



Childbirth experience in women at high risk in facing the delivery process at UGM Academic Hospital, Yogyakarta

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Abstract

Background: A high-risk pregnancy is a severe health and life-threatening for pregnant women and babies, regarding to its effect on an increase of the risk of complications during pregnancy, childbirth, and the puerperium. About 20 million women worldwide have high-risk pregnancies, and it is known that more than 800 die each day. Pregnant women have potential risks during pregnancy, childbirth, and the puerperium. The mother's lack of knowledge about pregnancy health problems and health service providers can increase inappropriate handling risk by health workers. So, women should understand the concept of high-risk pregnancies to reduce these risks. This research aims to determine the childbirth experiences of mothers at high risk in the delivery process at UGM Academic Hospital, Yogyakarta.

Materials and Methods: This study is a Qualitative Research with Descriptive-Narrative Design, conducted by in-depth interview with 5 high-risk birth mothers as primary informants, two husbands as supporting informants, and one midwife as a supporting informant.

Results: The mothers knew the risks of pregnancy, but they were less aware of the risks of other pregnancies. Mothers' experience in choosing a place of delivery was influenced by personal experiences, family, friends, or other people. The availability of adequate hospital facilities, service flow, and ownership of insurance coverage were also other factors in choosing a maternity hospital.

Conclusion: Mothers are aware of the risks of pregnancy, but they are less aware of other pregnancy risks.

Keywords: *Maternal mortality, High-risk childbirth, High-risk Pregnancy*

1. Introduction

Maternal Mortality Rate (MMR), Neonatal Mortality Rate (NMR), Infant Mortality Rate (IMR), and Child Under Five Year Mortality Rate (AKABA) are indicators that can be used to determine the health status of the community in an area. The use

of these indicators has been agreed upon nationally as a measure of the health status of an area. MMR and IMR in Indonesia are included in the high category compared to other ASEAN countries. Based on the Indonesian Health Demographic Survey (IDHS) 2012, the maternal mortality rate in Indonesia is still high. It has

reached 359 per 100,000 live births. This number decreased compared to the 1991 IDHS with 390 per 100,000 live births. Thus, the most significant cause of maternal death during 2010-2013 was bleeding¹.

A high-risk pregnancy is a severe life-threatening to the pregnant women and babies, considering that it can increase the risk of complications during pregnancy, childbirth, and puerperium². The condition categorized as high-risk pregnancies are pregnancies with medical or obstetric conditions. This is an unpredictable problem and has potential negative effect to the pregnancy and the health of the mother and fetus³. About 20 million women worldwide have high-risk pregnancies, and more than 800 die each day. Thus, the percentage of high-risk pregnancies increased from 6% to 33% due to various high-risk pregnancy conditions².

The choice of place of delivery for pregnant women is an important decision. Giving birth at home is considered safe for women with low-risk pregnancies. Some women with risky pregnancies will also choose to have a home birth. The reason is that pregnant women at low risk believe that giving birth in the hospital is no safer than a home. A higher level of medical intervention at the hospital can increase the risk of giving birth. Obstetricians say that they have difficulty communicating with women with high-risk pregnancies. That is because they are reluctant to comply with medical advice. The difficulties are how to increase understanding of high-risk pregnancies and their risks, communicate with the group, and facilitate understanding of their decision-making⁴.

Most maternal deaths occurred during childbirth, including the postpartum period and

the puerperium. The most common causes are bleeding, eclampsia, and infections⁵. These three common causes contribute around 60% of the total maternal mortality rate. The cause of maternal death during the delivery process occurs due to three delays, including late decision-making, late referral process, and late treatment. Moreover, a lack of knowledge about pregnancy health problems, and health service providers on the competence in services can affect the risks. It increases the occurrence of treatment by officers who do not have the competence. If it happens, it will increase the risk of mothers not receiving prompt and appropriate services⁶.

2. Materials and methods

This research was a qualitative research with a descriptive-narrative design. The research subjects consisted of 5 high-risk birth mothers as primary informants, two husbands as supporting informants, and one midwife as a supporting informants. The researchers had in-depth interviews to obtain research data. The interview guideline was related to Childbirth Experience in Women at High-Risk in Facing the Delivery Process at UGM Academic Hospital, Yogyakarta. Types of interviews conducted with informants were semi-structured in-depth interviews. It aimed to explore and expand data through open-ended questions. The data collection tool obtained from the interview process was a voice recorder with an interview guideline guide. Then, data obtained were processed into an official report on the interview results along with the interview guideline and field notes. The data were reduced in order to provide transparent information. The presentation of data was in a chart equipped with a narrative. Last stage, verification and drawing

conclusion were performed to make the conclusions were credible 7.

3. Results

The diagram below (Figure 1) illustrates the themes and sub-themes about the experiences of high-risk pregnant women in facing the delivery process:

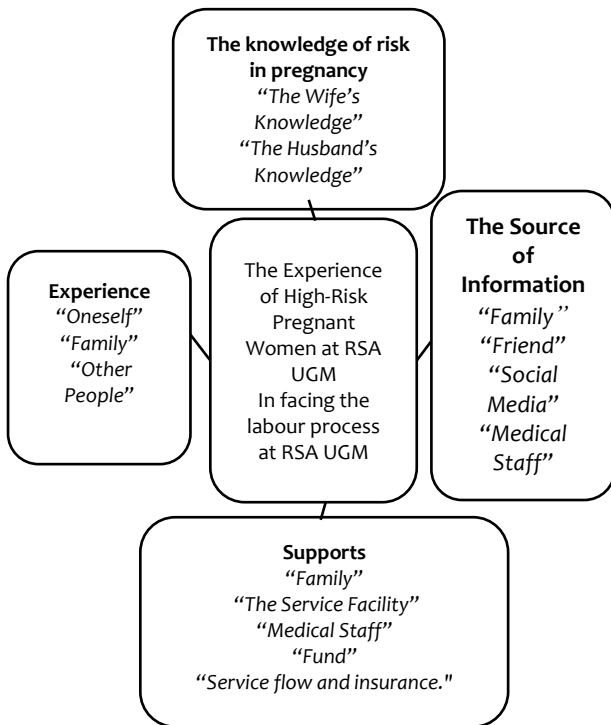


Figure 1. Themes and sub-themes of the experiences of high-risk pregnant women in facing the delivery process

The theme of knowledge in research includes the sub-theme of "wife's knowledge" and "husband's knowledge" (Figure 2). The sub-theme of "wife's knowledge" describes the knowledge of pregnancy risks currently experienced and knowledge of other pregnancy risks. As expressed by informants 1 and 3 as follows: "High risk during childbirth, for example, if the amniotic fluid has decreased and the placenta is calcified, so it is advisable to do induction so that the baby could be born soon" (Informant 1).

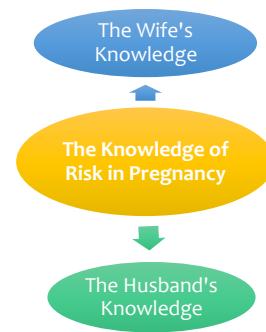


Figure 2. Theme of knowledge in research includes the sub-theme of wife's knowledge and husband's knowledge

"I feel very anxious. At that time, I had serious bleeding because my placenta was blocking the birth canal. My baby was also premature, plus that was the first birth. There are many risks for pregnant women as described in the MCH boo, such as bleeding and pre-eclampsia. However, it is unclear, and what is discussed only in general, there is no detailed information, so I find out it by myself on the internet so that the knowledge I get can be more focused and complete" (Informant 3).

The sub-theme "husband's knowledge" describes the risk of pregnancy experienced by the mother. As disclosed by informant 6 follows: "Yes, I get it, my wife's pregnancy has exceeded the due date, the placenta has also undergone calcification so that it could poison my baby (Informant 6).

Informants' lack of knowledge about other high-risk pregnancies was disclosed by informants 3 and 5 as follows: "There are many risks of pregnant women described in the MCH book.... Such as bleeding and pre-eclampsia, but in my opinion, it is not clear and the information discussed is only in general, then I find out the information by myself on the internet so that the information is more complete "(inf 3)." The officer always explains, but not much "(Informant 5).

Knowledge about a high-risk pregnancy and childbirth is necessary for mothers to know, as expressed by informants 2, 4, and 8 as follows: "I think such information is essential, the risks during childbirth are significant to know" (Informant 2). "It needs to be explained ... so that we will be more aware of our pregnancy" (Informant 4). "About the risks during pregnancy, childbirth, postpartum even in newborns, not only to the patient and her husband but the other member of the family should also know" (Informant 8).

The theme of the experience of high-risk pregnant women in facing the labour process is based on the experience of whom, with the sub-themes: "Self", "Family", and "Other People" (Figure 3).

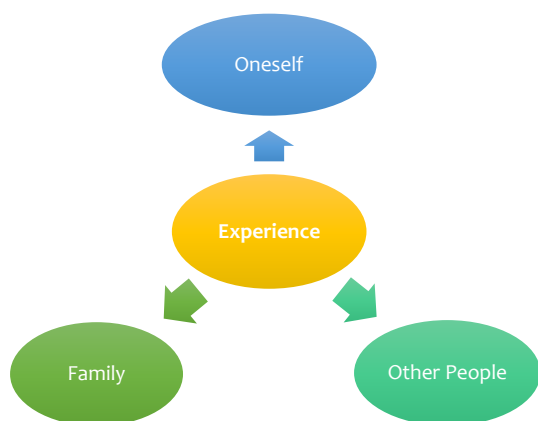


Figure 3. Sub-themes: Self, Family, and Other People

The sub-theme "self" describes the experience of childbirth based on one's own experience, as conveyed by informants 2 and 3 as follows: "In my opinion, the experience of childbirth is more comfortable here, all processes are well explained ... the facilities are also very comfortable here, not like my childbirth experience before where I felt down with the service. For example, a health worker says that because you are stressed, your husband is also

confused. But here, everything feels more positive; I feel more confident, calmer, and grateful than in the previous experience." (Informant 2). Another opinion was stated by the mother. She said, "Everything, in my opinion, is very comfortable here, the facilities provided are according to class, but I do not know if there will be another patient next to me because it is still empty ... yesterday at the "N" Hospital. There was also the next one who just gave birth, so the baby kept crying. I can't sleep, I don't know if the patient's companion feels the same or not, but because I am alone, as a patient I feel everything is just good" (Informant 3). The sub-theme "family" describes the choice of place of delivery based on the family's experiences. As conveyed by informants 1 and 2 as follows: "One of my relatives said that the doctor here provides good service, the midwife is also friendly, give an education how to breastfeed well" (Informant 1). "I've just heard from my relative, but as I know, this hospital is for doctors who are still studying because it is an academic hospital, but it's not kind of what I was thinking" (Informant 3). The sub-theme "other people" describes the choice of place of delivery based on the experiences of other people, as conveyed by informants 1 and 7 as follows: "Once... yesterday the patient in front of me gave birth here too, a neighbor of S" (Informant 1). "Sometimes people, many people talk about this hospital, I have also been here to visit patients who are treated here, so I know a little bit of information about this hospital" (Informant 7).

The theme of support here relates to the choice of place of delivery, whether based on the support that is categorized into sub-themes, namely: "family", "service facilities", "funds", and "health personnel" (Figure 4).

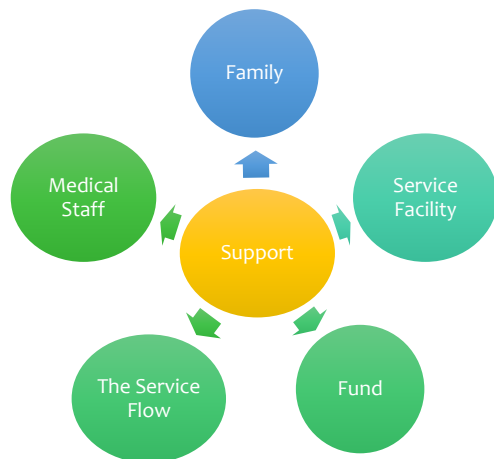


Figure 4. Sub-themes family, service facilities, funds, and health personnel

The sub-theme of "family" describes support for choosing a place to give birth based on family, as conveyed by informants 4 and 5 as follows: "Yes, just pray for the best, because relatives are not allowed to visit" (**Informant 3**). "Yes, I was worried after I told them that they could not visit, but they said yes, it's okay" (**Informant 5**).

The sub-theme "service facilities" describes the facilities available at the hospital, where the hospital service facilities are also one of the informants' considerations when choosing a referral hospital, as stated by informants 3 and 5 as follows: "The facilities are more complete than the hospital. "N" (**Informant 3**). "This hospital was chosen by SI Hospital ... They said the facilities are better and more complete" (**Informant 5**).

The sub-theme of "health workers" illustrates that the role of health workers is also one of the factors that provide satisfaction when informants are hospitalized. As expressed by informants 1, 3, and 4 as follows: "Everything is clear because the doctor has also explained everything, I need to know what it that and how the process" (Inf 1). "All the actions and treatment that will be carried out are explained first; I feel better understood, so I feel satisfied ..., I feel that I am ready to give birth at U Hospital" (Inf 3). "I was

explained by Doctor W that if it was already given three flabots of infusion, I could not be induced again, so a cesarean section had to be done. All the midwives also told me that everything was well explained when I put the infusion when it had to be checked". (**Informant 4**).

The sub-theme "funds" describes the preparation of a maternity fund other than insurance, where some informants also know if at any time insurance cannot be used, as stated by informants 1 and 3 as follows: "Costs for childbirth are separated from other needs" (**Informant 1**) "I have saved some costs, but not so much, just a little, because later there are still some costs can be covered by BPJS as well" (**Informant 3**). The need to prepare funds for delivery was also expressed by informant 8 as follows: "Besides, it also needs to be informed about savings preparations for delivery" (**Informant 8**).

The sub-theme "service flow and insurance" revealed that some informants knew the service flow when they had to be referred to advanced-level services. The expressions conveyed by informants 6 and 7 are as follows: "Yes, I know, but, if possible, the reference letter can be used directly" (**Informant 6**). "Yes, I know, I was informed that if I followed the line from PPK 1, the insurance could be used continuously, because my monthly salary was boosted for insurance" (**Informant 7**).

Several informants in this study also revealed that insurance ownership is needed during the delivery process, as disclosed by informants 1 and 5 as follows: "Previously I had a BPJS, but the data is no longer valid because it is expired, BPJS is government, now I don't have any" (**Informant 1**). "BPJS class II, this insurance is very

helpful ... my husband's salary is deducted every month for this assurance" (**Informant 5**).

The theme "sources of information" describes where informants get information about referral hospitals divided into the following sub-themes: "Family", "Friends", "Social Media", and "Health Workers" (Figure 5). The sub-theme of "family" contains information that the hospital they chose when they were about to give birth was based on information from the family, as conveyed by informants 3, 9, and 10 as follows: "I've heard about this hospital from one of my relatives. I thought that the doctors here are doctors who are still studying because this hospital is an academic hospital, but it turns out this is not like what I was thinking" (**Informant 3**). "I have known the information for a long time because U Hospital is close to my mother-in-law's house" (**Informant 4**).

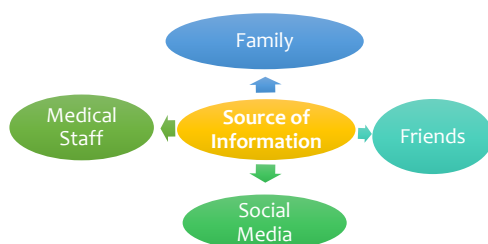


Figure 5. Sub-themes: Family, Friends, social media, and Health Workers

The "friends" sub-theme illustrates that the information related to the hospital that the informant chose when giving birth came from friends or neighbors, as stated by informants 1 and 2 as follows: "I received a recommendation about this hospital as the place for giving birth from my neighbors, and browsing as well. The neighbor said that the doctor here has good service, the midwives are also friendly, they are also educated on how to breastfeed properly" (**Informant 1**). "Sometimes

from people, sometimes when I visit here, this hospital has services like this and many more I have also been here to visit patients." (**Informant 2**).

The sub-theme of "social media" describes the information obtained by informants about which hospital to choose when giving birth from social media, as expressed by informants 1 and 2 as follows: "What information I got from browsing? Uhmhm, for example, like the location and the doctor's schedule" (**Informant 1**). "Besides, I also was browsing on the internet to look for the information I want to know" (**Informant 3**).

The sub-theme of "health workers" illustrates informants consider that information and recommendations from health workers in choosing which hospital to choose during high-risk childbirth, as stated by informants 3, 4, and 5 as follows: "I am here for a reference from N Hospital, they looked for information about a hospital that provides facilities for premature babies, but they did not immediately find it because all was full, it was only available at U Hospital, so I just followed their recommendation" (**Informant 3**). "I have never been here before ... at first, my husband and I wanted to come here because it was closer to home, and luckily that this hospital became a referral hospital from the husband's office as well" (**Informant 4**). "Chosen from SI Hospital ... because the facilities are better and more complete" (**Informant.5**)

4. Discussion

This research shows that both the primary and supporting informants expressed the same thing. They knew the risks of pregnancy which is very important to make every pregnant woman better prepared to face pregnancy. The importance of increasing knowledge is not only for

a pregnant woman or mother, but it is also essential to involve the husband. It is because the husband and family will play a role in decision-making⁸. Recognizing as early as possible the risk of pregnancy that is experienced or other risks of pregnancy is needed. It aims that pregnant women be more prepared when they need further action. It was also pointed out in a study by Murray-Davis, which revealed that recognizing the dangerous signs of pregnancy in mothers is as essential as seeking other health facilities. The aim is to obtain a good outcome for both mother and baby, especially in low-income community settings, such as in Papua New Guinea⁹.

In terms of choosing the hospital as a place for delivery, several informants said their decisions were made based on their siblings' experiences and influenced by the experiences of friends or neighbors. As expressed in the study of Grigg et al., it states that women's experiences in choosing a place of delivery have different characteristics, such as age, parity, education, and knowledge¹⁰.

In general, support for high-risk pregnant women during childbirth can be in the form of support regarding their pregnancy and the selection of a place of delivery, which is determined based on family, funds, delivery service facilities, and support from health personnel. Family support in empathy for husbands and children towards women is positive support related to accepting pregnancy and dealing with childbirth. It is because the role of the family will provide a sense of security and comfort for pregnant women before childbirth¹¹. Several informants revealed that service facilities were one of the factors that were considered when they had to choose which hospital would be the place

of delivery. This facility is related to the fact that a service center provides various facilities and services.

Moreover, it has a variety of products that will attract the public to use its services. Adequate medical service facilities will make the services provided to patients better¹². Hospitals with adequate medical facilities are also an option for mothers planning to give birth in the hospital. It is not only because of the high risk of childbirth. Moreover, some pregnant women also think that this is important for the safety of both mother and baby¹³.

The informants in this study revealed that in addition to having insurance to prepare for labour, they had also prepared special funds if the insurance was not valid or could not be used. According to the 2020 Nourmayansa research, it is stated that policies that support the delivery process are not a requirement for mothers to choose a place of delivery. Some mothers choose a place of delivery that has a sound referral system because this is one of the essential things that might affect the safety of mothers and babies¹⁴. Marwan Azmi's research explained that informants were ready to seek additional funds from other sources to obtain the desired place of delivery¹⁵.

In general, the informants in this study obtained information about the destination hospital based on various sources of information, such as from family, friends, social media, and health workers. It was also revealed in the research by Suzana Lee that the information about the choice of where the mother would give birth and which sources they would trust. 16. Besides, some informants got information from neighbours and friends. Information about referral hospitals was

also informed by health workers who revealed the choice of referral hospitals according to the level of risk. In this case, midwives have the opportunity to raise awareness and provide information and discussions with pregnant women to open up choices for birthplaces¹⁷.

5. Conclusion

The mothers already know the pregnancy risks they experienced. On the other hand, they are less aware of the risks of other pregnancies. The mothers' experience of choosing the place of delivery is influenced by personal experiences, family, friends, or other people. In addition, it is also influenced by the availability of adequate hospital facilities, service flow and insurance coverage.

Mothers should be aware of the risks of pregnancy they experience and learn more about high-risk pregnancy knowledge so that it is hoped that they will be better prepared to deal with high-risk pregnancies.

Acknowledgement

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