

A Review of Alternative Health Interventions in the Treatment of Perinatal Depression

Ulziibat Shirendeb Person MD, PhD; Porsha Okiye BS, MS; Guitelle St.Victor, MD,FAPA, FACLP

Nassau University Medical Center, East Meadow, NY

Background

- Perinatal depression (PD):
 - A mood disorder lasting from the onset of pregnancy and up to 1 year postpartum [1]
 - Affects 10 to 20% of women during pregnancy [2]
- Not always detected → increased maternal morbidity and mortality
- Linked to increased risk for substance use disorders and suicide
- Suicide: leading cause of maternal death within 1 year postpartum [6]
- Treatment with antidepressants and cognitive psychotherapy already established
- More women are now seeking alternative and non-pharmacological approaches



Results

- Data suggests an interest in alternative supplemental therapies including: omega-3 fatty acids, folate, Vitamin D, SAMe, selenium, zinc, magnesium, St. John's Wort.
- Mind and body practices with mood enhancing effects that can reduce depressive symptoms [3],[4],[7]:
 - Physical activity
 - Yoga and acupuncture
 - Bright light therapy
- Lack of randomized control trials for SAMe, selenium, zinc, magnesium, St. John's Wort, and vitamin D [3],[4],[5]

Conclusion

- PD:
 - Debilitating condition with deleterious implications on maternal and neonatal outcomes
 - If left untreated → increased risk of maternal and fetal complications:
 - Maternal: Pre-eclampsia and spontaneous abortions
 - Fetal: Developmental delay, low birth weight, and higher incidence of prematurity
- Alternative therapies and mind and body practices:
 - Both potential useful treatment to reduce depressive symptoms in PD depression and improve outcomes for both mother and baby [3],[4],[5]
 - Further investigation is needed with randomized control trials

Objective

To review potential and available non-pharmacological therapies for the treatment of PD including:

- Omega-3 fatty Acids
- Folate
- Vitamin D
- S-adenosylmethionine (SAMe)
- Selenium
- St. John's Wort
- Zinc
- Magnesium Sulfate
- Mind and Body Practices

Methods

A critical literature search of peer-reviewed publications from 2008-2020 using:

- Medline
- PubMed
- Science Direct
- PsycINFO

Search terms:

- Perinatal Depression
- Complementary and alternative treatments
- Omega-3 fatty acids
- S-adenosylmethionine (SAMe)
- Mind and body practices: yoga, acupuncture, and bright-light therapy

Discussion

- Studies showed promising evidence for omega-3 fatty acids and folic acid [3],[4]
- Daily omega-3 fatty acids such as Eicosapentaenoic acid (EPA) and Docosahexaenoic acid (DHA) as monotherapy or adjunctive treatment may help reduce PD symptoms
 - Recommend 1 gram of EPA and DHA daily in perinatal patients with depression
 - Daily intake of 0.4-5mg/day of folic acid as adjunctive therapy

References

- [1] Ford, E, Lee, S, Shakespeare, J, & Ayers, S. (2017). Diagnosis and management of perinatal depression and anxiety in general practice: a meta-synthesis of qualitative studies. *The British journal of general practice : the journal of the Royal College of General Practitioners*, 67(661), e538–e546. <https://doi.org/10.3399/bjgp17X691889>
- [2] Sayres Van Niel, M, & Payne, JL (2020, May 1). Perinatal depression: A review. *Cleveland Clinic Journal of Medicine*, 87(5), 273-277. <https://doi.org/10.3949/cjcm.87a.19054>
- [3] Reza N, Deligiannidis KM, Eustis EH, Battle CL. Complementary Health Practices for Treating Perinatal Depression. *Obstet Gynecol Clin North Am*. 2018 Sep;45(3):441-454. doi: 10.1016/j.ogc.2018.04.002. PMID: 30092920.
- [4] Deligiannidis, KM, & Freeman, MP. (2014). Complementary and alternative medicine therapies for perinatal depression. *Best practice & research. Clinical obstetrics & gynaecology*, 28(1), 85–95. <https://doi.org/10.1016/j.bpobgyn.2013.08.007>
- [5] Zhang, MM., Zou, Y, Li, SM. et al. The efficacy and safety of omega-3 fatty acids on depressive symptoms in perinatal women: a meta-analysis of randomized placebo-controlled trials. *Transl Psychiatry* 10, 193 (2020). <https://doi.org/10.1038/s41398-020-00886-3>
- [6] Guillard, V & Gressier, F. (2017). Suicidalité en période périnatale [Suicidality during perinatal period]. *Presse medicale (Paris, France : 1983)*, 46(6 Pt 1), 565–571. <https://doi.org/10.1016/j.jpm.2017.05.018>
- [7] Carter T, Bastounis A, Guo B, Morrell CJ. The effectiveness of exercise-based interventions for preventing or treating postpartum depression: A systematic review and meta-analysis. *Arch Womens Ment. Health*. 2019;22:37–53. doi: 10.1007/s00737-018-0869-3.