

# Prenatal Physical Exercise and Postpartum Depression: A Short Study

Prakash K. Bhandari\*

Department of Health Science, Savitribai Phule Pune University, India

## ABSTRACT

It's still unclear if engaging in physical activity (PA) during pregnancy can help prevent postpartum depression (PPD). This brief study focuses on the impact of PA on PPD prevention during pregnancy. Many changes occur in a woman's body throughout pregnancy and the postnatal period, both in the mental and physical realms. The delivery of a child and the assumption of a new role that of a mother can be fraught with negative feelings such as uncertainty, fear, anxiety, disgust, sorrow, and grief. The development of baby blues or postpartum depression may occur during the puerperium era. Within one month of childbirth, postpartum depression sets in and can persist up to a year. Depressive disorders in a young mother can have a negative impact on both her and her child's health. That is why it is critical to look for characteristics that could considerably minimise the risk of acquiring depression.

Keywords: Physical exercise; Depression; Postpartum

## INTRODUCTION

Pregnancy, childbirth, and the postnatal period are some of the most crucial times in a woman's life, when her physical and mental well-being alters dramatically. Processes restore the woman to her pre-pregnancy status in the postpartum phase, which lasts 6–8 weeks after the kid is born (e.g., uterus involution, postpartum wound healing, and increased abdominal muscle tension). Previous depressive episodes, anxiety and despair during pregnancy, low self-esteem, poor partner relations, low socioeconomic position, and loneliness are all risk factors that predispose women to postnatal depression [1]. Women who are at risk of perinatal problems, hospitalisation during pregnancy or caesarean section delivery following a natural birth are also at risk. Women can develop depression as a result of stress related to child care and a lack of body acceptance following childbirth.

Due to the likelihood of depressive illnesses, the first month of the postnatal period is critical. Women in the postpartum phase are susceptible to three types of depressive disorders (baby blues, postnatal depression, and postpartum psychosis). The baby blues can start four days after the child is born and linger up to 12 days. It was expected that it would happen in the majority of cases among moms. Postpartum depression is linked to baby blues. Psychosis after childbirth is uncommon (0.1–0.2 percent of women) [2]. Postpartum depression is a significant mental illness that occurs within one month of giving birth. In the postpartum period, up to 20% of women suffer from postpartum depression. The chance of having depression increases in the second month after childbirth and decreases in the sixth month.

The main symptoms of postpartum depression include anxiety, despondency, sleep difficulties, attention and appetite disorders, loss of interest in the kid, and the environment. Furthermore, in severe cases, suicidal thoughts may arise. Previous episodes of depression, depression and anxiety during pregnancy, self-esteem disorders, postpartum blues, spouse relations problems, low socioeconomic position, and perinatal complications are all risk factors for postnatal depression. Prematurity, low birth weight or the new-born's reduced functioning are all risk factors for postpartum depression. Postpartum depression can persist anywhere from three to nine months after a child is born, and it can even linger a year. Furthermore, postnatal depression disorders may have a negative impact on the mother–child relationship's development.

Hormonal changes in women during labour and postpartum influence the development of postnatal depression. Progesterone levels decline dramatically between the first and second stages of labour, while oestrogen levels drop once the placenta is expelled. Estrogen decreases the concentration of serotonin and dopamine, which has a negative influence on psychological well-being. In addition, low oestrogen and progesterone levels influence the development of anxiety disorders. The posture is also more prone to sudden and fast reductions in B-endorphins in mood disorders [3].

The development of the disease directly related to the birth of the child is a condition for diagnosing postpartum depression. Psychotherapy, antidepressant medication, and hormonal therapy are all options for treating postpartum depression. Additionally,

\*Correspondence to: Prakash K Bhandari, Department of Health Science, Savitribai Phule Pune University, India, E-mail: Bhandari-pk@gmail.com

Received: Dec 04, 2021, Accepted: Dec 18, 2021, Published: Dec 25, 2021

Citation: Bhandari PK (2021) Prenatal Physical Exercise and Postpartum Depression: A Short Study. J Yoga Phys Ther. S9:002. DOI:10.35248/2157-7595.21. S9:002

Copyright: © 2021 Bhandari PK. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

therapeutic therapies such as light therapy and exercise are available. Physical activity has a substantial impact on pregnant women's physical and mental health. For pregnant women and after childbirth, the American College of Obstetricians and Gynecologists recommends a minimum of 150 minutes of moderate physical exercise per week.

Exercise during pregnancy aids in the return to form, lowers the risk of postpartum depression, and alleviates depression symptoms. Physical activity promotes blood circulation, develops abdomen and spine muscles, stimulates lactation, accelerates uterine constriction, reduces urogynecological dysfunction, and enhances mothers' mental and physical health in the postpartum period. Women's health improves after childbirth in different ways depending on the type of birth. Physical therapy can begin 10–12 hours after a caesarean section and 6 hours following physiological labour in postpartum patients. Physical activity should be safe and tailored to the obstetrician's current status [4].

After the delivery of a child, postnatal depression is the most frequent mental disease among women. Depressive disorders, on the other hand, may have long-term harmful effects on the mother and child's social, emotional, and cognitive dimensions during this time. Despite the harmful consequences, postpartum depression is frequently misdiagnosed and untreated. The fear of being stigmatised for having a mental illness and the difficulty to nurse owing to the psychotic medicines used are the two main reasons for not treating depression. Physical therapy has been shown in studies to be a natural therapy with no negative effects. Regular physical activity reduces the incidence of depression during pregnancy and is a safe approach of prevention. When compared to physically inactive women, women who were active before or during pregnancy had a lower chance of having depressive disorders.

Several theories have been proposed to explain the beneficial effects of regular physical activity on the elimination of depressive disorders. Exercise raises the levels of neurotransmitters like 5HT, dopamine, and noradrenaline in the brain. Furthermore,

physical exercise boosts BDNF secretion, which is low in persons with depression. Because it is responsible for neuroprotection, neurogenesis, and synaptic plasticity, the BDNF factor plays a critical role in the human body. Exercise raises cortisol levels as well. Corticosteroids stimulate the endocannabinoid system, which influences the function of neurotrophins such BDNF. Exercise also boosts GH (growth hormone) and IGF-1 (insulin-like growth hormone) synthesis [5]. These hormones are in charge of sleep, cognitive function, and mood management.

## CONCLUSION

Physical activity lowers the symptoms of postpartum depression throughout pregnancy, pregnancy and puerperium, and puerperium itself. It also improves the quality of life for young mothers and reduces fatigue. Physical training under supervision, training in an aquatic environment, and home-made exercises all has a favourable effect on the mental health of puerperium women. Every activity, however, should be begun after consulting with an expert and receiving suitable training. Mental and physical well-being is intertwined. As a result, young moms should be educated on the appropriate level of physical exercise. The proper development of a child is dependent on the health of the mother.

## REFERENCES

1. Altuntuğ K, Anık Y, Ege E. Traditional practices of mothers in the postpartum period: Evidence from Turkey. *African Journal of Reproductive Health*. 2018;22(1):94-102.
2. Ospina AM., Muñoz L, Ruiz CH. Coping and adaptation during puerperium. *Colomb Méd*. 2012;43:168-175.
3. Leigh B, Milgrom J. Risk factors for antenatal depression, postnatal depression and parenting stress. *BMC Psychiatry*. 2008;8:24.
4. Rowlands IJ, Redshaw M. Mode of birth and women's psychological and physical wellbeing in the postnatal period. *BMC Pregnancy Childbirth*. 2012;12.
5. Hung CH. The psychosocial consequences for primiparas and multiparas. *Kaohsiung J Med Sci*. 2007;23:352-360.