

DOI: <https://dx.doi.org/10.18203/2320-1770.ijrcog20240500>

Review Article

Pregnancy, stress and coping techniques: a review

Fiza Amin¹, Tavseef Ahmad Tali^{2*}, Sieqa Shah¹, Rifat Ara¹

¹Department of Gynaecology and Obstetrics, SKIMS Medical College, Srinagar, Jammu and Kashmir, India

²Department of Radiation Oncology, Sher-i-Kashmir Institute of Medical Sciences, Srinagar, Jammu and Kashmir, India

Received: 20 January 2024

Revised: 10 February 2024

Accepted: 12 February 2024

*Correspondence:

Dr. Tavseef Ahmad Tali,

E-mail: ahmad.tavseef90@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Pregnancy is a common time to experience stress. Stress during pregnancy might be brought on by changes in your daily routine and physical discomforts. Certain forms of stress might result in issues like premature birth and major health problems like high blood pressure. Find out about strategies to help you deal with some of the stress in your life, such as consulting a licensed mental health professional, your healthcare provider, or friends and family. Stress relief techniques include deep breathing, meditation, and relaxation techniques. Even while stress is more common and has negative effects on both the mother and the child, there is still a lack of study on specific stress during pregnancy and coping mechanisms to avoid those negative effects.

Keywords: Pregnancy, Stress, Coping

INTRODUCTION

A specific kind of psychological anguish that a pregnant woman experiences about her health, the health of her unborn child, her body image, and delivery is known as pregnancy concerns. Pregnant women experience elevated levels of stress and anxiety due to a variety of hormonal and environmental factors, as well as modifications in their interpersonal connections. Pregnant women frequently worry about the health of their unborn child, pregnancy problems, pregnancy loss, and childbirth. Furthermore, other stressors such concerns about finances, employment, housing, health, and marital relationships might impede the normal course of pregnancy.¹⁻⁴ The precise contribution of various prenatal stress, depression, anxiety, and pregnancy-specific anxiety sources to newborns' emotional reactivity remains unknown, despite the fact that pregnant anxiety is a powerful predictor of unfavorable birth and baby outcomes. In infants that

experienced little postnatal stroking, a prior study found a correlation between strong negative emotionality and prenatal anxiety.⁵⁻⁷ Prenatal anxiety and concerns, a history of mental health issues in the past, a dysfunctional marriage, stressful life events, a negative attitude toward pregnancy, and a lack of social support were all found to be important risk factors for postpartum depression in a recent review. Determining the scope and root causes of pregnancy-related concerns and anxiety is therefore crucial.⁸⁻¹¹ The manuscript emphasizes the need for comprehensive interventions and support networks while highlighting the complex effects of stress during pregnancy. The physical, psychological, and social components of maternal stress can be addressed in order to improve the long-term health and wellbeing of mothers as well as their offspring and to encourage favorable pregnancy outcomes. It also suggests potential therapies and future research avenues.

Stress and pregnancy

A woman's pregnancy is a wonderful and life-changing experience. But it's also accompanied with a range of emotional and physical changes that might lead to tension and anxiety. It's critical to comprehend how stress affects pregnancy because high amounts of stress may have negative consequences for the developing fetus as well as the expectant mother.

Comprehending stress throughout pregnancy

Although stress is a normal reaction to challenging circumstances, it may be harmful to a person's physical and emotional well-being when it persists and becomes excessive. Expectant women may experience stress due to the particular difficulties and uncertainties that come with being pregnant.

STRESS'S EFFECTS ON MOTHER

A higher chance of complications

High levels of stress during pregnancy have been linked to an increased risk of problems, including preterm birth, low birth weight, and preeclampsia, according to research. Hormonal changes brought on by stress can harm the uterus and placenta, impairing the growth and development of the fetus.

Emotional health

Pregnant women who are under a lot of stress may be more susceptible to anxiety and sadness. These mental disorders have an impact on their own health and may also make it difficult for them to bond with their unborn kid.

Maternal health

Extended periods of stress can impair immunity and increase a pregnant woman's vulnerability to diseases that could endanger the unborn child. Pregnant women must put their physical health first and take steps to manage stress.

STRESS'S EFFECTS ON THE FETUS

Developmental impact

High concentrations of stress hormones in the mother's blood can have a direct impact on the growing fetus by crossing the placenta. This may interfere with the child's natural growth and development and cause behavioral, emotional, and cognitive problems later in life.

Epigenetic modifications

Research indicates that stress experienced by mothers may cause epigenetic changes that impact the fetus's gene expression. These alterations may impact the child's long-

term health results and heighten their vulnerability to diverse ailments in the future.

PREGNANCY RELATED ISSUES THAT MAY GIVE RISE TO ANXIETY AND STRESS

Worrying about giving birth

The experience of giving birth and what it will be like are frequent concerns for many aspiring mothers. It's common to feel anxious before giving birth, whether you choose a vaginal birth or a C-section. Speaking with your doctor or midwife, who can guide you through the delivery process; can help reduce your tension. Many others in your relations and acquaintances, including your mother and other family members, have experienced it. You can feel at ease by having a heart-to-heart conversation with them.

Concerning the health of the unborn child

A lot of ladies are also concerned about the health and well-being of their unborn child. The good news is that your doctor will arrange for routine ultrasounds and check-ups so you may visit your baby and make sure everything is well. It is possible to identify many curable illnesses early on, ensuring that your unborn child is healthy. You will experience a pleasant and healthy pregnancy if you take the appropriate measures and care and follow-up as advised.

Regaining your pre-pregnancy physique

The extra weight gain and concerns about how to shed the same after delivery could be another source of stress. It's critical to go cautiously, step by step. For the proper growth of your unborn child, eating a balanced, healthful diet should be your first priority during pregnancy.

It's crucial to welcome this transformation with open arms because your body is going through a significant transition and performing one of nature's miracles. Following delivery, you can speak with dietitians and register for classes that will assist you in shedding weight post-delivery through appropriate activity and nutrition.

Work stress during pregnancy

When women of today decide to become mothers, they are also confronted with concerns regarding their careers. Concerns about how their professional development may be impacted by these issues include how to re-enter work after taking a maternity break or how to move jobs when they go on leave.

Once more, this is the time to put yourself and your child first. Additionally, you can speak candidly with your employer about any questions or concerns you may have so that you can decide on a course of action that benefits both of you.

Concerning yourself with becoming a good mother

It's common to experience some degree of anxiety as you get ready to assume a new position in life. It's wise to accept that everything will work itself out in due course, even though you may be concerned about developing a strong attachment with your child or being a good mother. Everyone involved will learn from it, and you will also have a better understanding of your child and how to best care for them. The partner plays a key role here in providing a healthy environment for the new mother and baby.

COPING TECHNIQUES FOR EXPECTANT MOTHERS

Pregnant women may encounter a variety of stressors; it is imperative that they manage their stress for the sake of the unborn child as well as the mother. These coping mechanisms can help avoid issues caused by stress:

Frequent prenatal care

Aim for routine prenatal checkups to track both the development of the unborn child and your own health. You should talk to your healthcare practitioner about any worries or stressors.

A well-being lifestyle

Keep up a nutrient-rich, well-balanced diet to promote the health of both you and your unborn child. Regularly partake in mild physical activity, as directed by your healthcare provider. Get enough sleep to maintain your mental and physical health.

Techniques for relaxation and mindfulness

Engage in deep breathing techniques to help you relax. To help you feel less stressed and anxious, try prenatal yoga or meditation. To maintain your attention and present, try practicing mindfulness.

Social assistance

Communicate your emotions to your family, friends, and spouse. Join a support group or prenatal class to meet other pregnant women.

Effective time management

Set priorities and concentrate on the most crucial chores to prevent feeling overburdened. As much as feasible, assign tasks and express your needs.

Teach yourself

This includes to lessen doubt and anxiety, educate yourself on the various phases of pregnancy and childbirth. To

acquire information and skills for labor and delivery, enroll in childbirth education programs.

Sources of creativity

Take up hobbies you like to do, like reading, drawing, or listening to music. To communicate your feelings and ideas, think about maintaining a pregnant notebook.

Have reasonable expectations

Recognize that some stress is normal and try to successfully handle it. Be adaptable with your plans and modify your expectations as necessary.

Expert assistance

If you're dealing with a lot of stress or worry, get help from counseling or therapy. Speak with a mental health specialist who focuses on issues related to pregnancy.

Avoid unnecessary stressors

Reducing your exposure to stressful or depressing news is advised. Establish a peaceful and encouraging atmosphere at work and home.

Interaction with the partner

Talk about your worries and emotions with your partner and keep lines of communication open. Share parenting and pregnancy duties and work together to make decisions.

Tools for organization

It includes; to assist in keeping appointments and tasks organized, use calendars, planners, or smartphone apps. Feeling disorganized can be less stressful when you have a well-organized plan.

Positive affirmations

Formulate empowering statements concerning getting pregnant and giving birth. To strengthen a cheerful outlook and lessen anxiety, repeat these often.

Educational sessions

Take advantage of the stress management, coping, and relaxation techniques covered in prenatal programs designed especially for expectant women.

Nutrition and hydration

Eat a balanced diet and drink plenty of water. Make sure you're obtaining the nutrition your body needs for optimal health and growth of the unborn child.

PROSPECTS FOR THE FUTURE AND RESEARCH REPERCUSSIONS

Longitudinal studies

The long-term results of children exposed to mother stress during pregnancy can be monitored through longitudinal studies, which can offer important insights into the developmental paths and possible treatments for groups that are at risk.

Interventional research

Researching the effectiveness of stress-reduction strategies like yoga, social support groups, and mindfulness-based programs can help create evidence-based methods for lowering stress during pregnancy.

Policy and healthcare integration

Encouraging the incorporation of stress management protocols into conventional prenatal care guidelines and healthcare policies can augment the resources at the disposal of expectant mothers, guaranteeing a comprehensive approach to the well-being of both mother and fetus.

DISCUSSION

Every woman's pregnancy is a wonderful journey that culminates in the moment she holds her child in her arms. Some women have very smooth pregnancies, while others experience physical challenges including back pain and morning sickness. Although your physician will assist you in controlling the uncomfortable moments, you have the power to enhance this experience by learning how to manage stress while pregnant. In addition to the physical changes, your body experiences hormonal changes during this time, and all the ideas of pregnancy and childbirth along with other changes can lead to unnecessary mental strain.¹²⁻¹⁵ There are certain worries that practically all pregnant women have at this time, even if there isn't a single, universal guideline for what can trigger stress or anxiety during pregnancy. Whether or not you experience these, it's a good idea to be aware of the typical stressors during this period so you may identify them early and receive the necessary support to lessen your burden.¹⁶⁻¹⁸

CONCLUSION

Pregnancy is a happy, exciting, and developmental time. Stress is practically inevitable during pregnancy, but it's important to know what effects it might have. Expectant moms can use coping mechanisms to support a better, happier pregnancy experience by being aware of the effects stress has on both the mother and the fetus. Making self-care a priority, building support systems, and getting expert advice can all contribute to the mother's and the developing child's wellbeing. Allow stress to act as a catalyst for change, encouraging expectant mothers to

adopt calming strategies and concentrate on living a healthful lifestyle in order to create the conditions for a happy and uneventful pregnancy experience.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: Not required

REFERENCES

1. Dunkel SC. Stress processes in pregnancy and preterm birth. *Curr Dir Psychol Sci.* 2009;18:205-9.
2. Roesch SC, Dunkel Schetter C, Woo G, Hobel CJ. Modeling the types and timing of stress in pregnancy. *Anxiety Stress Coping.* 2004;17:87-102.
3. Dole N, Savitz DA, Hertz-Picciotto I. Maternal stress and preterm birth. *Am J Epidemiol.* 2003;157:14-24.
4. Kramer MS, Lydon J, Seguin L. Stress pathways to spontaneous preterm birth: the role of stressors, psychological distress, and stress hormones. *Am J Epidemiol.* 2009;169:367-71.
5. Rini CK, Dunkel Schetter C, Wadhwa PD, Sandman CA. Psychological adaptation and birth outcomes: the role of personal resources, stress, and sociocultural context in pregnancy. *Health Psychol.* 1999;18:333-45.
6. Orr S, Reiter J, Blazer D, James S. Maternal prenatal pregnancy-related anxiety and spontaneous preterm birth in Baltimore, Maryland. *Psychosom Med.* 2007; 69:566-70.
7. Fransson E, Ortenstrand A, Hjelmstedt A. Antenatal depressive symptoms and preterm birth: a prospective study of a Swedish national sample. *Birth.* 2011;38:10-6.
8. Alder J, Fink N, Bitzer J. Depression and anxiety during pregnancy: a risk factor for obstetric, fetal and neonatal outcome? A critical review of the literature. *J Matern Fetal Neonatal Med.* 2007;20:189-209.
9. DiPietro JA, Hilton SC, Hawkins M. Maternal stress and affect influence fetal neurobehavioral development. *Dev Psychol.* 2002;38:659-68.
10. De Weerth C, Buitelaar JK. Physiological stress reactivity in human pregnancy: a review. *Neurosci Biobehav Rev.* 2005;29:295-312.
11. Field T, Diego M, Hernandez-Reif M. Prenatal depression effects on the fetus and newborn: a review. *Infant Behav Dev.* 2006;29:445-55.
12. Feldman PJ, Dunkel-Schetter C, Sandman CA, Wadhwa PD. Maternal social support predicts birth weight and fetal growth in human pregnancy. *Psychosom Med.* 2000;62:715-25.
13. Glynn LA, Dunkel Schetter C, Wadhwa PD, Sandman CA. Pregnancy affects appraisal of negative life events. *J Psychosom Med.* 2004;56:47-52.
14. Glynn LM, Wadhwa PD, Dunkel-Schetter C, Chicz-DeMet A, Sandman CA. When stress happens matters: effects of earthquake timing on stress responsivity in pregnancy. *Am J Obstet Gynecol.* 2001;184:637-42.
15. Hedegaard M, Henriksen TB, Secher NJ, Hatch MN, Sabroe S. Do stressful life events affect duration of

- gestation and risk of preterm birth? *Epidemiology*. 1996;7:339-45.
16. Hobel CJ, Goldstein A, Barrett ES. Psychosocial stress and pregnancy outcome. *Clin Obstet Gynecol*. 2008; 51:333-48.
17. Hoffman S, Hatch MC. Stress, social support and pregnancy outcome: a reassessment based on recent research. *Paediatr Perinat Epidemiol*. 1996;10:380-405.
18. Huizink AC, Robles de Medina PG, Mulder EJ, Visser GH, Buitelaar JK. Coping in normal pregnancy. *Ann Behav Med*. 2002;24:132-40.

Cite this article as: Amin F, Tali TA, Shah S, Ara R. Pregnancy, stress and coping techniques: a review. *Int J Reprod Contracept Obstet Gynecol* 2024;13:784-8.