

# MENTAL PREPARATION WOMEN AT HIGH-RISK PREGNANCY

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## REVIEW

## OPEN ACCESS

### ABSTRACT

**Background:** Pregnancy becomes risk period in woman's life which need to make adjustment in physical and psychological. Improper handling can cause serious problem. Women need to be readiness before entry to next phase become a mother.

**Objective:** To reveal about mental readiness of pregnant women at high-risk pregnancy.

**Method:** This paper was review which supported by literature review from PubMed, Medline and Cinahl database research published journal from 2017-2021 which talk about pregnant women at high-risk during pregnancy and the fetus.

**Results:** 15-20% of pregnancies are high risk; pregnancies are complicated by the presence of a high risk or serious condition that affects the outcome of the mother and the fetuses. Women with high-risk pregnancies had 5.2x greater anxiety than women with low-risk pregnancies. High-risk pregnancies require more intensive or frequent treatments. Mental preparations need to be supported by many supporting system and holistic interventions.

**Conclusion:** High-risk pregnancy and childbirth are two risk factors associated with anxiety during pregnancy. The mental preparation of pregnant women needs to be supported with adequate mental health to minimize adverse outcomes, maintain normal social relationship and interactions, physical activity, oriented interventions to bring better quality of preparation.

**Keywords:** mental, high-risk pregnancy, childbirth.

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## INTRODUCTION

Pregnancy becomes an expression of a sense of self-realization and identity as a woman, worrying periods which need to had adjustment as their impact in physical and psychological condition. Pregnancy for a woman is a matter of happiness as well as anxiety, worrying about bad things that can happen to her and the fetus, especially during childbirth. The condition of pregnancy which was originally a source of happiness can turn into a certain anxiety, one of which is caused by a high-risk pregnancy condition. Pregnancy conditions that are at high risk can cause the fetus to be conceived not to grow healthily, it can even cause death to the mother and fetus. The results showed that high-risk pregnancies accounted for large mortality rates in many countries, both in Africa, Latin America, the Caribbean, and countries in Asia.<sup>1,2</sup>

Women who begin to realize that they are at high risk in pregnancy have their own anxiety in dealing with childbirth. Health problems in pregnant women, both physically and psychologically, have an impact on the quality of life of the mother. Women have a condition that can increase the risk during pregnancy, about 15-20% of pregnancies including high-risk pregnancies. Women with high-risk pregnancies need to prepare themselves with more attention to their health conditions in dealing with pregnancy. Through improving

health conditions that have a direct impact on improving the quality of life, 90-95% of pregnant women who are considered high-risk pregnancies can give birth safely and have healthy babies.<sup>1</sup>

Various problems greatly determine the quality of pregnant women, both during pregnancy and after pregnancy. In mothers with high-risk pregnancies, they have more complex problems related to their pregnancy. Ineffective treatment can cause serious problems. Although pregnancy is a physiological phenomenon, several conditions can harm the maternal or fetal health, pregnancy becomes a High-Risk Pregnancy (HRP) and results in the mother experiencing stress. HRP is experienced by almost 22% of pregnant women. HRP is related to the mother's abnormal physical condition and can affect mood, mental and social problems. Research shows that women with HRP can experience anxiety or anxiety, fear, inability to control feelings, disability, and irritability. A qualitative study suggests that women with HRP can also have behavioral, affective, and emotional problems. In addition, they risk experiencing sociocultural, financial, and uncontrollable feelings such as doubt, worry, and insecurity, so HRP threatens women's and fetus health.<sup>1,3</sup>

Pregnant women often have mental disorders. The prevalence rate of depression reaches 11%-17% in women during

pregnancy. For example, using a validated screening instrument,<sup>3</sup> found that 11.1% of third trimester pregnant women usually experience depression. In addition, most pregnant women experience symptoms of stress and anxiety thinking about their pregnancy. The prevalence of anxiety disorders during pregnancy and after pregnancy is about 15%. The cause of the mental disorder is not yet known in depth,<sup>4</sup> but pregnancy and the puerperium are vulnerable and emotionally depressed periods. Anxiety of pregnant women is significant complications reported in 20-40% of pregnant women. Common causes of worry during pregnancy can range from fetal well being, maternal illness, social and financial support, and death. If this concern persists for a long time, it can become problematic and negatively impact behaviors that are potentially harmful to the mother and fetus, so it is necessary to increase maternal mental health screening and access to care.<sup>5</sup>

Hormonal changes in pregnant women such as levels of prolactin, steroids, and cortisol play an important role in their emotional well-being. If high risks such as diabetes mellitus, hypertension, obesity, and the mother's age that is too young (<20 years) or too old (>35 years) occurs during pregnancy, then mother's emotional distress will rise. Worries during pregnancy and childbirth can negatively affect maternal psychology and unstable emotions.<sup>6</sup> The purpose of this journal is to find out the mental preparation of pregnant women who are high risk to pregnancy. Mental preparation for pregnant women who are at high risk is necessary in order to avoid mental disorders so as not to worsen the health of themselves or their fetuses.

## METHOD

This article will discuss the mental preparation of pregnant women at high risk with pregnancy and fetus based on a literature review from PubMed, Medline, and Cinahl database for research published in journals from 2017 until 2021.

## RESULT

### Mothers with High-risk Pregnancy

Mothers with high-risk pregnancies are pregnant women who experience greater risk or danger during pregnancy or childbirth, when compared to normal pregnant women. High risk pregnancies are pathological pregnancies that can affect the condition of both the mother and fetus. Promotional and preventive efforts are needed until the time is taken with a firm and fast attitude to save the mother and her fetus. High-risk pregnancies can come from the mother, fetus, or other factors. Maternal factors include pregnancy at the age of less than 20 years or more than 35 years, fourth pregnancy or more, pregnancies with a distance of more than 5 years or less than 2 years, the mother's height is less than 145 cm and the mother has never given birth to a baby term and normal weight, pregnancy with disease (hypertension, diabetes, thyroid, heart, lung, kidney, tuberculosis, and other systemic diseases), pregnancy with certain conditions (uterine myoma, ovarian cyst), pregnancy with anemia (Hb less than 10.5 g%), pregnancy with a history of SC.

Factors from the fetus can be caused by abnormalities in the location of the fetus (breech, transverse, oblique or diagonal, facial presentation), large fetus (estimated more than 4000 grams), gameli or twins, fetus with stunted fetal growth, preterm fetus (premature). Fetus with congenital defects or

congenital abnormalities. Other factors are premature rupture of membranes, antepartum hemorrhage, placenta previa. Pregnancy with a high risk can result in several things, namely the baby is born not enough months, the baby is born with a low birth weight, miscarriage or abortus, childbirth is not smooth or jammed, bleeding before and after childbirth, the fetus dies in the womb, pregnant or maternity died, pregnancy poisoning or convulsions, and the occurrence of psychological/mental problems in the mother.<sup>7</sup>

### Quality of Life in Mothers with High-risk Pregnancy

High-risk pregnancy conditions as described above, can affect the mother's quality of life. The results of the study explored the effects of hypertensive disorders, gestational diabetes, and preterm birth as risk elements related by depressive indications while pregnancy and after delivery. Based on the output of this research, it's known that pregnant women who give birth prematurely have high rates of depression, with lower quality of life compared to pregnant women who do not experience complications. Meanwhile, pregnant women who experience hypertension rank the second who experience depression quality of life that goes down. Other high risk pregnant women also exhibit significant psychological problems.<sup>8</sup>

### Factors that Affect Anxiety during Pregnancy

High risk pregnancies are associated with anxiety during pregnancy. Pregnant women who are at high risk will feel worried about pregnancy and childbirth, so if psychological problems during pregnancy are not handled properly it can lead to mental disorders at a later stage. Risk factors from the mother, fetus, and other factors can also exacerbate the anxiety of pregnant women. Anxiety disorders can also be affected by the social support received by pregnant women (especially support from her husband), and socioeconomic status such as family income, employment and education level.<sup>9</sup>

### High-risk Pregnancy Disorders and Anxiety

High-risk pregnancies account for about 15-20% of pregnancies, which can affect the health of the mother and the fetuses. This risk can exacerbate stress in both risky and normal pregnancies, and result in high levels of cyclonic anxiety. Women with high-risk pregnancies may experience an anxiety incidence 5.2x greater than women with low-risk pregnancies.<sup>10</sup> High-risk pregnancies require increased care and more intensive visits by health workers, so that the mother's anxiety about her pregnancy can be reduced.<sup>11</sup>

Pregnancy is riskier in women who become pregnant at the age of 16 and 24 years, they can experience mental disorders. The prevalence of mental disorders in young pregnant women under 25 years of age is very high, which is 67.2% (95% CI 41.7 to 85.4) to 21.2% (95% CI 17.0 until 26.1) in older pregnant women. Previous research has shown that low levels of social support are peril factor to causing depression in adolescents before pregnancy as well as in adults. The service mandatory targeting source to pregnant women beneath 25, count that in them first 20s. Interventions that improve social networking, address abuse and provide adequate mental health care can minimize harm to young women and their children.<sup>12</sup> Women over the age of 35 during childbirth or who have a history of miscarriage are more prone to anxiety.<sup>2</sup>

Pre-pregnancy diabetes and pre-eclampsia are chronic diseases more commonly seen in pregnancy. Both conditions are associated with increased morbidity and mortality. Pregnant women who suffer from the disease will feel more worried

about their pregnancy, because of the various impacts that can be caused by the disease. Pregnant women at high risk or do not have to pay attention to health and control feelings. Recent research shows that 20-100% of women with midwifery complications (requiring more intensive intervention and the need for social support), and have increased anxiety levels. Women with anxiety or depression during pregnancy are 3 times more likely to suffer from hypertension during pregnancy when compared to women who are not anxious or depressed.<sup>12</sup>

Obese women are known to be at higher risk of developing mental health disorders during pregnancy. One third of women of childbearing age are obese which causes an increase in the number of women who start pregnancies with obesity conditions Body Mass Index (BMI) more than 30 kg/m<sup>2</sup>. Obesity during pregnancy can lead to complications in the mother and fetus such as pre-eclampsia, gestational diabetes and the need for caesarean section. In the study there were 1,621 pregnant women and 25% of those women were overweight (2529.9 kg/m<sup>2</sup>). Pregnant women who are obese during pregnancy feel anxious compared to women in normal BMI (<25 kg/m<sup>2</sup>). Fat women are also more susceptible to anxiety disorders due to excessive pregnancy weight gain or postpartum weight retention.<sup>5</sup>

### **Labor and Anxiety**

Some factors that can exacerbate anxiety levels associated with pregnancy and childbirth are low self-esteem, a medical history that causes anxiety during pregnancy, low social support, fear of loneliness, fear of illness, and a poor history of childbirth. Anxiety can also stem from potential complications of reproductive organs, shoulder dystosia, postpartum bleeding, and child morbidity.<sup>7</sup>

Women's perception of the health care system and trust in medical staff during childbirth are important factors that can affect maternal anxiety during pregnancy and childbirth. One study found a significant association between experience of giving birth (obstetric complications were no exception) and the fear of childbirth. Poor communication with patients or lack of understanding of patients can also exacerbate anxiety levels, such as in studies that seek to improve patient education by introducing antenatal education programs in week 4, and the results show that they find increased confidence during childbirth, decreased fear or anxiety during pregnancy and childbirth.<sup>13</sup>

### **Effects of High-Risk Pregnancy**

Mother with high risk of pregnancy are at high risk of referral before preterm, with underdeveloped fetal growth, low birth weight and inhibition of intrauterine growth. Babies born prematurely or born before 37 weeks of pregnancy can suffer many complications stem from several different organ systems. Besides developments problems described above, some organ problems which affects premature babies including inhalation distress syndrome and pneumonia, as well as increased susceptibility to infections, sepsis, patent duct arteriosus and necrotized enterocolitis are more common. The effects of panic before pregnancy are not yet clear regarding babies being born, especially since some studies report a link between maternal panic, premature delivery, requiring a caesarean section and can have an impact on delays in infant development, but other studies have not found evidence to support this negative association.<sup>5</sup>

## **DISCUSS**

Mental Preparation for High-risk Pregnancy (HRP) can be revealed as holistic way. The existence of HRP management that uses a holistic and woman center care. Medical personnel manage HRP related to physical health, psychologis or feelings, patient satisfaction, and pay attention to the well-being of pregnant women and infants.<sup>1</sup>

Social support - pregnant women can ask for support from spouses, other family members, parents, or friends. Based on the results of the study, social support can help provide protection effects and negative risks of stressful conditions. Social support also as a positive effect on the mental health of the mother, by getting social support from those closest to her, can reduce the anxiety and stress conditions that are being experienced by pregnant women. Even experts believe that social support is important for pregnant women.<sup>1, 12</sup>

Psychological support or maintain emotional health. Pregnancy will give a variety of major changes in a woman, both physical and emotional changes, it requires psychological adjustment to reduce the risk of stress that can occur. Here are some ways that can be done to reduce the risk of stress and anxiety during pregnancy, especially for mothers who are at high risk: prioritize psychological health, get rid of negative talk about yourself, take time for yourself, take maternity classes, utilize stress management techniques to combat stress and anxiety.<sup>13, 14</sup>

Understand the physical changes that occur. In this case, pregnant women should understand that there are some physical changes that occur during pregnancy, especially if the pregnant woman is at high risk. That way, pregnant women need to reproduce reading references about pregnancy. Starting from a variety of symptoms that can be experienced to the risk of complications that can occur. While it can't predict exactly what happens during pregnancy, it can help maintain pregnancy health and reduce the various bad risks that can occur.<sup>1, 5</sup>

Physical activity, such as aerobics and resistance can control glycemic and limits of insulin utilise in women by gestational diabetes. Regular physical activity can also limit weight gain during pregnancy, stabilize the mother's mood, fat mass in the fetus and physiological stress response in offspring.<sup>15</sup>

Body-oriented interventions (yoga or massage therapy) and acupuncture can reduce symptoms of depression during pregnancy.<sup>16</sup>

Non-pharmacological (psychotherapy) and pharmacological treatments are available for women with anxiety disorders during pregnancy and perinatal periods. Non-pharmacological treatments include psychosocial techniques used to reduce stress, such as problem overcoming abilities, relaxation techniques, and diaphragm breathing. Evidence based HVP and CBT approaches that address maladaptive behavior and cognition. Evidence based HVP is an intervention implemented to address the mental health of pregnant and postnatal women. Some of the core elements of this intervention program are strengthening maternal interaction, promoting parenting, maternal and child well-being.<sup>5</sup>

Mindfulness-Based Interventions – peripartum anxiety and depression are relevant health problems in pregnant women. Short-term MBIs has the potential to reduce anxiety levels in pregnancy, but adherence to MBIs is associated with lower pregnancy stress symptoms among high-risk pregnant women. MBIs repre-sents a mental health resource that can be accessed

at a lower cost and can be tailored for pregnant women who are hospitalized. Several potential mechanisms underlying the success of MBI can explore internal actions such as emotional experiences and cognition, influence on rules, self-

## CONCLUSION

Pregnant women at high risk are at high risk of giving birth to premature babies, low birth weight, stunted fetal and intrauterine growth. High-risk pregnancy and childbirth are two risk factors associated with anxiety during pregnancy. The mental preparation of pregnant women is at high risk among others, the use of a woman-centered care, psychological support, interventions that increase social networking, and provide adequate mental health care can minimize adverse outcomes for pregnant women, maintain normal social relationships and interactions, physical activity, oriented interventions on the body (yoga or massage therapy), acupuncture, and MindfulnessBased Interventions (MBIs).

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