

The role of the parents' perception of the postpartum period and knowledge of maternal mortality in uptake of postnatal care: a qualitative exploration in Malawi

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Background: Postpartum is the most risky period for both mothers and newborn babies. However, existing evidence suggests that utilization of postnatal care is relatively lower when compared to uptake of other similar health care services. Therefore, the aim of this study was to examine the perceptions of parents toward the postpartum period and postnatal care in order to deepen our understanding of the maternal care-seeking practices after childbirth.

Methods: A descriptive qualitative study, comprising four focus group discussions with 50 parents aged between 18 and 35 years, was conducted in Malawi between January and March 2014. Only young men and women who had either given birth or fathered a baby within 12 months prior to the study were eligible to participate in this study. This was to ensure that only participants who had recent first-hand postpartum experience were included. Local leaders purposively identified all parents who met the inclusion criteria and then simple random sampling was used to select participants from this pool of parents. Data analysis followed the six steps of thematic approach developed by Braun and Clarke, and NVivo software aided the process.

Findings: The parents interviewed described the various factors relating to pregnancy, childbirth, and postpartum periods that may possibly influence uptake of postnatal care. These factors were categorized into the following three themes: beliefs about the causes of maternal morbidity and mortality; risks associated with the pregnancy, childbirth and postpartum periods; and the importance of and barriers to postnatal care. Most participants perceived pregnancy and childbirth as the most risky periods to women, and their understanding of the causes of maternal death differed considerably from the existing evidence. In addition, segregation of mother and baby care in the clinics was identified as one of the potential barriers to postnatal care.

Conclusion: The study findings suggest that parents' perception of the postpartum period and postnatal care as well as their knowledge of maternal morbidity and mortality play a vital role in the uptake of postnatal care. The study has also established that lack of knowledge of postnatal care, long waiting time for treatment, and separation of the mother and baby care in clinics are some of the key barriers to postnatal care. We recommend massive maternal health education programs as well as the integration of all postdelivery health care services provided in clinics, so that mothers and neonates receive health care together.

Keywords: barriers to postnatal care, health belief model, health-seeking behavior, qualitative research

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Background

Maternal complications are the second largest cause of mortality among women of reproductive age worldwide.¹ Every year, around 300,000 women die globally during

pregnancy, childbirth, or postpartum period.² Existing evidence indicates that most of these deaths happen during the first 24 hours after childbirth mainly due to hemorrhage, sepsis, and other complications.^{3–5} Similarly, many children (7.6 million) continue to die each year globally.^{6,7} Just like maternal deaths, most of the neonatal deaths are also clustered around delivery and immediate postpartum period.⁵ For that reason, immediate provision of postnatal care (a combination of health care services provided to women within 42 days after childbirth) has the potential to change the maternal and child mortality scenario around the world.^{8,9} However, data from developing countries, where around 99% of the maternal and neonatal deaths occur, show that utilization of postnatal care is relatively lower when compared to uptake of other maternal health care services.^{10–13}

Studies have documented the main factors that contribute to lack of engagement with postnatal care in developing countries and these include financial difficulties, distance to the health facility, lack of women's decision making power, and cultural beliefs.^{11,12,14,15} If these are indeed the main barriers, then the same factors would also be expected to deter access to other postdelivery health care services by women. However, as observed in Malawi, this is not necessarily the case. For instance, out of the Malawian women who gave birth between 2005 and 2010, around 97% accessed neonatal health care services such as Polio-0 and Bacille Calmette–Guérin vaccines within 42 days after childbirth compared to less than 40% who accessed postnatal care within the same period.¹⁵

It is not clearly known why most women did not access postnatal care during the same period in which almost all of them were able to seek other post-childbirth health care services. Evidently, there is more to postnatal care utilization than meets the eye. Therefore, the objective of this study was to examine parents' perceptions of the postpartum period and postnatal care. In addition, the study also aimed to understand parent's knowledge of the risks associated with the pregnancy, childbirth, and postpartum periods. Our interest was to understand the influence that parents' perception and knowledge of the postdelivery period might have on care-seeking behavior.

Methods

Study design

We conducted a descriptive qualitative study, comprising focus group discussions with parents in Malawi. The design and the data-collection method were selected because of

their ability to provide detailed explanations of the participants' feelings and lived experiences from their own point of view.^{16,17}

Study setting and context

This research was part of the baseline study of the project called 'Missed Opportunities in Maternal and Infant health' (MOMI) in Malawi. The aim of this project is to address maternal and newborn health problems by focusing on improving the postpartum care. In Malawi, the Ministry of Health in collaboration with a nongovernmental organization called Parent and Child Health Initiative (PACHI) are implementing the MOMI project in the following traditional authorities in Ntchisi district: Malenga, Kusakula, and Chikho. Ntchisi district was chosen for the project because it has the lowest uptake of postpartum care (30%) in Malawi.¹⁵ Since this study was part of the MOMI project, its fieldwork was confined to the same setting as the MOMI project.

Ntchisi is one of the 28 districts in Malawi. It is located in the central region of the country with a population of over 250,000 people.¹⁸ According to the Malawi Demographic Health Survey, Ntchisi is one of the districts with poor maternal health indicators in the country.¹⁵ For instance, around 40% of the deliveries are performed outside health facilities by unskilled assistants such as traditional birth attendants. In addition, over 30% of the women of childbearing age lack knowledge of the risks associated with the maternal period.

Participants and recruitment techniques

The participants of the study were young men and women who had either given birth or fathered a baby within 12 months prior to the study (new parents). This was a necessary prerequisite to ensure that only participants who had recent first-hand postpartum experience were included. Other inclusion criteria included the ability to provide written/oral consent, being older than 18 years old, and willingness to participate in the study. Data were collected between January and March 2014 through four focus group discussions. Three of the discussions were with women and one was with men. Table 1 describes the composition of each group. In total, 50 new parents participated in the study (36 women and 14 men). We believe that this sample size was adequate enough since the goal of the qualitative research was depth and not breadth of the participants' accounts.^{16,19}

We recruited participants of this study from the communities with the help of local leaders. We asked the leaders

Table 1 Description of the focus groups

| | Descriptions of the groups | | | |
|------------------------|----------------------------|---------------|---------------|---------------|
| | Focus group 1 | Focus group 2 | Focus group 3 | Focus group 4 |
| Location | Malenga | Chikho | Kusakula | Chikho |
| Sex of participants | Female | Male | Female | Female |
| Number of participants | 12 | 14 | 12 | 12 |

of the participating villages to identify parents who met the inclusion criteria in their respective areas. Participants were selected from the list of parents that was obtained from the local leaders using simple random sampling technique.¹⁶ In particular, all the potential respondents were given anonymous codes, which were written on separate pieces of paper and put in a container. These pieces of paper were one by one and randomly picked from the container until the required number of participants was reached. Selection of female and male participants was done separately and we only allowed one participant per household. Detailed information about the study was provided to the selected participants and they were asked to reconfirm their participation. All of them agreed to participate. Even though the likelihood of bias in the selection of participants could not be ruled out, we believe this was the best possible approach for this study. Moreover, qualitative research is not about the generalizability of the findings, but rather subjective experiences of the people.¹⁶

Data collection and data collection tool

The focus group discussions were facilitated by the two investigators of this study (COFZ and AND). Both of them are experienced qualitative researchers who have been conducting fieldwork for at least 4 years in both urban and rural settings. The discussions followed a focus group discussion guide that was specially designed for this study (see Table 2). The questions in the guide were informed by the objectives of the study as well as relevant gaps that were observed in the literature. All the questions in the guide were open-ended and only served as the starting point for the discussions. Depending on the flow of the conversations, follow-up questions not included in the guide were also asked to the participants. The guide elicited participants' demographic details, their views on maternal health, and uptake of postnatal care. The places and time of the discussions were chosen by the participants. The discussions were in the local language (Chichewa) and were digitally recorded. In addition, observations that were made during the course of the discussions were also recorded as field notes. Each focus group discussion lasted between 60 and 90 minutes, depending on the level of interaction.

Ethical considerations

We obtained ethical clearance to conduct this study from Malawi's National Health Sciences Research Committee and we further sought informed consent from all the participants. Potential respondents were given the necessary information about the study and asked whether they would want to participate or not. It was indicated to all potential participants that refusal to participate would not attract any consequence. No one declined to take part in the study and all the participants provided a verbal consent, which was digitally recorded. For the purpose of confidentiality, anonymous codes were used to identify participants.

Data management and analysis

The audio recordings of the discussions were transcribed and then translated (from Chichewa to English) verbatim by an independent person who did not participate in the data collection. The investigators who facilitated the discussions checked the transcripts for accuracy and completeness. The final transcripts were transferred to NVivo software version 10 for further analysis. The analysis followed the six steps of thematic approach described by Braun and Clarke.²⁰ All the investigators separately read the transcripts in detail in order to familiarize themselves with the data and to develop initial codes. The codes identified were collapsed into themes, which were then verified with the transcripts. Themes were largely developed from the data, but some were deductively coded from the interview guide and the objectives of the study. The investigators discussed the emerging themes from their separate analyses and agreed on final key themes. These themes were repeatedly compared and checked against the transcripts in order to identify patterns. Interpretation of themes was informed by the literature, objectives of the study, and discussions among the investigators. Data analysis was also underpinned by the phenomenological theoretical approach because the intention was to present participants' accounts from their point of view.²¹

Findings

The parents interviewed described various relevant factors relating to pregnancy, childbirth, and postpartum periods.

Table 2 Part of the focus group guide (translated) that was used during data collection**General maternal health issues**

- What are the main causes of maternal mortality? What about infant mortality? (ranking required)
- What is the most likely period in which women die due to maternal complications? For example the most dangerous period (ranking required) and explain why.
- What are things which can be done to reduce maternal and infant mortality?
- Are there interventions that communities are doing to prevent maternal/infant mortality and morbidity. Explain them.
- What are specific factors that encourage/discourage men and women from participating or seeking the interventions above?

Postpartum care (PPC)

- Cultural beliefs usually interact with health behaviors. Would you share some of the beliefs associated with the postpartum period?
- What are some of the health problems that might arise after delivery?
- What are some of the needs of women during postpartum period?
- What is the importance of health care, in particular during PPC period?
- Can you briefly explain about the type of care you (or your wife) received after giving birth at the hospital? What about in the community?
- What was good and not so good about each type of care you (or she) received?
- What are the main barriers to postpartum care?

Family planning (FP)

- Is family planning important? To who? Explain?
- Whose responsibility is family planning?
- When is the right time for a woman (or a man) to go for contraception?
- What is the most preferred FP method here? Explain why.
- Where do you access family planning services?
- What are the main barriers to family planning?
- What is the role of men in family planning?

Community role

- What kind of PPC is provided to women who deliver in the community?
- How are communities involved in the delivery of PPC and FP services?
- What are the roles of community health workers eg, health surveillance assistants (community health workers), traditional birth attendants, during PPC.

These factors were categorized into the following three themes: beliefs about the causes of maternal morbidity and mortality; risks associated with the pregnancy, childbirth, and postpartum periods; and the importance of and barriers to postnatal care. These themes are presented below, after the characteristics of the respondents.

Characteristics of the respondents

The study involved 14 men and 36 women who were engaged in the four focus group discussions. All the participants were

Table 3 Characteristics of the participants

| | Men | | Women | |
|--|--------|-----|--------|-----|
| | Number | % | Number | % |
| Married | 14 | 100 | 36 | 100 |
| Beyond primary education | 2 | 14 | 3 | 8 |
| Subsistence farmers | 14 | 100 | 36 | 100 |
| Lives at least 1-hour's distance from the hospital | 12 | 86 | 26 | 72 |

married and had given birth to or fathered a baby within 12 months prior to the study. Most of the female participants were within the age category of 18–25 years while most men were between the ages of 25 and 35 years. All the participants were subsistence farmers. More than half of the participants finished primary education, but very few had attended secondary or tertiary education. The majority of the respondents walk for at least 1 hour to get to the nearest health facility and the major mode of transportation is a bicycle. Table 3 presents the main characteristics of the participants.

Beliefs about the causes of maternal morbidity and mortality

During the focus group discussions, participants reported many factors, which they felt cause maternal mortality. We have categorized these factors into three groups.

Firstly, participants noted that failure to use maternal health care is one of the major causes of maternal mortality. They acknowledged the importance of antenatal care and delivery assisted by skilled attendants in minimizing risks of maternal death. Various factors that contribute to lack of engagement with maternal health care were pointed out. For instance, most women talked about family engagements at home, distance to health facilities, and lack of reliable and affordable transport to ferry them to health facilities. Most men talked about lack of financial resources for transport and food at the clinic.

In addition, respondents also mentioned cesarean section as one of the causes of maternal mortality. They questioned the increase in the number of cesarean sections nowadays, which they believe contribute to maternal death. Some participants inferred that cesarean section is caused by witchcraft in their communities. They argued that some jealous people are capable of hurting pregnant women by closing up their birth canal, so that they are not able to give birth normally when their time is due, and as a result they die of maternal complications:

It happens due to jealousy [witchcraft] amongst the people.

A woman may go to the hospital to deliver, but fail to do

so until caesar [Caesarean section] when she was actually supposed to deliver normally. This usually happens because the passage couldn't open for the baby to pass. [A male participant, 29 years old]

The majority of participants also pointed out that one of the major causes of maternal mortality is the health system itself. They complained that sometimes health workers do not attend to women in labor in good time until it is too late to save them. Respondents also accused the health workers of sending back women who go to give birth at the health facilities. It was revealed during the discussions that some of these women end up giving birth on their way home, which puts them at a higher risk of maternal death. Furthermore, many respondents also stressed that most of the maternal deaths, especially in rural areas, occur because health facilities regularly run out of essential supplies, such as blood and drugs that are important to save lives of women during complications:

Most times we feel let down by our health system. When your delivery time is due and go to the health facility, you find that there is no medication, worst still the nurses tell you to help [deliver] on your own. [Female participant, 24 years old]

Risks associated with pregnancy, childbirth and postpartum periods

Risks associated with pregnancy, childbirth, and postpartum periods was one of the themes that emerged from the study. Participants compared and ranked these periods according to the risks that accompany them. Two major issues were reported during the group discussions.

Many participants stated that childbirth is the most dangerous period as they felt that this is the time that a lot of women die. Women added that the pain that they experience during childbirth further makes it the most undesirable period. Other risks associated with childbirth period that respondents provided include prolonged labor, cesarean section, and anemia:

Speaking from my experience, I believe that the most risky period is during delivery... This is the time that most of my friends and relatives have died or experienced the most horrible pain of their lives. [Female participant, 28 years old]

Additionally, some participants also mentioned that pregnancy is the most critical maternal period. They argued that whatever happens during pregnancy determines what will transpire during childbirth and thereafter. For instance,

participants stated that poor diet during pregnancy might lead to health problems, such as anemia during childbirth. Participants also mentioned other risks, which they felt are associated with this period, such as high blood pressure, miscarriage, swollen legs, abdominal pain, malaria, and dizziness:

... the pregnancy stage is the most dangerous. It is just the same as saying that if you plant a tree, you are likely to be watering it, applying fertilizer, in that way I believe it grows well. The same applies to pregnancy, this is the stage that needs proper care... [Male participant, 35 years old]

The importance of and barriers to postnatal care

Another interesting theme that was identified relates to the importance of postnatal care as well as barriers to its uptake. Participants expressed their varied subjective views about the care that is provided to women after childbirth. It was noted that parents perceive postnatal care in different ways.

On one hand, many parents consider postnatal care as vital to the health of women. They indicated that postnatal care allows women to access health care, such as family planning and immunization. For instance, participants said that if a woman delivered through cesarean section, postnatal care presents an opportunity to the health workers to examine the woman and determine if she needs further treatment. They expressed that postnatal care is especially crucial to the "first-time-mothers" because health workers provide some tailor-made parenting lessons to them:

... honestly, I have benefited a lot from the postnatal care. Apart from the treatment, they also teach us many other things such as the proper way of handling a baby when breastfeeding. [Female participant, 18 years old]

On the other hand, some respondents reported that they find it very hard to appreciate the importance of postnatal care. They argued that postnatal care is not a priority in many health facilities because women are made to wait for many hours to get treated as health workers give priority to pregnant women and others. It was reported that health workers usually start with the provision of antenatal and neonatal care before postnatal care. Many participants complained that they received less attention from the health workers during the last time they went for postnatal care and most of them also pointed out that they spent almost the whole day at the facility.

In the course of the group discussions, some parents admitted that they accessed neonatal care, but not postnatal care after the birth of their last child. One of the main factors for non-compliance that the parents provided was about the women's appointment for the next visit to the clinic. Participants reported that they are usually given two different appointment dates for neonatal and postnatal care. Due to distance and financial constraints, parents stated that they just decide to honor one of the appointments. The other reasons that the participants provided for the lack of engagement with postnatal care included lack of knowledge (health workers did not inform them after childbirth), long waiting time for treatment, and distance to the health facilities.

Discussion

The findings of this study demonstrate that most parents lack a good understanding of the causes of maternal mortality and the risks associated with the postpartum period. In addition, the outcomes also put forward some significant barriers to postnatal care, which include lack of knowledge of postnatal care, long waiting time for treatment, and separation of the mother and baby care in clinics. These findings build on, validate, and expand the results of other studies in this area.

It appears that lack of knowledge of the causes of maternal mortality continues to be a problem in developing countries. Our study shows that parents' understanding of the major causes of maternal mortality differed substantially from the known causes in this area. Recent reports have shown that the leading causes of maternal mortality are postpartum hemorrhage, anemia, sepsis, hypertension, and indirect causes such as malaria.^{22–24} However, most of these factors were not mentioned by the respondents in this study. This finding is consistent with two Nigerian studies which reported that many participants mentioned factors such as lack of money, poverty, evil spirits, and illiteracy as the major causes of maternal mortality in addition to medical factors.^{25,26} Similar findings were also noted in Malawi and South Africa, where many women considered witchcraft as the origin of some of the maternal complications.^{27,28} Participants' lack of knowledge of the underlying physiological causes of maternal mortality could be a step backwards as far as care seeking is concerned.²⁹ For instance, studies have shown that knowledge of the cause of an illness determines the type of care that would be sought.^{27,30} Therefore, it is essential that parents should have a clear understanding of the causes of maternal morbidity and mortality.

It has also been observed that the perception of the postpartum period by parents deviated considerably from

the existing evidence in the literature. Studies have shown that the postpartum period is more dangerous than childbirth or pregnancy.^{3,23,24} However, participants in this study recognized childbirth as the most risky period followed the antepartum period. A related finding was also documented by a study in Ethiopia, which reported that around 80% of the participants were not knowledgeable about the risks that are associated with postpartum period.²⁹ Therefore, bearing in mind the role that perceived susceptibility to and severity of maternal complications play on care seeking behaviors,^{31–33} the perceptions of the parents toward the postdelivery period (low risk) might affect their decision to seek postnatal care.

The role of the health care system and health care worker factors in the uptake of postnatal care were also explored in this study. Parents complained about lack of attention from health providers (long waiting time) and lack of essential services and medical supplies in health facilities. These findings augment what other studies in Nigeria, Ghana, and Tanzania have reported in this area.^{25,31,32} The results suggest that apart from the frequently reported costs relating to financial resources, parents also incur nonmaterial cost as they interact with the health system. As this cost increases, lack of engagement with postnatal services is inevitable. For example, studies in Indonesia, Malawi, and Ghana have divulged that women who had to pay more in terms of the waiting time and distance to the facility were less likely to utilize maternal care.^{14,15,27,31} Correspondingly, in most of the health facilities in Africa, mother and baby care are separated.^{34,35} Therefore, women who have given birth are supposed to go to the facility two or three times within a short period of time for neonatal and postnatal care. This probably increases pressure on the parents' time and financial resources, and hence could discourage uptake of postdelivery care. This is a policy matter which needs to be reviewed to ensure that women are both efficiently and effectively assisted.

Conclusion

The study findings suggest that parents' perception of the postpartum period and postnatal care as well as their knowledge of maternal morbidity and mortality play a vital role in the uptake of postnatal care. Moreover, even though the emphasis in the literature has been on addressing socioeconomic barriers to postnatal care, the findings of this study demonstrate that there are other rarely recognized, but equally significant factors that affect the uptake of postnatal care. These factors include lack of knowledge of postnatal care, long waiting time for treatment, and separation of the mother and baby care in clinics.

Since knowledge is not only power, but also fundamental to desirable behavior, we recommend massive health education programs about maternal health (antenatal, childbirth, and postpartum) to parents, health workers and community members in order to raise awareness of postpartum issues. Furthermore, since the separation of health services into mother and baby care seems not to help matters, we call for integration of all postdelivery health care services provided in clinics, so that mothers and neonates receive health care together.

Disclosure

The authors report no conflicts of interest in this work.

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