not.... have any complications. You know when you have antenatal and you are reassured that there is no problem your mind is at rest, that is why I just thought there will be no problem if I deliver at home”*P2

All the women stated that even though they were encouraged to deliver in the hospital by the staff during ANC, there was little or no information on delivery plans.

“They asked me to hasten to the hospital the moment I start feeling labour pains so that they may be able to examine and detect any emerging complication. They advise that staying at home while in labour is not recommended because prolonged labour may occur and a woman can start bleeding before delivery” P3

“They did not discuss anything ((delivery plans)) like that with me.” P3

Five women who intended to deliver at hospital also gave reasons for their choices. They expressed the need for experienced staff; stating that hospital delivery is quick and easier and they will be treated for after pains or for complications. They talked of the home environment as an uncertain place that is risky.

“To tell you the truth; in the hospital after you deliver, they help a lot in removing all blood clots and any other dirt’s (remnants) that are in your womb. They do their best in ensuring that all are out”. P7

“Home deliveries can be risky. The delivery I had before this one that I said the baby died was a home delivery.” (P5 FGD)

Delivery practices at health facilities

The delivery practices at health facilities, especially birthing position, greatly influenced women’s decision-making about where to deliver. Of the 19 women interviewed in this study, 11 delivered at home, 7 delivered in a health facility and one woman was pregnant at 38 weeks gestation. All however agreed that the birthing position was an important factor for them to make a decision about home or health facility delivery. They also reported that most health facilities do not usually allow women to deliver using a birthing position of their choice. One woman summed up her experience as follows:

*....The position I prefer is the squatting. I put a footstool to lean on and squat when I felt the urge to push. That position facilitates delivery more than the supine position. In the hospital they ask you to lie on their small bed and will not allow you to squat. This is why I prefer to deliver at home”*P10

Health seeking behaviour

The health seeking behaviours of the women was a major influence to decision making. Most women believed that a pregnant woman would only need to seek care at a health facility if she had problems during pregnancy or labour. They further indicated that they may decide to have their babies in the hospital.

“I was afraid when I was told I needed blood transfusion. That was when I said to myself it will be better to deliver in the hospital in case I needed further transfusion at delivery. I wanted to deliver where I could be cared for in case I still

needed blood, they will transfuse me immediately. That will not happen if I deliver at home”P12

“I was a bit scared because I started bleeding in labour. I have never seen that before. [And I was very scared]. I thought of all sort of things. I have heard of women that bleed to death at delivery. I thought of what I needed to do.”P7

“.... I was so worried that I just walked alone to the hospital. The people in the house later realized I was not around and followed me to the hospital. (Laughs) I had vivid imagination of myself lying in a pool of blood death” P7

Some women did not make any key decision and waited for labour in other to make up their minds.

: *“I really did not decide firmly on where to deliver. I was praying for God to choose the best for me. I however, delivered in the hospital. I laboured throughout the night and when I did not deliver by morning; I asked my husband to take me to the hospital.”P5*

Socio-cultural factors

Health facility environment factors

Participants identified health facilities’ physical environment as a factor that influence their decisions on where to delivery.

Proximity of health facilities to participants’ homes

The physical distance of health facility from the women homes and bad roads were identified as barriers to some women. Participants reported that having to access health facilities that are far away from their communities, coupled with difficulties in arranging for transportation often makes facility delivery the last option.

... if you were to go to the hospital, transport had to be arranged and money will be spent on medications in the hospital. You have seen our roads; it’s just terrible during the rains. The household will be destabilized. Some of the women have to go with you to the hospital and then arrangement has to be made for your other

children and for the food that you and your companions will need in the hospital”. (P2 FGD) Some participant’s displeasure with the hospital environment influenced their decision to deliver at home as summed up by another participant.

“I don’t so much like hospitals. The labour ward smells of blood all the time. You can smell it when you pass along the corridor as I do during ANC. Some women say the beds are dirty and soiled with blood. May be it is not cleaned well and that is why we can smell it from the corridors. Although, the compound where we get antenatal care service is clean, I cannot vouch for the labour ward. One may end up with disease instead of getting healthcare”.P9

Socio-cultural factors

The participants stated that the cultural norm in their community was for a woman to deliver by herself at home and that this is the expectation of other community members of a pregnant woman. Participants further reported that the opinion of other community members about deviation from this cultural norm is a vital consideration for them in making decisions about the place for delivery.

“... my mates are watching to see what I will do at delivery. This is my first birth in this house and everyone wants to know whether I am a strong woman or a weakling. It’s all a matter of honour. I needed to show everyone I can do it as others are doing it.”P11

Social factors

Social support in the form of family, community and husband support was very important in making decisions especially at the occurrence of complication in labour. Most of the women agreed that they will send for their husbands or relation before making a decision whether to go to the hospital or not at the onset of complication. There were established family and community support with TBA which were used by participants. These were mainly supports after delivery. From the interviews, the TBAs were called after delivery

and were not consulted or considered before a decision for delivery. Two women stated that they will call the local TBA if they have an emergency. *“We send for Goshi (the TBA), she is our neighbor. She is experience (.....) she had 12 children of her own. She had assisted with thousands of deliveries in this community”*.P6

Mother in-laws were however found to play a very influential role in making decisions to where a woman delivers.

I made up my mind to give birth at home but when my mother in-law realized I was in labour she insisted that I should be taken to the hospital. Just as we were about to leave for the hospital I delivered at the entrance of the house. P7

Partner factors

The role of the husband was clearly defined as it relates to the woman decision. As one participant pointed out, any decision she will make will be based on what she thinks her husband would like.

“You know when one husband is at home he will not agree to take one to the hospital except if he noticed that the labour is difficult or you are in distress. That is really what will make you decide on home delivery and hope for it to be easy than to wish for a hospital delivery. no one will hope for a difficult delivery. So you see why it’s different between home and hospital delivery?”(P6 FGD)

Past experiences

Participants made references to what happened in their previous deliveries when they want to make subsequent decisions about future deliveries.

“... The delivery I had before this one that ... baby died was a home delivery. I think that labour just lasted for an hour. My husband was trying to make arrangement for transportation to the hospital when I delivered. The woman that assisted with the delivery did not tie the umbilical cord stump very well. It bleeds continuously. That was not noticed in time till the baby was paper

white. I don’t think that will happen in the hospital. ...” P5

Home factors

Considerations for other children, cost of delivering outside the home and who pays for the expenses, and traditional home practices are home factors that influences some of the participants’ decisions.

“Ohh..ooh that one there is no rest even after delivery. At one time, I was told I had elevated blood pressure and needed some rest. I had to be admitted to the hospital for the rest following the delivery at home. The moment you deliver at home, friends and relations will be visiting you to greet you. You are exhausted but you are still required to socialize. You answer their greetings, some will stay for a chit chat, and some will even come with their own noisy children. Your relations will come from far to stay with you up to the naming ceremony. You are not expected to do the house work but chatting with people can be tiring”.P11

Discussion

The perception of the quality of Antenatal care (ANC) received by women was found to be a very important factor that influences women’s decision about where to deliver. This is similar to findings from other studies carried out in other parts of the country^[22]. However, in contrast to other studies^[10], antenatal care utilization did not increase health facility delivery with skilled birth attendant but was associated with decisions for home deliveries due to women perception that hospital deliveries are for complicated pregnancies. This could be directly related to the lack of proper information on birth plan during antenatal care. All pregnant women were advised to deliver in the hospital but few women actually delivered in the hospital in contrast to the finding by Fotso^[23] where women advised during antenatal care to deliver at a health facility were significantly more likely to use health facilities for

delivery. Quality of care offered in the hospital as well as staff attitude when perceived as less than adequate influenced women to have home deliveries as identified in other studies ^[13, 22]. In Nigeria and Nepal and as revealed in this study, lack of utilization of health facility was linked to inadequate qualified staff and negative staff attitude ^[13,24].

Delivery practices exert significant influence on women's choice of place of delivery. This study, like others, revealed rural women place significant value to birthing position during labour and delivery ^[3,25,26]. In rural northern Nigeria, women decided against hospital delivery due to inability to adopt squatting posture, the perceived lack of privacy, and presence of a male staff attendant^[3]. The women also expressed difficulty with payment for services in the hospital as a factor that hinders them from hospital delivery. The women were aware that delivery services in the public hospital were supposed to be free but different account of request for money to buy items for health intervention were made by hospital staff and was a factor that influenced women decision against hospital delivery. Other studies ^[2, 18, 27-29] found that cost for health care especially for the poor is a factors that prevent women from seeking medical care from skilled personnel. Falkingham, stated that even where government declares free health services for pregnant women, there are a lot of informal payments in form of cash or in kind to health workers^[30].

Findings from this study are similar to others that revealed poor attitude of health workers, demand for hospital fee, and poor environmental sanitations as some of the quality of care assessment that influenced women to decide against hospital delivery ^[18]. Few women who had hospital delivery perceived the quality as good in terms of staff attitude and delivery services that are efficient, quick and easy. In Enugu Southern Nigeria, factors that encouraged hospital delivery were promptness of care, competence of health workers, teamwork, round the clock services that

are affordable^[2]. There was no uniform assessment of quality of care by the respondent because of the differences in the experiences and in perception. Perhaps, many of the findings in this study could in some way be associated sub optimal healthcare, and to the health care system itself.

The intention of women to deliver in a particular location had a direct bearing to pregnancy factors. Those women who had complication in pregnancy are aware that they can be assisted when they deliver in the hospital. Almost all women however, stated the need to discuss decision with the husband before seeking help for a complication. This clearly revealed the lack of autonomy of women as found in other studies ^[31,32]. Husbands are sole bread winners and have control over their spouses' spatial mobility. This means the wife cannot go out without permission from the husband. The study also revealed the mother in-law to be an important influence on decision making either directly or through advice given to the husband. The women decisions are often not their own but that of the husband or the mother in-law as discovered in other studies ^[25, 32]. Fotso did not find an association between influences of woman's autonomy on the utilization of maternal health services for delivery^[23]. Perceptions of danger signs^[33], traditional views on pregnancy and delivery ^[25] and the women past experience as relates to child birth ^[24] are important factors that influences the decision on the place for delivery in this study as was revealed by others.

In this study, childbirth was viewed as a natural process and intervention is only necessary when something is wrong. Hospital delivery is considered culturally inappropriate. The women stated that it is "more honorable for a woman to deliver alone". This is in contrast to views of child birth in the western world ^[34] where women first options for delivery place was hospital. In Malawi, Cultural factors, perceptions of danger signs and traditional views on pregnancy and delivery were also important factors that influence decisions on place of delivery ^[25].

Physical distance from healthcare was found to be a barrier for hospital delivery in some studies [18, 25,27-29]. The women in this study considered distance, arrangement for transportation and access roads as factors that influenced their decision to have a home delivery. During standard antenatal care, a pregnant woman is expected to make a birth plan on where to go for delivery, keep fund available, and arrange for transport in case of occurrence of labour or complication [8]. All women in the study had antenatal care but they stated some difficulties with transportation because transport arrangements were not made prior to the onset of labour. Recommendations made by the women were for government to rehabilitate access road and not for transportation in recognition of the bad roads in the area. This indicates that even when a vehicle is available transport time may be prolonged due to the bad roads as was also stated in other studies [13,27-29]. Social support in form of TBA was evident and acknowledge by the women, however the TBA were not a major influence to the women choice of place of delivery. TBAs were called to provide general support after delivery at home in contrast to findings in Zambia where arrangements are made with TBA even before labour start, indicating decision to deliver with the TBA. Family and husband support were acknowledged as very important even for those that deliver in the hospital. Although the women stress the ‘honor’ of delivering alone, most of them acknowledge that the family are always in the background. This finding is similar to other studies conducted in rural Nigeria and Uganda^[3].

Conclusion and Recommendation

This study has contributed to understanding women views as it relates to their decision on place of delivery. It uncovered the different factors that affect decision making which include quality of service provided at health facilities, environmental and cultural factors as well as access to health facilities. The study also revealed that women decisions on place of delivery are not

made in isolation; it may mirror that of their partners or in-laws and thus multipronged interventions that target the whole community need to be put in place to address the problems identified. In addition, health providers need to help women plan for delivery during ANC and this should include decision to use skilled attendant, know the signs and symptoms of complications, know where to get expert care, have transportation plan, have a plan for saving money for an emergency and identify a person to accompany her in the event of emergency^[35]

Competing Interest Statements

The authors have no known competing interest.

Authors' contributions

HM: have made substantial contributions to conception and design, acquisition of data, analysis and interpretation of data and initial drafting of the manuscript. In addition, have given final approval of the version to be published.

OO: have been involved in drafting the manuscript and revising it critically for important intellectual content.

DA: have been involved in revising the manuscript critically for important intellectual content.

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List of Abbreviations

ANC	Antenatal care
CHC	Comprehensive Health Center
EmOC	Emergency obstetric care
FGD	Focused Group Discussion
IDI	In-depth interviews
LGA	Local Government Area
LK	Liman Katagum
MMR	Maternal mortality ratio
MSS	Midwife Service Scheme
NDHS	Nigeria Demographic and Health Survey
NPHCDA	National Primary Healthcare Development Agency
P1, 2....5	Participant number 1.2.....5
PMR	Perinatal mortality rate
SBA	Skilled Birth Attendant
SPs	Service Providers
TBA	Traditional Birth Attendants
TSHIP	Targeted States High Impact Project
USAID	United State Agency for International Development
WDC	Ward Development Committee