Postpartum Depression: Potential Treatments

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Introduction

The transition to motherhood is often portrayed as a time of fulfillment. However, for many women this period is marked by emotional challenges. Postpartum depression (PPD) is one such complication. It is one of the most common and debilitating mental health conditions affecting new mothers, impacting over 20% of new mothers globally (Stewart & Vigod, 2019; Meltzer-Brody et al., 2018). PPD is characterized by feelings of intense sadness and hopelessness that can last from two weeks to years after childbirth. It is estimated that 13% of patients with PPD experience symptoms two years postpartum (Stewart & Vigod, 2019). 20% of women with PPD experience suicidal thoughts and many experience substance abuse and self harm (Meltzer-Brody et al., 2018). Infants are at a higher risk of poor attachment and impaired cognitive, social, and emotional development (Stewart & Vigod, 2019).

Despite the prevalence and consequences of PPD, treatment outcomes remain inadequate. Many women are left without adequate treatment which is a form of mismedicine. Mismedicine, coined by Dr. Pooya Beigi, is any medical act that results in harm or failure to meet the standard of care. Common treatments such as antidepressants and psychotherapy can be inaccessible for some people. Antidepressants typically take between 4 - 6 weeks to show improvements, while psychotherapy may not be an accessible option for new parents who face time constraints or financial challenges (Gaier et al., 2014). Furthermore, some women treated with standard therapies do not reach full remission (Kanes et al., 2017). Response rates for SSRIs rarely exceed 50% (Pinna et al., 2022). Given the gaps in treatment for PPD, it is necessary to explore accessible treatment options.

Biological Mechanisms Underlying Postpartum Depression

Understanding the biological mechanism behind PPD may inform new research and lead to effective treatments (Stewart & Vigod, 2019). It has been shown that hormonal fluctuations during and after pregnancy can contribute to PPD symptoms, specifically, the reduction of allopregnanolone (Kanes et al., 2017). Allopregnanolone, a derivative of progesterone, plays a role in regulating mood and protecting the brain from stress during pregnancy (Pinna et al., 2022). Additionally, it promotes healthy fetal brain development (Pinna et al., 2022). Allopregnanolone is a modulator of GABA receptors, which are responsible for inhibitory action in the brain. Disruption of these receptors, such as a sharp decline in allopregnanolone, may contribute to depressive symptoms (Meltzer-Brody et al., 2018). The decline of allopregnanolone is linked to the depression-like symptoms in mice (Deligiannidis et al., 2023). The decline of allopregnanolone, combined with the stress of parenthood and other hormonal changes may lead to the onset of PPD (Pinna et al., 2022).

Zuranolone as a Potential Treatment for Severe Postpartum Depression

Given the role of GABA receptor dysfunction in the onset of PPD, targeting these receptors may offer promising treatments. A recently approved treatment, known as Zuranolone, is a medication that acts on GABA receptors. Zuranolone is a synthetic form of allopregnanolone. It acts as a modulator of GABA receptors (Deligiannidis et al., 2023). In a randomized, double blind placebo study with women who had severe PPD, Deligiannidis et al. (2023), found that a 14 day treatment of a 50 mg/day dose of Zuranolone showed significant reductions in depressive symptoms and anxiety as well as improvements in sleep by day 3 of treatment. Patients who showed improvements at the 3 day mark maintained those improvements throughout the 45 day follow up period. Side effects of Zuranolone appeared to be well tolerated. Side effects included sedation, somnolence, and dizziness. A later study, also conducted by Deligiannidis et al. (2024), studied the safety of Zuranolone during breastfeeding. It was found that the dose of the drug's transfer to breast milk was less than 1%, which is far below the 10% threshold for dosage considered safe for breastfeeding.

The results of the study show that Zuranolone offers several advantages in the treatment of PPD. Unlike traditional antidepressants which can take 4 - 6 weeks to show improvement, Zuranolone demonstrates improvement of symptoms within 3 days (Deligiannidis et al., 2023). After the 14 day period of treatment, benefits of Zuranolone were maintained for the observed 45 day follow up period, contrasting with antidepressants that must be taken continually (Deligiannidis et al., 2023).

Furthermore, as an oral medication administered over 14 days, Zuranolone is much more accessible that other treatments that have similar effects. One such treatment is Brexanolone. Like Zuranolone, Brexanolone also has a rapid onset and benefits have been shown to be maintained over a 30 day follow up period (Meltzer-Brody et al., 2018; Kanes et al., 2017). However it requires a 60 hour intravenous infusion, requiring new parents to stay in a medical facility for three days (Simas et al., 2026). Conversely, Zuranolone is a more accessible and feasible option for new parents.

Limitations

While Zuranolone shows promise in treating PPD, there are several limitations to consider. First, Zuranolone studies have limited generalizability. Current studies, including the studies performed by Deligiannidis et al. (2023) focus on women with severe PPD (Simas et al., 2026). These findings may not be as applicable to individuals with moderate or milder symptoms of PPD. In addition women with co-occurring conditions, such as bipolar disorder or psychosis, were excluded from studies. This further limits the generalizability of the results. Furthermore, the effectiveness of Zuranolone 45 days after treatment has yet to be assessed. Considering that 40% of women who have experienced PPD experience a relapse of symptoms both related and unrelated to pregnancy (Stewart & Vigod, 2019), it is necessary to understand long term efficacy of Zuranolone.

Conclusion

Zuranolone shows promise as a fast acting treatment for severe PPD by reducing depressive symptoms and regulating GABA receptors. However, despite its potential further research is needed to determine its long-term efficacy. Further studies should also be conducted on using Zuranolone to treat mothers with co-occurring conditions. Understanding the full extent of Zuranolone's use in postpartum care is crucial to improve maternal and infant outcomes for families affected by PPD.

Frequently Asked Questions

What is postpartum depression?

Postpartum depression is a depressive disorder that occurs following childbirth. It is characterized by symptoms such as low mood, fatigue, sleep disturbances, anxiety, and feelings of worthlessness.(Stewart & Vigod, 2019).

What are risk factors for postpartum depression?

Risk factors for PPD include a history of mood or anxiety disorders, lack of social support, infant health issues (Stewart & Vigod, 2019)

Does postpartum depression make someone a bad parent?

No. Postpartum depression is a medical condition caused by hormonal changes and stress. It is not a sign of a bad parent. Seeking treatment and finding peer support groups is a crucial first step.

References

Deligiannidis, K. M., Bullock, A., Nandy, I., Deligiannidis, K. M., Dunbar, J., Lasser, R., Witte, M., Leclair, B., & Wald, J. (2024). Zuranolone Concentrations in the Breast Milk of Healthy, Lactating Individuals. Journal of Clinical Psychopharmacology., 44(4), 337-344. https://doi.org/10.1097/JCP.0000000000001873

Deligiannidis, K. M., Meltzer-Brody, S., Maximos, B., Deligiannidis, K. M., Peeper, E. Q., Freeman, M., Lasser, R., Bullock, A., Kotecha, M., Li, S., Forrestal, F., Rana, N., Garcia, M., Leclair, B., & Doherty, J. (2023). Zuranolone for the Treatment of Postpartum Depression. The American Journal of Psychiatry., 180(9), 668-675. https://doi.org/10.1176/appi.ajp.20220785

Geier, M. L., Hills, N., Gonzales, M., Geier, M. L., Tum, K., & Finley, P. R. (2015). Detection and treatment rates for perinatal depression in a state Medicaid population. CNS Spectrums, 20(1), 11-19. https://doi.org/10.1017/S1092852914000510

Kanes, S., Colquhoun, H., Gunduz-Bruce, H., Raines, S., Arnold, R., Schacterle, A., Doherty, J., Epperson, C. N., Deligiannidis, K. M., Riesenberg, R., Hoffmann, E., Rubinow, D., Jonas, J., Paul, S., & Meltzer-Brody, S. (2017). Brexanolone (SAGE-547 injection) in post-partum depression: a randomised controlled trial. The Lancet., 390(10093), 480-489. https://doi.org/10.1016/S0140-6736(17)31264-3

Meltzer-Brody, S., Colquhoun, H., Riesenberg, R., Epperson, C. N., Deligiannidis, K. M., Rubinow, D. R., Li, H., Sankoh, A. J., Clemson, C., Schacterle, A., Jonas, J., & Kanes, S. (2018). Brexanolone injection in post-partum depression: two multicentre, double-blind, randomised, placebo-controlled, phase 3 trials. The Lancet., 392(10152), 1058-1070. https://doi.org/10.1016/S0140-6736(18)31551-4

Pinna, G., Almeida, F. B. B., Davis, J. M. M., Almeida, F. B., & Davis, J. M. (2022.). Allopregnanolone in Postpartum Depression. Frontiers in Global Women's Health., 3. https://doi.org/10.3389/fgwh.2022.823616

Simas, T. A. M., Hoffman, M. C., & Roussos-Ross, K. (2026). Zuranolone and Brexanolone for the Treatment of Postpartum Depression. Obstetrics and Gynecology., 147(1), e24-e28. https://doi.org/10.1097/AOG.0000000000006093

Stewart, D. E., Vigod, S. N., Stewart, D. E., & Vigod, S. N. (2019). Postpartum Depression: Pathophysiology, Treatment, and Emerging Therapeutics. Annual Review of Medicine, 70(1), 183-196. https://doi.org/10.1146/annurev-med-041217-011106

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