

**A REVIEW OF RISK FACTORS AND MANAGEMENT OF POSTPARTUM  
DEPRESSION**Athira S.\*<sup>1</sup>, Feba Mathew<sup>1</sup>, Feba John<sup>1</sup> and Elsa Baby Jacob<sup>1</sup>

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**ABSTRACT**

Pregnancy and postpartum are the suitable period for the onset and relapse of mental illness. Maternal well-being is very important for the proper growth of the child because Maternity depression can lead to lower birth weight of infants, poor long term cognitive development. PPD usually develops within 6 months of childbirth. It is one of the most common psychological health problems affecting 10% -15% of women. Child interactions including Breast feeding and bonding are the major consequences of the postpartum depression. In majority of cases the symptoms of this health problem happens during the first four weeks after the child birth and reaches its peak level during the first six months. The effective ways for the management of the PPD mainly include supportive IPT, psychosocial support through support group, pharmacological interventions, cognitive therapy, self-help strategies and complimentary therapies.

**KEYWORDS:** Postpartum depression, maternity depression, interpersonal psychotherapy, cognitive therapy, postpartum illness.

**INTRODUCTION**

Pregnancy and postpartum are the suitable period for the onset and relapse of mental illness.<sup>[1]</sup> Peripartum is a time of sudden and dramatic changes in hormone levels and it is the peak phase for the development of mood disorder. This mood disorder is highly associated with the fluctuations of the reproductive hormones.<sup>[2]</sup> Maternal well-being is very important for the proper growth of the child<sup>[3]</sup> and the transition of women into motherhood is a difficult era that contains significant changes in the social, physiological and psychological aspects and considered as a huge vulnerability period for the development of mental illness.<sup>[4]</sup> Maternity depression can lead to lower birth weight of infants, poor long term cognitive development, and high rate of underweight at six month of age and antisocial behavior.<sup>[5]</sup>

**Postpartum Illness**

Postpartum illness is a puerperal illness which includes postpartum depression, postpartum anxiety, postpartum blues and postpartum psychosis.<sup>[6]</sup> Anxiety can occur at any stage of lifetime, but when it happens in a period after parturition, it is known as postnatal anxiety or postpartum anxiety.<sup>[7]</sup> Maternity blues or postpartum blues is a common mood disturbance which affects 50% of women within 3-5 days of delivery.<sup>[6]</sup>

**Post Partum Depression**

Postpartum depression is a very often unrecognized, distinctive and destructing disorder<sup>[5]</sup> which is

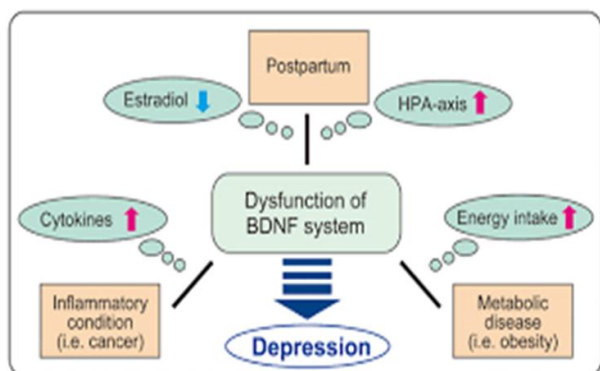
characterized by an inability to experience pleasure, loss of enjoyment, reduced energy, low mood and sometimes suicidal thoughts following the childbirth.<sup>[8]</sup> PPD usually develops within 6 months of childbirth.<sup>[6]</sup> It is one of the most common psychological health problems affecting 10% -15% of women<sup>[5]</sup> and having a significant impact not only the women but also her child and family.<sup>[9]</sup> The mother may have irresolute emotions towards the baby and some of them may require hospitalization.<sup>[6]</sup> The pattern of the symptoms of PPD women are similar to those in women who have depression not related with child birth.<sup>[3]</sup> PPD can reduce mother-child bonding, cognitive or emotional development of the child and increase risk of preterm delivery.<sup>[10]</sup> Mother-Child interactions including Breast feeding and bonding are the major consequences of the postpartum depression.

Particularly risky behavior, relationship, physical and psychological health are the consequences of a mother due to PPD while infants deals with the issue of physical health, social, emotional, cognitive, language and behavioral development.<sup>[7]</sup>

**Proposed Biomarkers For Ppd**

A various numbers of biomarkers have been proposed as a useful identifier for the patient with risk of PPD which includes neuroendocrine, epigenetic and neuroinflammatory biomarkers but most of these above biomarkers have not been replicated across the world which may be due to the heterogeneity in the population

of the patients. Genome wide association studies have identified that both potential pathways and individual candidate genes are also involved in PPD. In addition to the genetic factors, epigenetic factors also affect gene transcription. Inflammatory responses and neuroinflammatory changes can occur throughout normal delivery which is an influential factor in the neurobiology of PPD.<sup>[2]</sup>



BDNF=brain – derived neurotrophic factor, HPA=hypothalamic pituitary adrenal

### Manifestations and Risk Factors for Ppd

In majority of cases the symptoms of this health problem happens during the first four weeks after the child birth and reaches its peak level during the first six months. Some of the common manifestations are guilty feeling, sleep disturbance, persistent dismay and fear of harming the child, suicidal thoughts, confusion, anorexia, decreased libido and presence of obsessional ideas. PPDs are highly associated with risk factors like less schooling, low socio economic level, lack of social support, irritability, poor concentration, postpartum sadness, unplanned pregnancy, premenstrual dysphonic disorders, stressful life events, history of mental illness and negative feelings in relation to the offspring.<sup>[11]</sup> Earlier it was believed that postnatal mood disorders are associated with culture that is women from western societies suffered from PPD.<sup>[12]</sup>

### Treatment Targets In Postpartum Depression

The effective ways for the management of the PPD mainly include supportive interpersonal, psychosocial support through support group, pharmacological interventions, cognitive therapy, self-help strategies and complimentary therapies. Women with severe PPD, who are at risk of suicide, should be hospitalized and it has been proven that ECTs are effective. Support group is a kind of psychosocial intervention which gives mothers a sense of realization that they are not alone. They teach her coping strategies and provide immense encouragement. They also give her an opportunity to express fears and needs in a nonjudgmental environment. IPT is another extraordinary intervention for the PPD patients. It mainly focuses on social functioning, symptom formation and personal contributions. This therapy can also be started during pregnancy for women who are listed at high risk.<sup>[12]</sup>

The responsibility of the patient care team involve awareness of the manifestations, assisting with family coping skills, family education before delivery, physiological and psychological support of the mother. It is the duty of nurses and midwives to identify the vulnerability and symptoms of PPD because they have more time and better communication with the mother.<sup>[13]</sup>

### CONCLUSION

Health policy makers should take necessary step to involve the component of mental health in reproductive and child health program. Health care team should be trained to provide awareness and treat postpartum depression. Primary care physicians are the point of contact between the patient and the health facility. Family physician nurses and midwives have a significant role in the prevention and early detection of this mental health disorder along with ensuring the physical well-being of the child and mother in the postpartum period.

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### CONFLIT OF INTERST

There is no relevant conflict of interest between the authors to disclose.

### ABBREVIATION

PPD: Postpartum Depression  
BDNF: Brain Derived Neurotrophic Factor  
HPA: Hypothalamic Pituitary Adrenal  
ECT: Electroconvulsant Therapy  
IPT: Interpersonal psychotherapy  
HOD: Head of the Department

### REFERENCES

1. Pariente, G. and Wissotzky Broder, O., Risk for probable post-partum depression among women during the COVID-19 pandemic. Archives of Women's Mental Health, 2020; 23(6): 767-773.
2. Payne, J. and Maguire, J., 2021. Pathophysiological mechanisms implicated in postpartum depression.
3. Baria, H. and Amipara, T., A study on postpartum depression and its association with infant feeding practices and infant nutritional status among mothers attending the anganwadi centers of Valsad district, Gujarat, India. Indian Journal of Community Medicine, 2020; 45(3): 299.
4. Shitu, S. and Geda, B., Postpartum depression and associated factors among mothers who gave birth in the last twelve months in Ankesha district, Awi zone, North West Ethiopia. BMC Pregnancy and Childbirth, 2019; 19(1).
5. Anitha Rani, M. and Shriram, V., Are Patients With Type 2 Diabetes Not Aware or Are They Unable to Practice Self-Care? A Qualitative Study in

- Rural South India. *Journal of Primary Care & Community Health*, 2019; 10: 215013271986582.
6. Balakrishnan, S., 2010. *Textbook of gynaecology*. Hyderabad: Paras medical publisher.
  7. Wassif, O., Abdo, A., Elawady, M., Abd Elmaksoud, A. and Eldesouky, R., Assessment of Postpartum Depression and Anxiety among Females Attending Primary Health Care Facilities in Qaliubeya Governorate, Egypt. *Journal of Environmental and Public Health*, 2019; 1-9.
  8. Simhi, M., Sarid, O. and Cwikel, J., Preferences for mental health treatment for post-partum depression among new mothers. *Israel Journal of Health Policy Research*, 2019; 8(1).
  9. Mohapatra, I., Mishra, K. and Rout, R., An epidemiological study on depression among women during postpartum period in an urban slum of Bhubaneswar. *Journal of Family Medicine and Primary Care*, 2020; 9(9): 4736.
  10. Davenport, M., Meyer, S., Meah, V., Strynadka, M. and Khurana, R., Moms Are Not OK: COVID-19 and Maternal Mental Health. *Frontiers in Global Women's Health*, 2020; 1.
  11. Moraes, I., Pinheiro, R., Silva, R., Horta, B., Sousa, P. and Faria, A., Prevalência da depressão pós-parto e fatores associados. *Revista de Saúde Pública*, 2006; 40(1): 65-70.
  12. Moraes, I., Pinheiro, R., Silva, R., Horta, B., Sousa, P. and Faria, A., Prevalência da depressão pós-parto e fatores associados. *Revista de Saúde Pública*, 2006; 40(1): 65-70.
  13. Ay, F., Postpartum depression and the factors affecting it: 2000-2017 Study results. *Journal of Psychiatric Nursing*, 2018.