

Research for Better Society: Developing Science and Technology to Improve Health and Well-being

#### ICASH-A017

#### PREGNANT WOMEN'S PERCEPTION ON HIGH-RISK PREGNANCY

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#### **ABSTRACT**

**Background**: Central Java province is one of the contributors to maternal mortality rate (MMR) in Indonesia which reached 126 per 100.000 live births. The cause of death of pregnant women can be predicted based on the risk factors posed by the mother during pregnancy. In 2014 the number of high-risk pregnant women in Semarang City is 2.904 people and this number increased in 2015.

**Aims**: To explore the perception of pregnant women about high risk pregnancy at Bandarharjo Health Center Semarang City.

Methods: This is a qualitative research study with phenomenology approach. The sampling technique used is purposive sampling and the sample criteria in this study were the third-trimester pregnant women and did not have a high-risk pregnancy, living in work area of health center of Bandarharjo Semarang City, doing a pregnancy check up at Bandarharjo Semarang health center, and willing to become an informant. The sample in this study amounted to 7 participants, consisting of 4 informants and 3 triangulation. Triangulation in this research is a midwife at Health Center Bandarharjo Semarang City and another pregnant women who does not become an informant and live in working area of Bandarharjo Health Center Semarang City. Data collection techniques for both informants and triangulation used in-depth interviews. Results: All the informant understand that high-risk pregnancies is a condition in which maternal pregnancies at high risk for both mother and baby. The information about high-risk pregnancy obtained from health workers, the public, reading books, and media. Midwives play as an important source when pregnant women looking for the information about high risk pregnancy. Most of informants revealed they never wished to be in high-risk pregnancies, but they know about the impact of high risk pregnancy. The informants also agreed if they have to go health facilities if they get a high risk pregnancy.

**Conclusion**: Overall pregnant women already understand about high-risk pregnancies. Midwives play an important role in the welfare of mothers and babies so that the information provided is very beneficial for pregnant women. Therefore, it is expected that cooperation from various parties refers to the government, health workers, community and individual pregnant women themselves in conducting activities such as counseling that can provide benefits, especially in the prevention of pregnancy with high risk.

**Keywords:** Pregnant Women, High-Risk Pregnancy, Perception

#### INTRODUCTION

Pregnancy is considered as high-risk when the development of fetus, or the pregnancy itself, is at risk of complications [1] that threaten both mother and the fetus[2]. Risk factors in pregnant women include maternal age less than 20 years and over 35 years, childbearing 4 times or more, birth spacing less than 2

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years, maternal height less than 145 cm, history of poor obstetrics, and risks to the fetus include preterm birth (37 weeks gestation), multiple pregnancies, congenital anomalies and poor fetal growth, placental abruption and stillbirth[3]. The determination of pregnancy risk is a process that is influenced by social and cultural factors where pregnant women and health workers do not determine or assess risk factors in the same way[4].

Globally, about 358,000 women die every year due to pregnancy and childbirth. About 99% of maternal deaths occur in developing countries where 85% of the mortality rate occured in sub-Saharan Africa[5]. In Indonesia alone, maternal mortality is still a major health problem. Up to now, Indonesia's Mortality Rate is in the top position among ASEAN countries. The Indonesian Demographic and Health Survey (IDHS) shows that the maternal mortality rate (MMR) in 2007 was 228 per 100,000 live births and an increase to 359 per 100,000 live births in 2012, far from the Millennium Development Goals (MDG's) target of 102 per 100,000 live births by 2015. IDHS reported, about 64% of pregnancy in the high-risk category. The most common risk categories are maternal age less than 18 years, birth spacing less than 2 years and parity more than three[6].

Central Java province is one of the contributors to maternal mortality rate (MMR) in Indonesia which reached 126 per 100.000 live births. By age group, the maternal mortality rate was highest at productive age (20-34 years old), followed by older age and the placed the youngest age group at the lowest [7]. In Semarang, 10% of total pregnant women were at high risk [8] and the highest high-risk pregnancies was found at Bandarharjo health center, with an increased tendency from 61% in 2012 to 76% in 2015 [9]. A preliminary conducted at the Bandarharjo health center on 10 pregnant women who came for Ante Natal Care (ANC) on 30 November to 2 December 2015 revealed that many women knew about high-risk pregnancies but did not fully understand.

High-risk to pregnant women can be prevented if the pregnant woman has the ability to recognize herself and her pregnancy against high risk and routinely perform the examination during pregnancy[10]. The ability of the mother to recognize herself and her pregnancy against high risk, cannot be separated from cognitive processes experienced by someone. This cognitive process is used by someone to interpret and understand the world around. Perception is one of the cognitive process, the process of perception is preceded by the process of sensing the tangible receipt of stimulus by the individual through the receptors, which is forwarded to the central nervous system so that the individual realizes what he Sees what he hears and so on[11]. Therefore, people's perception of high-risk pregnancy needs to be developed so that high-risk pregnancy events can be prevented. Based on the above background, researchers want to see how the perception of pregnant women about high-risk pregnancy.

#### **METHODS**

This research is a qualitative research with phenomenology approach. Seven informants, consisting of 4 participants and 3 triangulation were involved in the study, selected purposively with these following criteria: third-trimester pregnant women, did not have a high-risk pregnancy, living in work area of Bandarharjo health center, residents of Semarang City, and doing a pregnancy check-up at Bandarharjo health center. Midwife at Bandarharjo health center Semarang was interviewed as triangulation. This study was conducted from April 16 to April 25, 2016, in the work area of Bandarharjo Puskesmas Kota Semarang. The in-depth interviews took about 35-40 minutes at informants' convenience. Qualitative thematic content analysis was employed, started by searching and compiling systematically the data obtained from interviews, field notes, and documentation, then followed by organizing data into categories, translating into units, arranging into patterns.

#### RESULTS

Pregnant women perceptions about high-risk pregnancy based on their own experience and knowledge was the main data of the study. The study is categorized into the following themes: knowledge of high-risk



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pregnancy, perceptions of various high-risk pregnancies, high-risk pregnancy effects, and attitudes of pregnant women when experiencing high-risk pregnancies. Direct quotes supporting themes are provided and encoded (informants I1-I4 and triangulation T1-T3) to maintain anonymity.

Table 1 Characteristics of Informants

Code Informants	Day / Date	Hour Interview	Mother's Age	Last Education
I1	Saturday, April 16, 2016	At 11.00 am	33 years	Junior high
I2	Sunday, April 17, 2016	At 16.00 pm	22 years	Senior high
I3	Monday, April 18, 2016	At 10.00 am	27 years	Senior high
<b>I</b> 4	Friday, April 22, 2016	At 16.00 pm	30 years	Senior high

Table 2 Characteristics of Triangulation

Code Triangulation	Day / Date	Hour interview	Mother's age	Last Education	Job
T1	Sunday, April 24, 2016	At 10.00 am	30 years	Senior high	housewif e
T2	Monday, April 25, 2016	At 16.00 pm	23 years	Junior high	housewif e
Т3	Monday, April 25, 2016	At 13.00 pm	32 years	Diplome	Midwife

#### *Knowledge of high-risk pregnancy*

This theme refers to the knowledge and understanding of pregnant women about high-risk pregnancies, which in this understanding determines how much maternal knowledge in describing what is a high-risk pregnancy understanding, where the information source is obtained, what information is provided and how often the mother visits antenatal care.

#### *Understanding high-risk pregnancy*

All expectant mothers understand that high-risk pregnancies are a condition in which maternal pregnancies are at high risk for both mother and baby. This illustrates that the educational status does not affect the mother's knowledge because the informant's education in this study from SMP to SMA, informants with junior high school education said that: "A high-risk pregnancy for mother and child ....." (I1). This is in line with the statement of the midwife as triangulation that is: "A condition in which the pregnancy has a high risk to the mother and baby" (T3). The knowledge of pregnant women is depend on the exposure of information about high-risk pregnancies, the more often hearing information the better understood about high-risk pregnancies. Understanding of this is important for pregnant women because in pregnancy not all are running normally, for that, early detection is necessary, and high-risk events in pregnancy can be prevented.

#### Sources of information about high-risk pregnancies

The information obtained comes from a variety of sources from health workers, the public, from reading books or from media, the information here is linked to high-risk pregnancies. Midwives are believed to be good informers, pregnant women get information during pregnancy checks to midwives "When in check with the midwife, the midwife says ...... "(I2), "from the midwife during Integrated service post when checking the midwife ......" (I3). However, the information obtained is not enough only from the midwife given the limited time and working hours of the midwife, for it requires awareness of pregnant women



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themselves in seeking information as well as learning from the book of pregnancy ".... from midwives during pregnancy check-up and studying in pregnancy book ..." (I4).

#### Information provided

Good communication is needed in conveying information so that information provided can be understood by pregnant women. The information provided varies mainly for the health of the mother and fetus when the mother conducts antenatal visits the midwife is expected to provide counselling, information, and education about high-risk pregnancies, explain the results of the examination and provide health education for mother and baby. "The midwife informs the results of the examination, the pregnancy will be how" (12), "given counselling, reading a pregnancy book, recommended pregnancy exercise, told to exercise if the child is breech ....." (14). All information provided by the midwife during an antenatal visit needs to be frequently informed. The information provided is not only about the outcomes of pregnancy but also about the complications that may occur during pregnancy, because it does not close the possibility of a normal pregnancy will be pregnant with indications. Midwives do play an important role in the welfare of mothers and babies so that the information provided is very useful for pregnant women but usually information obtained from the surrounding environment or fellow pregnant women more easily remembered by pregnant women. So midwives need to work with local government and community to conduct activities which later can be a source of information for pregnant women because not enough information obtained only during the examination of pregnancy.

#### Pregnancy check (ANC)

Pregnancy checks are recommended at least 4 times during pregnancy, the more frequent the examination the more likely to reduce the risk of high-risk pregnancy. Informants in this study have conducted regular checks. "Every month check and currently 7 months check every week" (I4) Awareness of the importance of this pregnancy examination should be owned by all pregnant women so that pregnancy can be monitored. As the midwife says "... Routine, but not routine once well. Anyway, standard and indeed the average ever contact" (T3). This indicates that the average pregnant woman has checked the pregnancy in the midwife, although only a few visits, this is influenced by the busyness of the mother in taking care of the household, the knowledge of the mother who considers her pregnancy is still normal, the mother who has checked her pregnancy at the doctor. However, midwives are still able to monitor the progress of their patients because midwives give phone numbers and make visits home. Selection of pregnancy checkpoints is influenced by social and economic factors depending on the individual pregnant women, such as one of these informants said "Start pregnancy 4 months routine pregnancy check, if to doctor for ultrasound already 2 times ...." (I3) This informant performs pregnancy checks on midwives and doctors, proper selection of places has been done, informants also do ultrasound to monitor the development of the fetus, such an understanding is necessary for all pregnant women so they can know the pregnancy high risk or not.

#### The perception of pregnant women about the kinds of high-risk pregnancies

This theme refers to the perception of pregnant women about the kinds of high-risk pregnancies, which in this understanding determine how much of a mother's perspective in exploring various high-risk pregnancies and how self-assessment of high-risk pregnancies.

#### *Various kinds of high-risk pregnancies*

Various high-risk pregnancies in pregnant women include maternal age less than 20 years and over 35 years, high parity, birth spacing less than 2 years and mother's height less than 145 cm, history of poor obstetrics, and risks to the fetus include preterm delivery (37 weeks gestation), multiple pregnancies, congenital anomalies and poor fetal growth, placental abruption and stillbirth. In this study, informants have understood but not as a whole ".... usually pregnant more than 9 months, less than 9 months, bleeding before 9 months, the pregnant mother is too young and too old ...." (12), "ever caesarean section, young age, child Many more than 4 people .... "(11). Pregnant women only know some high-risk pregnancies, this



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may be because at the time of remembering the mother's information just remember some of which are easy to understand.

#### *Self-assessment of high-risk pregnancy*

Determining high-risk pregnancies or not, assessment of pregnant women is needed to know the characteristics that cause it and the fetus are more susceptible to illness or death. Self-awareness to detect early whether the pregnancy is risky or not required for every pregnant woman. Informants say they are not meant to be in high-risk pregnancies "Thank God no, because of no complaints, all right so far ...." (13), "no, because I am strong ...." (14). But it must be understood that all pregnant women consider that a good pregnancy is likely to be at risk, for the pregnant woman to consider all pregnancies at risk so that the mother will continue to care for and monitor her pregnancy as well as possible.

#### The impact of high-risk pregnancy

This theme refers to the perception of pregnant women about the impact of high-risk pregnancy. It is important for all pregnant women to know the impact in high-risk pregnancies, so pregnant women will be more careful and always keep their pregnancy. The most common effects are bleeding, premature birth, low birth weight, fetal death, and maternal death. Informants in this study already know about the impact "When his mother gave birth to bleeding, not normal, anyway later the baby can die in the womb ...." (I2), "The baby was born prematurely, a childbirth could bleed ...." (I4) This informant's understanding is supported by the triangulation statement "... which clearly threatens the lives of mothers and babies because mothers can threaten during pregnancy, childbirth, and after childbirth, while for babies, babies are born with low weight, yellow babies and unhealthy babies like other babies" (T3). In giving statements pregnant women look very confident with the answer and it seems there is a fear that the impact of high-risk pregnancy will occur in pregnancy. So they always try to maintain pregnancy and routine checks on health facilities.

#### The attitude of pregnant women if they have high-risk pregnancies

The attitude of pregnant women if they were experiencing high-risk pregnancy was expressed similarly between informants. "Check with the midwife immediately, follow the word midwife what keep check more often ..." (I2), "check to the hospital, to the midwife and doctor ..." (I1), "check to the health center to check pregnancy. "(T2). Attitudes of informants need to be improved, where every pregnant woman should have awareness of the attitude as above so that high-risk pregnancies can be prevented. This attitude is usually influenced by family support, local culture, economy, and environment. Midwives as health care providers should involve families in decision-making, pay attention to local culture in every treatment provided and advise mothers to take care of health insurance cards so that if anything happens to mothers and babies, families and mothers who are ready to know where To seek help.

#### **DISCUSSION**

Knowledge of pregnant women about understanding high-risk pregnancies

The results suggest that the concept of high-risk pregnancy is a high-risk pregnancy for both mother and baby. Knowledge of high-risk pregnancy understanding was obtained by the informant during counselling about a high-risk pregnant woman ever done at Bandarharjo Health Center. Health workers, especially midwives should conduct counselling more frequently, so information on health can cover all levels of society as a whole, in midwife counselling should work with cadres or village heads to provoke community participation in counselling. Statement of informants and triangulation of high-risk pregnancy is consistent with the study by Mochtar and Rochyati that high-risk pregnancy is a pregnancy that has a greater risk of pregnancy usually for mother and baby that will cause illness or death both before and after childbirth[10], [15]. This is also in line with research conducted by Endah Suprinatin who said that high-risk pregnancies are pregnancies that have a greater risk of normal pregnant women and harm to the mother and fetus[16].

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This informant's knowledge is different from the informant during the preliminary study, this is because, during the preliminary study, the extension activity has not been done so the informant has not known about high-risk pregnancies. It is also influenced by the situation and conditions during the interview where during the preliminary interview study conducted in the health center when pregnant women visit while the research was done at home in a comfortable state, of course, this can affect the thinking of informants because people can think well and correctly under favourable condition.

Pregnant women obtained information about high-risk pregnancies from midwives. Midwives as service providers play a role in pregnant women examinations, counselling of pregnant women and families on signs of labour, alarming signs of birth, maternal and infant risk factors for maternal and infant welfare[17]. Information provided by the midwife is expected to be useful to increase the knowledge of pregnant women so that every pregnant woman is able to do prevention so as not to experience high-risk pregnancy. Health workers, especially midwives, are required to provide information on maternal and child health, in this case including information on high-risk pregnancies. To further enrich the information should be not enough information just from the midwife given the limited time and hours of the midwife, for it requires awareness of pregnant women themselves in seeking information as well as learning from pregnancy books and experience from the community.

The information provided by the midwife during pregnancy is an explanation of the results of the examination, health education and encouraging the mother to read a home pregnancy book. During ANC visits, Mom is educated about health promotion, healthy diet, lifestyle choices, early detection of possible complications of pregnancy and childbirth, and establishing familiarity with health workers that can help reduce emotional burden[18]. According to Moison, et al factors that affect the satisfaction of services provided is communication and providing good and comprehensive information to patients[19]. Midwives take an informal approach to communication and health promotion tailored to the needs and provide solutions to the patient's perception of problems encountered[20]. The informant's statement and triangulation are in accordance with the theory of Moison, et al A pregnant mother will feel happy and satisfied if the midwife or health workers explain briefly and clearly about the results of the examination, in addition, a pregnant mother is in need of other information about the health of her pregnancy. Therefore, health personnel, especially midwives should have sufficient knowledge to build good communication in providing health education so that the information provided can be understood by pregnant women and willing to implement the suggestions that have been given.

The World Health Organization (WHO) recommends at least four antenatal care visits for uncomplicated pregnancies with first visits beginning before 16 weeks of gestation[21]. High-risk pregnancies can be prevented if symptoms are found early so that further action can be taken, one way to prevent them is to Regular and regular pregnancy check-ups to health facilities such as integrated health posts, health centers or hospitals at least 4 times during pregnancy and when risk factors are found, pregnancy tests should be more frequent and more intensive. Research conducted by Roziah, which showed that pregnant women with an ANC frequency of less than or equal to three times had a risk of 1.5 times for risky pregnancies compared to pregnant women who had ANC frequencies above three times. This illustrates that routine examination During pregnancy is very important[22].

Bandarharjo health center is one of the highest numbers of pregnant women, requiring greater supervision of local midwives to monitor all pregnant women. The results of the study found that pregnant women in the area routinely perform pregnancy checkups and some of them perform ultrasound to monitor fetal development, the choice of venue for the examination depends on the wishes of every pregnant woman, some choose midwives at health centers or at midwife homes in the area, Some go to a clinic or hospital to check their pregnancy with a doctor. Awareness of pregnant women to diligently perform pregnancy checks occurs because there are concerns pregnant women, and also local governments who work with health workers always remind people to always check pregnancy. The perception of pregnant women about the



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importance of routine pregnancy examination either an informant or triangulation in accordance with WHO recommendations, and expected all pregnant women have the same thoughts and perceptions so that the incidence of high-risk pregnancies can be prevented.

Perceptions of pregnant women about the kinds of high-risk pregnancies

Various high-risk pregnancies are too young and too old, too many children, too close to pregnancy and history of cesarean section. Most informants stated that high-risk pregnancies were still within the range of 4T (too old, too young, too much and too frequent). The informants know more about this because, in the work area of Bandarharjo Puskesmas, the number of high-risk pregnant women with too young and too old is quite high. In fact, in addition to 4T, there are many high-risk pregnancies that should be known by pregnant women, so it is hoped that later will change the perception of pregnant women that high-risk pregnancies not only within the scope of 4T only. This study is in line with a study by Hamideh Bayrampour et al. Which shows that pregnant women> 35 years old have a perception that their pregnancies are associated with high-risk pregnancies[23].

Pregnant women have assessed themselves and their pregnancy, they revealed that from the assessment that has been done, pregnancy is not intended in high-risk pregnancies, the reasons presented are very diverse, some say that he does not include high-risk pregnant women because of normal blood pressure, His body Both and those who said that based on the ANC midwife examination said there were no complaints and were in good condition. The results of the study found that the average pregnant woman has understood how to assess her own pregnancy condition whether high risk or not [23]. However, it should be understood that in assessing pregnancy in good condition is not sufficient only with the above reasons should also be examined such as laboratory examination.

The hazards or effects that can result from high-risk pregnancies are premature infants, low birth-weight babies (LBW), prior and postnatal bleeding, fetal deaths, pregnancy poisoning, and maternal death[24]. The results of this study pregnant women know only two of the six impact of high-risk pregnancies, namely premature and born babies with low birth weight. This may be due to the high-risk pregnancy effects that the mother knows only based on experiences experienced by or experienced by other pregnant women, therefore based on these matters should the maternity caregiver provide complete information to all pregnant women about the characteristics of pregnancy risk high by using a language that is easy to understand and done over and over again. With complete information, and easy to understand it, then from the beginning, pregnant women can detect the presence of risk factors, without waiting for a worse complaint.

#### Attitude of pregnant women if have a high-risk pregnancy

One of the treatments of high-risk pregnancy is by doing early pregnancy examination in health facilities and antenatal care services conducted by professionals in their field in this case midwives and obstetricians. Health center as a place of health services with a midwife as a provider (service) also has important role in the effort of handling high risk in the pregnant woman[25]. To increase the visit of pregnant mother needed knowledge and attitude of self-awareness of pregnant woman. Because knowledge of a person will affect the person's attitude, so when someone has known something in this case about high-risk pregnancy will affect his attitude in maintaining his pregnancy. So things that are not desirable in pregnancy can be avoided. The results of the study showed that pregnant women will conduct a medical examination if the pregnancy is a high-risk pregnancy. This attitude needs to be improved for every pregnant woman. In fact, the attitude of pregnant women is influenced by social, cultural and economic factors. This factor should be noted by health workers. The frequent occurrence of pregnant women late getting help for not recognizing the signs of life-threatening complications, slow decision-making that is influenced by family factors, late seek help is already severe new bring health facilities, the distance home to health facilities, or often called 3 late.

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Every pregnant woman has the opportunity to experience high-risk pregnancies. Therefore, every pregnant woman should have her pregnancy checked regularly, following all advice provided by the midwife, seeking information on pregnancy as much as possible, able to assess her and her pregnancy, look for health facilities or health workers when something happens to her pregnancy and increases her knowledge and understanding in high-risk pregnancy perception. Perception is subjective, because it depends on the ability and circumstances of each individual, so that will be interpreted differently by individuals with each other. Perception is the process of individual treatment to give a response, meaning, image, or interpretation of what is seen, heard, or perceived by the senses in the form of attitude, opinion, and behavior or referred to as individual behavior. For that, someone who has a good perception will produce good behavior or attitude, this also means in terms of health[11].

#### **CONCLUSION**

High-risk pregnancies are conditions in which both mother and baby are at risk of complication. Overall pregnant women already understand about high-risk pregnancies, able to recognize themselves and pregnancy at high risk, routine checks during pregnancy. Midwives play an important role in the welfare of mothers and babies so that the information provided is very beneficial for pregnant women but usually information obtained from the surrounding environment or fellow pregnant women more easily remembered. Therefore, it is expected that cooperation from various parties refers to the government, health workers, community and individual pregnant women themselves in conducting activities such as counselling that can provide benefits, especially in the prevention of pregnancy with high risk.

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