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Full Length Research Paper

Women and men's perception of birth preparedness and complication readiness: a qualitative study in semi-urban communities in Nigeria

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Abstract

The prevailing trend of maternal mortality *has* constituted a burden to some countries across the globe, especially in developing countries. It has been empirically established that the majority of these deaths were related to inadequate birth preparedness and complication readiness (BPCR). This study, therefore, explored women's and men's perceptions on BPCR. The study adopted a descriptive design using a qualitative approach. A total of 48 community men and women were engaged in focus group discussions (FGDs). The participants were purposively selected through consultation with the community leaders and primary healthcare centres in the selected communities. The perceived components of BPCR include; registration and regular antenatal clinic attendance, balanced diet, sleep and rest and having necessary laboratory investigations done. It was opined that complications could occur to pregnant women as a result of poor nutrition, lack of physical exercise as well as if the woman is involved in some house chores. It was concluded that the identified components of BPCR by the pregnant women, older women, and men in the community were at variance with the standard components by WHO. Hence, there is a need for public awareness of BPCR.

Keywords: Perception, Birth preparedness, Complication readiness, Semi-Urban, Communities Pregnant women, Nigeria.

INTRODUCTION

Maternal death remains a public health issue worldwide, and the maternal mortality ratio is one of the major health indices for assessing the development of any nation. Globally, an estimated 295,000 maternal deaths have been reported annually with 94% of the death occurring in developing countries (WHO et al, 2019). The majority of these deaths were related to complications during pregnancy, childbirth, and immediately after childbirth (Dufera et al, 2020). Also, the causes of these deaths have been attributed to lack of preparation for normal birth and failure to take appropriate action in anticipation of any unpredicted situation or complication that may arise during pregnancy, labor, childbirth, and a few days after childbirth (Tadesse et al., 2018).

Complications during pregnancy, labor, childbirth, and immediately after childbirth cannot be predicted, hence the need for birth preparedness and complication readiness (BPCR) (Letose et al., 2020). The World Health Organization, therefore, introduced BPCR as a component

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of the focus antenatal care model. Birth preparedness and complication readiness is meant to prevent delay in seeking obstetric care, thereby promoting skilled birth attendance and consequently reducing maternal and neonatal mortality and morbidity (Joyce et al., 2019).

In 2015, Nigeria joined other global leaders to put together Sustainable Development goals (SDGs) in which one of the targets aims at reducing maternal mortality (Ayele et al., 2021). The maternal mortality ratio in Nigeria was estimated to be over 800 per 100,000 live birth. Hence, a pregnant woman in Nigeria has a 1:22 likelihood of dying during pregnancy, labor, childbirth, and/or immediately after childbirth (WHO, 2019). The majority of these maternal deaths have also been traced to residents of rural communities which was reported as a disparity between the rural and urban areas due to inequities in access to healthcare services (WHO, 2019; Biswas et al., 2020; MacDonald et al., 2018). However, these deaths could be prevented through strategies such as BPCR. Many studies (Ananche et al., 2020; Sabageh et al., 2017; Eze et al., 2020; Olowookere et al., 2020) on BPCR have focused on pregnant women, only a few focused on men (Tadesse et al., 2018; Forbes et al., 2021; Worku et al., 2020; Gultie et al., 2021; Sodeinde et al., 2020) while there is a very limited study focusing on elderly women. However, the perception of elderly women and men about BPCR becomes important because in the Nigerian culture, these categories of the population influence the decision of pregnant women on when and where they seek healthcare services.

It is against this background that this study explored the perception of older women, men, and pregnant women on BPCR to elicit information that will guide appropriate intervention towards reducing maternal and neonatal mortality in Nigeria.

Methods:

Study Design

A descriptive cross-sectional research design using qualitative approach was used to achieve the objectives of this study. Focus Group Discussions (FGDs) were conducted to understand women's birth preparedness and complication readiness in the study areas.

Study Setting

This study was conducted in two semi-urban communities within Ibadan, a city in southwest Nigeria. Ibadan is the third most populous city in Nigeria with a population of over three million. The city is divided into urban (with five local government areas) and semi-urban (with six local government areas). The majority of pregnant women in these semi-urban communities receive antenatal care from the primary healthcare centers located in the communities.

Recruitment of Participants

The researchers conducted six sessions of focus group discussions; These included two among older women (who were in the position of mothers, mothers-in-law, aunts, neighbors, and sisters to pregnant women) (n = 16), two among men (who were in the position of husbands, brothers, and fathers-in-law to pregnant women who were not part of the study) (n = 16) and two among pregnant women (n = 16). The study participants were purposively selected through consultation with the communities' men and women leaders. This group of people is the main stakeholder in decision-making for a pregnant woman.

Data Collection

The study was conducted between February and May 2019. The men and women leaders of the communities were contacted through the community health educator at the primary healthcare facilities located in the communities. They provided information on how to select the study participants, time, and venue for the interview. An interview guide was used to ask open-ended questions from each of the groups of men, women, and pregnant women at different times. They were asked questions on their opinions on birth preparedness and complication readiness (BPCR), as well as their roles in ensuring birth preparedness and complication readiness among pregnant women in their various communities. The interviews were conducted in their local language (Yoruba language). Each focus group discussion lasted 60–75 minutes, it was audio-recorded and transcribed verbatim.

Data Analysis

Data collected were transcribed and translated from Yoruba to the English language. Transcripts were read through and *NVIVO11* was used in the process of categorization. Themes were presented in sections and categories in a subsection, direct quotes were used from the transcript for greater emphasis, careful selection of quotes demonstrated reliability and validity of data analysis.

Ethical Consideration

Ethical approval number UI/EC/18/0629 was obtained from the University of Ibadan/University College Hospital institutional review committee before the commencement of data collection. The objectives of the study were explained to the study participants, permission to record their voices was sought and consent was secured. They were assured of the confidentiality of information received and the right to opt out at any point of the interview without any consequence.

RESULTS

Sixteen married men (27–50 years old), 16 older women (39–56years old), and 16 pregnant women (22–28 years old) participated in the FGDs. Among the men are traders, motorcycle riders, artisans, civil servants, and a veterinarian. Among the older women are traders, artisans, a teacher, a missionary, and a traditional birth attendant, while among the pregnant women were traders, artisans, civil servants, and a teacher.

Perception of community men and women on birth preparedness and complication readiness

The focus group discussions explored issues on birth preparedness, causes of lack of adequate preparation, types of complications during pregnancy, childbirth, or immediately after childbirth, causes, and prevention of complications.

Birth preparedness

Description of preparation for normal birth

The three groups unanimously agreed to registration for antenatal care in the hospital at the early stage of pregnancy and purchase of materials needed to take care of the newborn and the mother as essentials to prepare for normal birth. The importance of antenatal registration concerning preparation for normal birth formed a consensus among the three groups. The groups of the older women and men perceived those pregnant women should be regular in antenatal clinic attendance after registration while the pregnant women did not share that opinion. The men group also explained that pregnant women must be properly monitored to ensure that they attend the clinic as part of birth preparedness while the groups of the older women and pregnant women did not share such idea.

Table 1 shows detail of other components of birth preparedness as identified by each group of participants. The need for antenatal registration was perceived by the pregnant women as a necessity to have access to quality care sharing this opinion by the older women was informed by their belief about fetal development. Their different perspectives are expressed below:

“register for antenatal to be able to have access to good treatment” (pregnant woman 1.1).

“she should go for antenatal to know the position of the baby and the mother, they let us know that when a woman is pregnant the baby will firstly share our blood in two, either is enough for the mother or not the baby did not know what concern the baby is the development, so pregnant woman firstly because of her and the unborn child need to go to the antenatal” (older woman 3.9)

However, the older women group identified lack of home training among women nowadays and lack of good advice from older women in the community as major causes of inadequate birth preparedness. One of them stated:

“lack of home training, that’s what is happening to many people and lack of good parent they said’ charity begins at home” (older woman 3.16)

Decision on a place of birth

Another dimension of birth preparedness mentioned during the FGD sessions relates to the decision pregnant women make on where to seek antenatal care. In other words, where one chooses to access antenatal care and deliver a child is important for birth preparedness. For example, in the case of the participants in this study, making a deliberate decision to go to the government hospital, as compared to other possible places to seek maternal care, is an indication of good pregnant women’s birth preparedness.

In the men’s FGD, the decision on the place of birth was discussed as part of the birth preparedness. Although some men believed that birth can happen anywhere, including at home, more men perceived that the birth preparedness of pregnant women can be understood from the decisions they make regarding where to access maternity care and deliver their babies.

“government hospital is the best place to go to have adequate treatment, they will give them the necessary drugs, they will do adequate check-up for the baby and the mother, they will give the mother the necessary drug to develop the baby inside the womb, they will give them adequate treatment” (older woman 4.1)

"There is no place she gave birth that is not good, even at home; my wife gave birth at home before I got home, who delivers her? God deliver her” (man 2.23)

"Sometimes it will be easy for some people and difficult for others, the way God makes it easy for an individual is different, some people when it happens the cycle of the delivery will not take more than thirty minutes, this not the matter of clinic is near, everything depends on God” (man 2.25)

Complication readiness

Another vital part of the preparation for birth includes anticipating any complications, hence the importance of being able to identify likely complications and be prepared to seek medical help immediately as discussed by the participants. The three groups of participants identified various complications that may occur during pregnancy, childbirth, and immediately after childbirth as presented in table 2:

Table 1. Community perception of birth preparedness.

Components of birth preparedness	Pregnant women	Older women	Men
Antenatal registration	✓	✓	✓
Purchase of delivery materials	✓	✓	✓
Medications	✓		✓
Regular antenatal clinic attendance		✓	✓
Breast care	✓	✓	
Personal hygiene	✓		
Adequate intake of water		✓	
Adequate diet		✓	
Regular medical check-up		✓	
Laboratory testing		✓	
Physical exercise		✓	
Diagnostic investigation		✓	
Monitoring			✓
Arrangement for birth location			✓
Emergency Contact			✓

Table 2. Identified obstetric complications.

Identified obstetric complications	Pregnant women	Older women	Men
Fetal death		✓	✓
Stillbirth		✓	✓
Bleeding	✓	✓	
Premature delivery			✓
Miscarriage			✓
Maternal illness		✓	
Maternal weakness		✓	
Fainting		✓	

However, having identified various likely complications, the participants discussed factors that could be responsible and at the same time inform the readiness of pregnant women for such complications. The three groups have divergent opinions on what could be responsible for obstetric complications. The pregnant women opined that neglect of self-care could be responsible, while menbelieved that some forms of posture maintained during pregnancy as well as failure to attend antenatal are factors responsible for complications. The older women from another point of view believed that patronizing traditional birth attendants (TBAs) and religious birthing centers by pregnant women are the major factors responsible for complications during and after delivery.

"what usually cause danger that may occur is when the pregnant woman did not take care of herself during pregnancy" (pregnant woman 1.25)

"it is not good for a pregnant woman to be bending down always or fetching water from the well, all these things cause complication for pregnant woman" (man 2.4)

"these traditional nurses, all these complications are happening from them, am pleading to the government to help us about these traditional nurses to eliminate maternal death" (Older women 3.12)

"think religion also have hand in maternal mortality" (Older women 4.4)

Complication prevention

Both the groups of men and the older women opined that being involved in some kinds of physical exercises is a way to prevent complications. This opinion of the older women however was tied to discouraging laziness in carrying out

Table 3. Complication prevention activities.

Activities	Pregnant women	Older women	Men
Physical exercise		✓	✓
Involvement in house chores		✓	✓
Antenatal clinic attendance			✓
Sex in pregnancy	✓		
Medication	✓	✓	
Nutrition	✓		
Hospital consultation		✓	

house chores among pregnant women while men tied this opinion to the ability of the pregnant women to know which exercise to do at different stages of pregnancy. However, a different opinion was shared by the pregnant women as shown in table 3.

Also, pregnant women and older women thought that

“in terms of drugs we should be extraordinarily careful, we should not eat anyhow, we should eat good food and take enough protein and minimize intake of carbohydrate because if the baby is too big during pregnancy it can cause tear and may cause a problem” (pregnant woman 1.29)

“they should not use unprescribed drugs; if they are feeling weak and they do not know what to do, instead of complaining to quack nurse they should go to the hospital to complain how they are feeling, they should not do self-medication” (older women 3.13)

Advance preparation for complications

Men and pregnant women have divergent opinions on what to do in readiness for any complication that may occur at any time. Men are of the idea that pregnant women should save towards this purpose and prepare for any type of complication that might occur, while pregnant women opined that scan should be done and pregnant women must not be left to be alone in readiness for complication.

“if a woman is pregnant she should be thinking another way round that if am bleeding, have I made the arrangement where am going to get blood” (man 2.21)

“doa scan to know the position of the baby” (pregnant woman 1.11)

“the pregnant woman shouldn't be alone because it is very dangerous and she will not get herself even it won’t be easy for her to call anybody, so pregnant woman shouldn't be alone to avoid danger” (pregnant woman 1.24)

However, if any complication occurs, pregnant women believed that being rushed to the hospital is the best thing to do;

"We are supposed to go to the hospital to lodge complain" (pregnant woman 1.22)

"There is a phone she can call one of her friends in the area so that they can quickly rush her to the nearest hospital, if the clinic where she registered is far from where she is living, they can quickly go to the nearby hospital, so they can explain whatever is happening to the doctor or the nurses can be able to find a solution to the problem (pregnant woman 1.23)”

Roles of older women in BPCR

Older women also discussed extensively women not preparing for their delivery in the right way. This is especially concerning buying the needed materials and equipment that are needed in the hospital. These women noted a change in attitude towards birth preparedness as now women pay more attention to preparing for the naming ceremony than the actual birth.

“the adult needs to be advising the pregnant women around them even if she is not our child, some people in the olden days, the parent around the environment usually borrow them the cloth to wear on the naming ceremony if they have noticed she did not have the cloth to wear and some will dash them, did you think our children nowadays can collect such? They cannot, that is why I said lack of home training, we should explain to them. Lack of home training, that’s what is happening to many people and lack of good parent they said’ charity begins at home’ If we have good parents that advise us, preparation of the naming ceremony should be after the delivery and there is no complication” (older woman 3.17).

Older women opined that their role is very important in advising pregnant women, praying for them, and showing them love.

"The impact we should take firstly, we should invite them and discuss on the pregnancy on the steps they should take maybe going to antenatal, we will explain to them, the food they should be eating like we have been discussing earlier we will explain to them and I am very sure they will listen, we are going to do continuous lecturing because some children will not listen at once but if we continue to lecture them am sure one day they will want to follow our advice" (older woman 3.28)

"Firstly we should pray for them, secondly we should be advising them and show them love so that they can be moving closer to us because if we did not put love first there is nothing we can tell that they will listen, so we can advise them on what to do and don't that is what we can do, because if we don't put love first, some people we can be seeing them wearing cloth and they may not have any belongings at home" (older woman 3.29)

Roles of men in BPCR

Men also believe it is their responsibility to monitor their wives during pregnancy to ensure that they attend a clinic and adhere to the recommendations of the health workers.

"preparation starts when the pregnancy is still in the early stage because a lot of the women you are looking at when they go to the hospital and they gave her drug she will keep it under the bed, we have seen a lot of them doing such bad act, it is on the delivery day when complication occur, but you know monitoring" (man 2.1).

Most men believed that pregnant women cannot be left to take care of themselves. Some recommended having a good rapport with the doctor to ensure that their wives are attending the clinic and that they are kept informed at different stages of the pregnancy.

Indeed, most of the respondents agreed that complications in birth or during delivery would mostly occur when birth preparation is not rightly done. One of the men reported a case of complication that occurred because the pregnant woman refused to take the necessary medications given to her at the hospital. This resulted in more expenses for her family;

"one incident happened recently at SASA, that I followed them to the hospital to take treatment and drug for her, but not knowing she does keep them inside a polybag at home, it is not more than three to four months that complication wanted to occur that her parent spent a lot of money before she confessed that she always kept the drug being given to her in a bag at home, we pray to God not to let us have a pregnancy that we are not going to deliver (Amen)" (man 2.11).

However, in birth preparedness men agreed that they also have a role to play. This includes ensuring that the health center is close by and that they have a means of transporting their wives to the hospital when it is in the dead of the night.

"is not on her delivery day that she starts labor around 11pm they will now be thinking whose bicycle and car are they going to call now, all those things usually cause delay and it can make the pregnant woman to deliver at home or on their way to the hospital or where she is not meant to deliver which can cause maternal mortality when a woman is pregnant she and her husband should have prepared where did we want to deliver our baby" (man 2.5)

DISCUSSION

The study highlights the components and discusses the importance of BPCR from the perspectives of pregnant women, community men, and women. The community men and women also agreed to their roles in BPCR and these roles were identified. The components/elements of BPCR as identified by WHO include; knowledge of obstetric danger signs, identification of birth location, obtaining birth materials, transportation arrangement, saving towards the delivery bill and expenses, arrangement for a blood donor, identification of skilled birth attendant, arrangement for family caregiver and arrangement for a companion.

Components of BPCR as identified and discussed by the pregnant women, community men, and women include; registration for antenatal care, regular attendance of antenatal clinic, breast care, laboratory investigations, diet, obtaining delivery materials. These identified components are however at variance with the components of BPCR as identified by WHO (Moinuddin et al, 2017; Akshaya et al, 2017; Vidhyashree et al. 2020) The only component of BPCR mentioned by the respondents which is also in agreement with the WHO framework was obtaining delivery materials out of the eight components identified by WHO. Therefore, it may be implied that women have poor knowledge of BPCR in comparison withthe WHO framework. This is supported by other studies (Ananche et al., 2020; Moshi et al, 2018)who reported poor knowledge of BPCR among pregnant women and men in Ethiopia and Tanzania respectively. Also in Nigeria, Sabageh et al. (2017) reported poor knowledge of BPCR among pregnant women. However, it might also be important for WHO to take into consideration the local context components of BPCR to plan effective interventions. Thus, programs that will increase the awareness and knowledge of BPCR among pregnant women, community men, and women will be a good intervention and one of the strategies to improve women's BPCR and subsequently reduce maternal and neonatal mortality in developing countries like Nigeria.

Also, all the categories of the study participants opined those obstetric complications could occur at any time. However, there was contradicting opinion on the identification of correct complications while factors responsible for such complications could not be appropriately identified in their discussion. Thus, knowledge of obstetric complications among pregnant women, men, and women in the community could be said to be poor. This is supported by a study in Ethiopia (Ananche, 2020), and another study in Nigeria (Oguntunde et al., 2019) which reported poor knowledge of obstetric complications among women of childbearing age. This poor knowledge, however, could mitigate against timely and adequate preparation for such complications. Hence, this could be responsible for why

all the groups of participants have a divergent opinion on what to do in readiness for complications. However, they all agreed that being rushed to the hospital in case of obstetric complications is most appropriate. This perception of accessing care from the hospital in case of complications could reduce delays in seeking skilled care thereby promoting timely access to skilled care which eventually will facilitate skilled birth attendance.

Furthermore, pregnant women, community men, and women agreed that they all have important roles to play in ensuring BPCR among pregnant women. Men believe that they give financial support to pregnant women in the community as well as monitor them to ensure they attend the antenatal clinics as necessary. This opinion was shared by men in a study by Cheptum et al. (2019) in Kenya, which reported that men opined that they play vital roles in decision making about the place of delivery and provision of money needed by pregnant women. Howbeit, another study conducted by Gultie et al. (2020) inEthiopia reported low involvement of men in antenatal care but supported the financial commitment of men to pregnant women. Therefore, men are important stakeholders in ensuring women's BPCR especially in the aspect of their financial obligation as well as in decision making. Also, older women discussed their roles as elders in the community. They agreed that they are supposed to advise pregnant women around them on the importance of buying delivery supplies instead of saving their money in preparation for the naming ceremony. It could be implied that the older women have gained experience as to know what is more important while a pregnant woman is preparing for a normal birth or any complication. Hence, they play a vital role in ensuring BPCR among pregnant women.

CONCLUSION

Registration and regular attendance of antenatal clinic, avoidance of self-medication, proper monitoring of pregnant women, good rapport with the doctors, registration at a close-by health center as well as provision of means of transporting for pregnant women to the hospital were perceived to be necessary for birth preparedness. There was a general belief among the respondents that, the complication could occur to pregnant women through inadequate birth preparation, quackery, poor nutrition, and inadequate physical exercise. It is therefore important for effective integration of the local context of BPCR components/elements among community dwellers and the WHO framework. Also, health educational program intervention to enlighten the family, the community, and pregnant women on BPCR is strongly recommended.

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