Maternal health care decision-making process at the family level in Geita Region, Tanzania: A qualitative study

Thecla W. Kohi (thecla.kohi@gmail.com)
Muhimbili University of Health and Allied Sciences
Jasintha S. Boniphace
Muhimbili University of Health and Allied Sciences
Justine Dol
Dalhousie University Faculty of Science

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Abstract

Background : Most maternal deaths are preventable if a woman is able to identity danger signs and seek obstetric health care without delay. However, lack of knowledge on obstetric danger signs and a prolonged decision-making process at family level may contribute to the high maternal mortality. Currently, there is little known on how the process of decision-making at family level in seeking obstetric care is being made in Tanzania. Therefore, this study aimed to describe the process on decision-making at family level in seeking maternal health care during pregnancy, delivery and postpartum period in the Geita Region, Tanzania.

Methods : A qualitative study using in-depth semi-structured interview was conducted at Chato District Hospital in the Geita Region with seven fathers and seven mothers who were attending the Reproductive Child Health Clinic.Participants were recruited using purposeful sampling and interviews were analyzed using content analysis.

Results: Three themes emerged from this study, including recognition of danger signs, decision-making process, and perceived influencers for seeking maternal health care. Almost all participants were aware of obstetric danger signs, yet some gaps remained among husbands. The process of decision-making starts with the woman herself who then communicates to others for discussion but the final decision-making in seeking care is dominated by husbands, parents, or neighbors, rather than mothers alone. Observing danger signs and perceived quality of care available from the health facilities were the most predominate influencers for seeking maternal health care.

Conclusion: While the process of decision-making in every family starts with the woman herself, others are consulted for discussion prior to reaching a decision about seeking maternal health care, resulting in delays in accessing care. It is positive that most of the decision makers had good understanding of obstetric danger signs and that observation of those danger signs encourage access of maternal health care. However, continued education on obstetric danger signs in the community is needed as well as quality care needs to be available and known to be provided at health care facilities to encourage early seeking of maternal health care.

Keywords : maternal health; decision-making; Tanzania

Background

Over 515,000 women die as a result of pregnancy-related complications each year, of which, half are in Africa alone(1). Tanzania faces high maternal deaths despite government efforts which has slowed maternal deaths from 870 per 100,000 live birth (1990) to 454 per 100,000 live birth in 2010 yet approximately 7,900 women still die each year from complications of pregnancy and child birth(2). One of the greatest challenges in preventing maternal deaths is recognizing a danger sign that indicates a life-threatening condition during pregnancy, delivery, or the postpartum period that requires immediate care(3). If a decision is delayed in seeking care, it significantly increases the chances of disability or

death(4). Delay in decision-making at home, delay in reaching a health facility, and delay in receiving appropriate care after reaching the health facility contribute to the high maternal mortality in developing countries like Tanzania(5).

The three delay model conceptual model developed by Thaddeus(5)has been used to explain why most women are slow in receiving obstetric care once they have been identified to have an obstetric danger signs or complications. If the process of accessing emergency maternal care is to function effectively in the first phase, several things must happen in rapid sequence. A problem must be present and it must be recognized as important enough to require action; then, the action needed to solve the problem must be identified, agreed upon, and acted uponto move the process into the second and third phases of obstetric care seeking(6). However, delays can occur at any stage and all delays can result in maternal death or disability. The factors that impact attitudes and decisions in the critical first phase are far more varied, intangible, and difficult to control than those impacting delays in the second and third phases as these factors operate at the level of individual and family dynamics(6). In the first phase of delay, perception is everything. Understanding that a problem is present, understanding what the problem is, and understanding how the problem may be solved is absolutely critical for the successful resolution of obstetric emergencies(6). In particular, delays occurring at the family level due to a slow decision-making process can be critical to a woman's survival(7).

However, the decision-making process at the family level for the utilization of obstetric health services is unclear yet may serve in reducing obstetric complications and maternal death. The utilization of maternal health services is a complex phenomenon influenced by many factors(8). Achievement in the reduction of maternal deaths can be reached by reducing delay in decision-making yet the process of decision-making at the family level in seeking obstetric health care is not very clear,, with limited research having been conducted in this area(9–11). Further research is needed to understand how the decision-making process at the family level influences access to maternal care.

Methods

Aim

The objective of this study was to explore the decision-making process at family level in seeking maternal health care at Chato District Hospital in Geita Region. Specifically, this study sought to explore if decision makers at the family level were aware of obstetric danger signs during pregnancy, delivery and postpartum period; how the process of decision-making at family level in seeking obstetric health care is done; and what factors influence decision-making at family level in seeking maternal health care.

Study Design

A qualitative study using in-depth semi-structured interviewswas used to explore and gain deep understanding of the decision-making process at family level in seeking maternal health care during pregnancy, delivery and postpartum period.

Study Area

This study was conducted at Chato District Hospital in the Geita region which has the population of 389,455. The Geita Region has one government district hospital (Chato District Hospital), three government health centers, and 29 dispensaries of which 22 are government-owned and 7 are private, faith-based organizations. The Chato District Hospital offers antenatal care, emergency obstetric care, as well as basic emergency obstetric care, including comprehensive emergency obstetric care. The District's target is to reduce maternal deaths to a very low number below 5, but not yet achieved with 10 out of 16,653 maternal deaths occurring 2014 at the Chato District Hospital alone.

Study Population

The population of this study were relatives of mothers who were admitted to the postnatal ward at the Chato District Hospital. Decision makers were defined by the mothers as relatives who stayed with the admitted mother or paid the financial costs associated with care, defined by regulations of the Hospital and Chato culture, respectively. All relatives of antenatal and postnatal admitted mothers who were decision makers were included in the study.The study excluded decision makers whose wives were critically ill, those discharged before the interview could occur, or relatives of mothers who were in labor at the time of data collection.

Sample Size

The study used non-probability sampling to recruit fourteen (14) participants which was determined to be the point of data saturation(12,13). Convenient, purposive sampling was used whereby selection of the available participants at time of data collection was done. Admitted antenatal and postnatal mothers who were found in postnatal and antenatal wards at the time of data collection were used to identify their responsible decision makers. The researcher recruited admitted woman from the respective wards. If the women agreed to participant, she also identified which relative was present with her and through that history, the decision maker was identified. The convenient time for the interview was mutually agreed upon to avoid interference of the relative (decision makers) routine activities and was held at a conducive place to ensure privacy.

Data Collection

Semi-structured interviews were used to guide the interviewee to focus on the topic under study. The interviews were conducted in Kiswahili to ensure that participants understood and could fully answer the questions. Interviews were recorded and participants agreed to have their interview audio recorded before the interview. After each face-to-face semi-structured individual interview with decision maker, the audio recorders were reviewed to ensure the accuracy of recording and completeness of data. All interviewers were transcribed verbatim in Kiswahili and transcription was cross-checked several times to ensure appropriate data and its quality before data analysis. Transcripts were translated into English prior to analysis.

Data analysis

Data analysis was conducted using content analysis(14).Identification of meaning unit was done immediately to avoid forgetting an important idea which was necessary in meeting research objectives. Transcripts were reviewed several times to get a sense of overall meaning of data and to ensure the information was accurate without distorting any meaning from what the participants said. Coding data was done manually and description of data using the formed codes (categories, themes) was completed. Interrelated categories and themes were reviewed resulting in interpreting of meaning within the data. Codes and themes were identified by JB and verified by TK to provide credibility and conformability with disagreement resolved through discussion (15).

Ethical Consideration

Ethical clearance from the Directorate of Research and Publications of Muhimbili University of Allied Health Sciences (MUHAS) as well as institutional permission from Chato District Medical Officer were obtained prior to data collection. Participants were informed about the purpose of the study and were provided a written copy of the consent form in Kiswahili. Participation was voluntary and confidentiality was maintained. The study was conducted without interfering with patient's services or relative/decision maker's activities.

Results

Participants

Fourteen (14) decision makers at family level/relatives were interviewed through in-depth interview. There was a total of seven men and seven women. The men were all married and ranged in age from 25 to 55 years. Four of the women were divorced and the other three were married, ranging in age from 20 to 37 years.

Themes

Recognition of Danger Signs

The majority of the participants were aware of obstetric danger signs that could occur during pregnancy, delivery, or the postpartum period. Some of the danger signs which were mentioned are bleeding, swelling of legs, loss of fetal movement, repeated fever, severe headache, leakage of water through vaginal canal, low hemoglobin level, dizziness, foul smell from the vagina, convulsion, high blood pressure, and puerperal psychosis. However, a few of them were not able to mention even a single danger sign, indicating that there are some participants who were not aware of danger signs. This was reflected in one of the husbands who reported that;

"On my side I can't know the danger sign that my wife she has but I know it through her after telling me the danger sign she has"(Husband 12).

Another husband added that,

"… Me I don't know these danger sign because it is the mother herself who feels the danger signs" (Husband 1).

Decision-making Process

Predominately, participants reported that the process of decision-making starts with a woman who recognized that she is experiencing a danger sign, which she then communicates that to her husband, as men were often the ones with power to decide to do something about it. Even if the husband is at home, participants suggested that someone else, such as neighbor or relatives, was involved in making decisions, but rarely did the woman herself decides alone. This was evidenced by one of the husbands, who shared that:

The process starts when mother tells me that she has labor pain, so I find money to take her to the health facility. Sometimes when I am not around at home, neighbor or any of my relatives can make a decision to go to the health facility (Husband 13).

Another husband added that:

...Me as a head of the family [makes decisions]. When my wife tells me that she has a danger sign, I should decide to take her to the health facility. Even if we are living with our father, mother, or aunt, still I am the one who should decide and not any other (Husband 5).

On the other hand, there were different responses from few of the participants who viewed the process of decision-making as a joint process between the woman and her husband or the woman and other relatives. One husband said:

At the time when mother reaches term, mother herself feels labor signs and she informs me. Me and my wife we sit together on the table and we decide together that she must go to the health facility (Husband 10)..

Also, other participants further emphasized this point by saying:

When the woman is seen to have any warning sign which can lead her in to the danger signs before she develops the real danger signs, we usually discuss if she is pregnant, [and] we make decisions for going to the clinic for further investigations (Woman relative 3).

Because she will be already showing any sign, we must observe that sign and the husband will be involved. Depending on the situation of the village or wherever you will be, you shall look on how to get the transport. For a woman who is not married also she need help in order to survive with her baby. So at home if there will be anybody who can give logical decision, the decision should be made to take this mother to the health facility. Those people might be mother, aunt, mother -in-law or any person who is

near. Most of mothers who are in labor they fail to make decision so they depend on their relatives (Woman relative 6).

However, there were very few participants who suggested that a woman can make their own decisions. This was evidenced particularly by female participants saying: "…If a woman is able to decide on her own, she does not need to wait for discussions, she should make decisions to go to the health facility". Likewise, another woman explained:

Because I am not depending to anybody, so when I get any problem I just call the transport to take me to the Hospital because I prepare myself before. Myself I am the decision maker, I don't involve anybody to make decisions for me (Woman relative 11).

Perceived Influencers for Seeking Health Care

Almost half of the participants in this study mentioned that they preferred to go to the health facility to get professional services as they recognized that they do not have enough knowledge and skills for managing a woman with obstetric complications at home, so they seek help from health centers. This was the greatest influencer in seeking health care. This was described by some of the husbands, who said that,

What encourages me is to see the mother she can get into big problem even she can die. Also, I do not have professional skills to help in such situation and there are professional people who can help in this situation, so I must be encouraged to take her to the health facility where she can be helped by professional people (Husband 14).

Participants also recognized that if a woman was experiencing a danger sign, she should seek care, such as if a woman was experiencing a leakage of water through vagina before labor starts, cord prolapsed, contractions, and backache. This was reported by one of the husbands, who said that,

…When a mother shows signs of labor such as contractions, vaginal leaking of water and backache, these are things which influence [me] to take [the] mother to the health facility" (Husband 7).

Also, a mother added that,

…The signs that a mother may portray such as signs of labor pains or any other danger sign like leakage of water through vaginal before labor starts or cord prolapsed, these are signs that influence to take mother to the health facility (Woman relative 2).

Additionally, there were a few participants who perceived that the understanding capacity of the person, financial ability, and availability of good transport were influencers for seeking maternal health care at the health facility. This was evidenced by one of the mothers, who narrated that,

What influences to take the mother to the health facility is the understanding and the good economic status you have. If somebody has good understanding and economically is well off, it is obvious that one

will be influenced to go to the health facility (Woman relative 4).

Another mother added by saying that:

…also it depends on mother herself how well off is she economically and how she prepared herself. Others if she has no husband, she cannot make the decision to leave home because there is nobody to take care of her children (Woman relative 13).

Finally, participants perceived that the good care they were given at the health facility influenced them to seek maternal care. For example, husbands reported that:

The type of care which you get from a certain health facility is one thing which influences me to bring my wife at that health facility. Because there are other health facilities when you reach there since morning till evening nobody to receive you, I mean you reach there at seven in morning time until four evening when you get care (Husband 3).

What encourages me to take my wife to the health facility is the way on how the health facility gives care to the patient. So, I know what type of care which is being given to a certain health facility. I will decide to go to the health facility which provides good care (Husband 11).

Quality care also includes the ability to provide clinical assessments at health facilities. A husband explained:

Because the health care facilities does a lot. The issue of vomiting or swelling of legs can be seen without knowing the real cause of the problem when you are at home. With all these I decide to take my wife to the clinic because there are further investigations which can be done by professional people who can also give us technical advice (Husband 9).

Discussion

This study describes the decision-making process in seeking maternal health care at Chato District Hospital. Findings suggest that the first delay described in the three-delay model(5)contributes to a delay in accessing obstetric care at the health facility when women are identified with obstetric danger signs at family level. The process in deciding to seek maternal health care is depending on familial and community awareness on the seriousness of the maternal conditions. Several factors influence the decision to seek care including the prevalence of danger signs, availability of transport, perceived quality of care at the health facility, individual understanding capacity, and preference of professional services, financial ability, and an ability to make decision.

To make timely decision for seeking maternal health care, it is essential that individuals are aware of obstetric danger signs, which was supported by most of the participants in this study who were aware of several danger signs that could occur during pregnancy, delivery, and the postpartum period. This is essential at the family level as family members play a role in seeking maternal health care without delay

to save the life of the mother and her unborn child. However, some participants who were regarded as the decision makers within the family could not mention a single obstetric danger sign. This finding is not unique to the Gieta region as August et al.(16)found that males in rural Tanzania were also not aware of obstetric danger signs. While participants who were not aware of obstetric danger signs were limited, this finding should not be neglected particularly as decision makers hold power and may cause the delay in seeking obstetric care, resulting in severe maternal complication or maternal death. Men in many settings, including Tanzania, hold the financial position in the family and can influence the decision on where women should deliver or what to do in case of an obstetric emergency as most of women depend on financial support from their husband for their reproductive and maternal health needs(16).Men as the decision makers in most families have an important role to play when being involved in reproductive and maternal health issues. This involvement may help in reducing or preventing maternal morbidity and mortality(16).

Additionally, results in this study suggest that the decision-making process in seeking obstetric health care begins with the mother identifying that she was experiencing a danger sign. After recognizing that she needs additional care, the mother then informs decision makers, including their husbands or in-laws, who then have a discussion about the condition of the mother and about if decisions should be made for seeking maternal health care, which is a similar finding echoed by others(10,17,18). Although others may be involved in the discussion, the husband predominately remains with final decisions; which is confirmed elsewhere(9).Furthermore, women who were not married but were living with their relatives, had a similar process of reporting whatever they experienced to their relatives, who then were involved in making the decision for them. Pregnant mothers are left passive in the whole process of decision-making concerning maternal health care, particularly in obstetric emergencies.

When the process of decision-making occurs at family level, it can be protracted instead of urgent, which might lead to delay in deciding for seeking maternal health care as well as receiving emergency obstetric care. By consulting family members, the process for decision-making becomes delayed, consequently delaying the mother to reach at the health facility and receive professional health care to intervene and address the identified obstetric problems on time. This delayed decision-making process at family level is due to women's lack of decision-making power(19). However, joint decision-making between women and their spouses have shown increased uptake of maternal health services(20), suggesting that shifting the decision-making process to include both men and women could prevent delays in seeking maternal care. Some participants in our study did report that shared decision-making occurring between the husband and wife, but this was a minority of participants.

The decision-making process for women who are not married do not face the same prolonged process as they are able to make their own decision without waiting others for discussion. When the women experience any danger signs, they do not delay for seeking maternal health care. This result was revealed in other research which was done by Kabakyengaand colleagues (20)who found that women who do not depend to other people adhere to the principal of birth preparedness and complication readiness and quickly seek maternal care if needed. This is possible because they do not wait for anybody to make

discussion with; they just decide themselves without delay to go seeking for maternal health care, hence there is no delay at family level.

Thus, the ability for women to make decisions alone was influenced by the decision toseek maternal health care. This finding is supported by Ganle and colleagues(21) who identified that women faced difficulties in accessing skilled maternal health services because they lack the independence to make decision even in the situations where they want to seek care. When a woman was able to decide immediately on where to go for obstetric health care, this encourages people to seek care from the health facility. In Tanzanian cultural context, male dominance has a prevailing effect on delaying decision-making at the family level because the mother who is experiencing the danger signs has no power on decision-making which in turn delays her in seeking maternal health care in obstetric emergencies. This result supported by Mselle and colleagues (22)who found that women's decision-making for seeking maternal health care was prevented by male dominance. In this study, it was seen that male partner and other relatives were responsible for deciding where to seek maternal health care(22). If the mother was empowered to make decisions at family level, this could break the decision-making chain whereby the mother has to report to her husband, the husband has to report to his parents or in-laws. Inability for women to make decision at family level prolongs the decision-making process in seeking maternal health care which in turn may lead to delay in receiving emergency obstetric care.

Another influencer in seeking maternal care was the mother showing any danger sign and knowing that quality care to address the issues were available at a health facility. Participants recognized that the health facility offered professional support, treatment, and testing for mothers who were facing an emergency and they would be in safe hands. This finding is supported by Kabakyenga and colleagues (20)who found that people sought maternal health care from the health facility due to the fact that they want to know the source of the identified problem. This perception of health facilities being effective in saving mothers' lives influences the decision-making process at family level in a positive way(5). Yet, if the health facilities are not in good condition, people may be discouraged and not motivated to make quick decision for seeking maternal health care and may not motivate some of the people to make decision early at family level. Therefore, it is not a surprise that the quality of care which was given at health facility was also an influencer for seeking maternal health care, which has also been echoed by others(5,23). If the available health facility is not able to offer sufficient quality care, including blood transfusions and caesarean section, the decision-making for seeking maternal health care will be prolonged. If quality care is not available, there may be a delay in the decision-making at family level on where to go for obstetric care, which will be prolonged due to lack of trustfulness of the nearest health facility, hence delaying the mother to receive emergency obstetric care which might cause maternal complications.

Other influencers related to seeking maternal care included financial ability, access to transportation, and understanding capacity. These factors facilitate people to make and engage in seeking care from the health facility and reflect issues related to the second delay(5). These findings are in line with findings from Uganda whereby women and their partners identified the importance of having money as one way

of birth preparedness which facilitates quick decision-making process at family level in seeking maternal health care(11). Likewise, research done in the Rufiji district highlighted that transportation costs were crucial in deciding and reaching the health care facility in the process of making decision for seeking maternal health care services(10). Finally, Some and colleagues (18)identified that the understanding of individuals on the effect of obstetric danger signs helps in all issues of seeking maternal health care from the health facility. If an individual understands what might happen to the mother or unborn baby, they are more likely to make a nearly decision to seek maternal health care regardless of their financial status or any other component so long as they understand that by delaying to make a quick decision to seek early maternal care at family level, it could cause some problems to the mother and her baby.

Study limitations

As the data was collected in the hospital environment, some of the participants could have felt that they were not free to express their ideas openly. To mitigate this, the interviewer confirmed confidentiality which encouraged participants to speak freely.

Conclusion

The findings from this study showed that most of the decision makers had good understanding on obstetric danger signs and the effects those danger signs could have on maternal health and her unborn child. While the process of decision-making in every family starts with the mother herself, her husband, relatives/family members or a neighbor, are most often consulted for discussion prior to reaching a decision about seeking maternal health care. Most of the participants perceived that women were not supposed to make decision alone which is common in most African culture including Tanzania. Different influencers for seeking maternal health care were perceived by the participants, most predominately identifying obstetric danger signs and quality and type of care given at health facility. This communicates that obstetric danger signs should be known by everyone in the community as it has shown to be the most first influencer for seeking maternal health care as well as quality and types of care being given at health facility.

Declarations

The project had ethical review and approval from Muhimbili University of Health and Allied Sciences (MUHAS), Tanzania as well as institutional permission from Chato District Medical Officer.

Consent for publication

All participants provided informed consent to participate in the study. All participants consented to having de-identified quotes used in publication in the consent form.

Availability of data and material

The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

Competing interests

The authors declare that they have no competing interests.

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Authors' contributions

JB and TK were involved in the planning of the original study and reporting all data. JB was responsible for collecting, analyzing, and reporting the data. TK initiated the writing of the manuscript. JD was involved in manuscript preparation. All authors contributed to the final manuscript.

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