

Pregnancy and its Relationship to Psychological Stress

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Abstract

This research aimed to clarify the relationship between pregnancy and psychological stress in pregnant women. The study relied on descriptive approach to achieve the research aim. The research found that elevated levels of hormones like estrogen and progesterone impact mood and emotional state, making pregnant women more susceptible to psychological fluctuations and emotional stress. Anxiety about the baby's health, pregnancy pains, changes in body shape, and fear of childbirth all contribute to increased stress levels during this period. The research recommended in providing psychological and social support to pregnant women through guidance programs focused on reducing stress and anxiety and helping them adapt to the physical and psychological changes associated with pregnancy.

Keywords: *Pregnancy, psychological, stress, pregnant, women*

1. Introduction

Pregnancy is a complex phenomenon involving significant physical and psychological changes, especially during a first pregnancy. These changes can be profound and exhausting for the mother, often associated with persistent mood swings, fatigue, anxiety, exhaustion, and even depression. In some cases, the fear of these changes can lead a woman to avoid pregnancy altogether and not want children.

However, not all women experience these symptoms. Many women experience pregnancy without any noticeable psychological changes or symptoms, aside from some physiological changes such as a missed period and the growing abdomen due to uterine expansion. While stress is a normal part of life, excessive or chronic stress during pregnancy can have negative consequences (Bhavya, 2023).

During pregnancy, estrogen levels rise significantly in a woman's body, as the placenta produces much higher than normal amounts. This hormone plays a crucial role in supporting uterine growth, fetal development, and regulating blood flow to the placenta (Betts et al., 2015). However, its elevated levels also affect psychological and emotional well-being, as it is associated with mood swings, increased sensitivity, and irritability, making pregnant women more susceptible to stress and anxiety throughout the different stages of pregnancy (Dunkel, 2011).

Psychological stress affects pregnant women, causing numerous psychological changes, including tension and some physical changes. Many previous studies have demonstrated a link between maternal stress levels and fetal development, showing that high levels of stress in mothers negatively impact fetal brain development (Zhang et al, 2014; Sun et al., 2024; Khoozan et al., 2024). Sarani et al. (2015) shown that increased stress levels during pregnancy can be associated with complications such as premature birth, low birth weight, and developmental problems. Furthermore, stress can negatively impact a mother's emotional well-being, potentially leading to feelings of anxiety and depression (Bhavya, 2023). Therefore, this research aims to clarify the relationship between pregnancy and stress in pregnant women.

1.1 Research problem and questions

Women are considered the fundamental element in the formation of society, which makes them susceptible to prevailing factors. This is reflected in their position, status, and roles. They are the ones who carry the human being within their wombs and bring them into this life to experience it in all its aspects. Undoubtedly, pregnancy is a challenging process for women, as many expectant mothers suffer from significant psychological stress. There is fear of the unknown, concerns about the health of the fetus and a natural birth, in addition to other anxieties related to the pain of childbirth. Despite the joy a woman experiences in approaching childbirth, she is exposed to many pressures that negatively affect her, which are alleviated through coping mechanisms and strategies. Thus, the problem of this research can be summarized in the following question: **What is the relationship between pregnancy and psychological stress in pregnant women?**

1.2 Research importance

This research provides important information for pregnant women to enhance their understanding of the changes that may accompany different stages of pregnancy and contribute to their psychological stress. Thus, strengthening their ability to cope effectively with the various phases of pregnancy.

This research also contributes to enabling families to better understand pregnant women and learn about methods that can be used to alleviate their psychological stress.

The research enhances pregnant women's awareness of an important aspect of their lives and strengthens their acceptance of their current situation in a way that protects their fetus from any harm.

2. Literature review

2.1 The concept of Psychological stress and its symptoms

Definitions of the term 'stress' vary depending on the approach, specific criteria, and areas addressed by each definition. Some definitions focus on the external stimulus, while others address responses to different stimuli. Still others examine both the stimulus and the response together. Psychological stress is defined as all external factors that put pressure on an individual's mental state to the point of causing tension and anxiety, negatively impacting their ability to achieve integration and balance in their personality (Dunkel, 2011). This includes emotional instability and the emergence of new behavioral patterns (Betts et al., 2015). Stress

arises when an individual faces an urgent matter requiring a proper response, a demand they lack the capacity to meet, or something beyond their control (Zhang et al., 2014).

Stress is the feeling of being under abnormal pressure. This pressure can come from various aspects of the day, such as an increased workload, a transitional period, a family argument, or new and existing financial worries (Sun et al., 2024). During these situations, the body may feel irritable, and may create a stress response, leading to anxiety and heightened irritability. This can cause a variety of physical symptoms, change the way the body behave, and lead to more intense emotions. Stress can affect the body in many physical and emotional ways, and to varying degrees.

Psychological stress can also be defined as a combination of three important factors; the external environment in which an individual lives, the negative feelings and emotions that control the individual, and the set of physiological responses they produce (Zhang et al., 2014). Psychological stress arises when these factors interact in specific ways, producing states of anxiety, depression, and tension that dominate the individual's psyche.

Stress affects people differently. The causes of stress also vary from person to person, and the stress level may be higher or lower than that of others around you. Stress at work, school, or home, as well as from illness or unexpected and difficult life events, can all contribute to stress. Some potential causes include (Sarani et al., 2015):

- Individual genetics, upbringing, and experience.
- Difficulties in personal life and relationships.
- Major or unexpected life changes (such as moving house, having a child, or starting to care for someone). Financial difficulties (such as debt or struggling to afford daily necessities).
- Health problems affecting oneself or a loved one.
- Pregnancy and children.
- Housing problems.
- A difficult or chaotic work environment.
- Loss in all its forms, whether it's a loved one, a job, or something else.

An individual under psychological stress exhibits many symptoms, including (Sarani et al., 2015; Khoozan et al., 2024):

- **Physical symptoms:** These are the physiological reactions the body makes to various stimuli that can generate a state of disturbance and instability. These include an increased heart rate and palpitations, muscle spasms, stomach pain, excessive and persistent sweating, and rapid and labored breathing.
- **Mental symptoms:** These include a general weakness in concentration and difficulty performing mental tasks.
- **Emotional symptoms:** These include irritability, anger, agitation, anxiety, and tension. Some individuals may also exhibit relatively subdued emotions such as sadness, frustration, depression, and withdrawal.
- **Behavioral symptoms:** These appear when an individual is under stress as a reaction to pent-up negative energy and an attempt to release it through repetitive physical movements, such as knee shaking, nail biting, smoking, and other behaviors, as well as blaming others for personal problems.

2.2 Psychological Stress During Pregnancy

While the psychological changes a pregnant woman experiences in the first trimester may not be obvious, they are very important. Among the most significant changes that occur during the first trimester are (Zhang et al., 2014; Bhavya, 2023):

- **Fear of miscarriage:** Some new mothers may feel anxious about losing their unborn child, especially since the risk of miscarriage is close to 20% during the first trimester.
- **This anxiety can significantly impact the pregnant woman's mental state in the early months.**
- **Intensified emotions:** The mother may experience rapid changes in her emotional state, including amplified feelings that she didn't experience before pregnancy.
- **Situations that previously didn't bother the mother may now bring tears, depression, and anger.**
- **High stress levels may also contribute to nausea and vomiting.**

These changes in a pregnant woman's psychological state during the first trimester may be more pronounced in some women than others, depending on their personality, the type of stress

they experience, the emotional support they receive, and the hormonal changes they undergo during this period.

Once the anxiety and stress of the first trimester subside, the pregnant woman's emotions and psychological state begin to change in the fourth month, which marks the beginning of the second trimester. These emotional and psychological changes are usually less intense, although some mothers may start to worry about gaining weight (Sun et al., 2024). There is also a possible link between the pregnant woman's psychological state and the sex of the baby. Among the most prominent psychological changes during pregnancy are:

- The need for a partner during the second trimester: During this period, the baby begins to move inside the mother.
- The psychological changes a pregnant woman may experience include: Increased dependence on her partner, as she develops more needs than usual.
- Worrying about whether her partner is available, attentive, and able to support her during this time.
- Sexual desire increases during the second trimester of pregnancy due to increased vaginal lubrication, increased blood flow to the pelvic area, the easing of nausea, and breast tenderness. This can affect a pregnant woman's mood, as she may feel anxious about whether her partner still finds her attractive.
- Talking to her partner about this can help alleviate many of her fears and misconceptions, allowing them to enjoy a healthy sex life during the second trimester.

In the final months of pregnancy; a pregnant woman's mental state is significantly affected, as:

- She begins preparing for childbirth both mentally and physically during this stage.
- She starts to feel increasing anxiety about labor and delivery.
- Her physical capacity for work decreases.
- Given the importance of a pregnant woman's mental well-being in the eighth and ninth months before delivery, she will need the following during this time:
 1. More attention from her partner, family, and friends.
 2. Reassurance regarding her physical appearance, which may be causing her low self-esteem.
 3. Reassurance from her partner regarding her decreased libido, which will boost her self-confidence.

2.3 Reducing Stress During Pregnancy

In addition to the importance of achieving work-life balance, adopting strategies to reduce stress during pregnancy is paramount. Here are some approaches that may help (Sun et al., 2024; Khoozan et al., 2024):

- **Healthy Lifestyle Choices:** Eat a balanced diet, drink plenty of water, and engage in regular, pregnancy-appropriate physical activity. Consult your doctor to determine the right exercises for your stage of pregnancy.
- **Seek Support:** Reach out to your partner, family, and friends for emotional support. Sharing your concerns and expressing your feelings can help alleviate stress and promote a sense of well-being. Also, consider joining a prenatal support group or seeking professional advice if needed.
- **Practice Mindfulness and Relaxation Techniques:** Incorporate mindfulness and relaxation techniques into your daily routine. Mindfulness meditation, deep breathing exercises, and progressive muscle relaxation can help reduce stress, lower anxiety, and promote a sense of calm.
- **Get Good Sleep:** Prioritize getting enough sleep during pregnancy. Establish a bedtime routine to help you relax and sleep well. Create a comfortable sleep environment, limit screen time before bed, and practice relaxation techniques to promote restful sleep.
- **Take Breaks:** Maintaining regular breaks throughout the day is essential for reducing stress. Incorporate short breaks into your work routine to stretch, take a walk, or simply relax. Stepping away from your work environment, even for just a few minutes, can be mentally and physically refreshing.
- **Maintain Regular Checkups:** Regular prenatal appointments are crucial for monitoring your health and your baby's development. Regular checkups provide reassurance and allow healthcare professionals to address any concerns promptly.
- **Seek Professional Help:** If you find yourself experiencing overwhelming stress, consider seeking professional help. Mental health professionals experienced in pregnancy-related stress can provide valuable guidance and support tailored to your specific needs. Every pregnancy is different, and what works for one woman may not

work for another. Discover what resonates with you and adapt it to your specific circumstances.

Through modern techniques and a patient-centered approach to care, Fakih University Hospital aims to provide expectant mothers with the knowledge and resources they need to achieve work-life balance and reduce stress during this special time in their lives.

Research conclusion

Pregnancy is a sensitive stage in a woman's life, accompanied by significant physical, hormonal, and psychological changes that affect her overall well-being. Elevated levels of hormones like estrogen and progesterone impact mood and emotional state, making pregnant women more susceptible to psychological fluctuations and emotional stress. Anxiety about the baby's health, pregnancy pains, changes in body shape, and fear of childbirth all contribute to increased stress levels during this period.

Furthermore, the psychological impact of pregnancy extends beyond the mother to the fetus, potentially affecting its neurological and physical development. Prolonged stress can also lead to complications such as gestational hypertension or premature birth. Therefore, providing psychological and social support to pregnant women and encouraging relaxation and calming activities is essential for maintaining the health of both mother and fetus.

6.1 Recommendation

Based on the above, the research recommends the following:

1. Providing psychological and social support to pregnant women through guidance programs focused on reducing stress and anxiety and helping them adapt to the physical and psychological changes associated with pregnancy.
2. Integrate health and psychological education sessions into prenatal care visits, including information on how to cope with daily stress and manage anxiety effectively.
3. Encourage the partner and family to actively participate in the pregnancy through emotional support and practical assistance, as this directly reduces stress levels.
4. Focus on early intervention to detect signs of stress and depression during pregnancy, and refer cases requiring specialized psychological follow-up.
5. Raise awareness about the importance of relaxation techniques such as breathing exercises, meditation, and light walking as effective ways to reduce stress and improve

mood during pregnancy.

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