## Non-Traditional Interventions for Perinatal Mood and Anxiety Disorders: A Review of the Literature

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NUR 691: Evidence-Based Practice in Nursing

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March 26, 2022

## Literature Review

Perinatal mood and anxiety disorders (PMADs), typically defined as occurring during pregnancy or the first year postpartum, can have lasting negative impacts on maternal and child health. About 13% of women experience postpartum depression (PPD), and the rate can be as high as 25% in certain populations (Mundorf et al., 2018). Rates of antenatal depression can be even higher, and Native American women and non-Hispanic white women report the highest rates of PPD, though rates do not vary significantly by maternal age or race/ethnicity (Mersky & Janczewski, 2018). Women should be screened for PMADs during pregnancy and after birth, and the most reliable predictors of PMADs are a history of psychosocial stressors, low income, poor partner relationship, low social support, and stressful life events (Mundorf et al., 2018). PMADs can be effectively treated with traditional medication and psychotherapy interventions, but barriers such as stigma and lack of access can worsen disparities in treatment. As such, there is a need for interventions that can reach more women via risk reduction or protective factor amplification approaches (Mundorf et al., 2018). The goal of this literature review is to explore and assess community and home-based psychosocial interventions for PMADs utilizing volunteers or paraprofessionals to expand evidence-based treatment options.

Using combinations of the search terms postpartum depression, perinatal mood and anxiety disorders, perinatal affective disorders, intervention, treatment, home, and community resulted in 33 potential full text, peer-reviewed articles published between 2016-2022 on the ProQuest Medical Database. Exclusion criteria for the initial review included populations of study dissimilar to western urban populations, opinion articles, and specific populations of study such as refugees, and resulted in 20 studies for final review. Ten articles for review remained after eliminating studies focusing on different outcomes of interest (e.g., childhood injury),

studies utilizing unrelated interventions (e.g., wearable light therapy), and studies with more recent updates from the same researchers. This review of the literature finds that informal psychosocial support is an effective intervention for many mothers, that special populations such as women with a history of adverse childhood experiences require special study and treatment, and that several community and home-based interventions show positive results.

Many studies conclude that providing informal psychosocial support can reduce symptoms of PMADs. A 2018 cross-sectional study examines interventions for PMADs including psychosocial support, professional postpartum home visits, cognitive therapy, and interpersonal psychotherapy and found that unstructured and non-directive psychosocial support was the only intervention that significantly reduced depressive symptoms (Anokye et al., 2018). Another prospective study determined that social support, including hands-on or childcare support, may be particularly effective as it helps parents meet children's needs, enhances parents' confidence, promotes positive views of child behavior, and increases parent emotional resources (Martinez-Torteya et al., 2018). Furthermore, there appears to be a relationship between perceived social support, fatigue levels, and maternal attachment in the postpartum period. Moms who report high rates of social support show increased attachment scores with their infants and decreased fatigue scores one-month post-partum, and there is a negative, significant correlation between fatigue and attachment levels. Researchers conclude that all three factors should be assessed postpartum and that mothers should be actively encouraged to utilize social supports (Yesilcinar et al., 2017).

Several of the reviewed studies emphasize or evaluate the impact of adverse childhood experiences (ACEs), trauma, and social determinants of health (SDOH) in relation to PMADs. In a retrospective cohort study, Mersky & Janczewski (2018) found that PPD is significantly

correlated with increased exposure to ACEs and that PPD rates are high among low-income women. Three antenatal conditions further mediated the impact of ACEs on PPD: intimate partner violence, perceived stress, and antenatal depression. Because ACEs may increase the risk of these factors, researchers conclude that these findings have implications for screening and interventions via home visiting and community-based services (Mersky & Janczewski, 2018). A prospective study by Martinez-Torteya et al. (2018) found a different interaction: women with low depression scores and high resilience factors showed high levels of parenting sense of competence, even when they had a history of maltreatment as children. However, among women with depression or low resilience, childhood maltreatment was correlated with a decreased sense of competence. Accordingly, it is important among women with a history of abuse to receive interventions that reduce PPD symptoms and enhance resilience to increase their sense of competence (Martinez-Torteya et al., 2018). A final related systematic review looked at interventions to prevent PPD in adolescent moms. Among their findings, Sangsawang et al. (2019) concluded that home-visitation interventions, an educational program across the entire prenatal to postpartum period, and infant massage training were successful in reducing PPD symptoms in teen mothers compared to moms in control groups. These types of interventions should be considered in antenatal care of adolescent mothers (Sangsawang et al., 2019).

The final portion of articles discuss specific interventions for PMADs that fall outside the typical treatments of psychopharmacology and psychotherapy. First, a pilot study by Tandon et al. (2018) modified an effective cognitive-behavioral intervention called Mothers and Babies (MB), typically delivered to groups by a mental health professional, to be delivered one-on-one via trained home volunteers in 15 sessions. Postpartum moms found the modified MB program enjoyable, easily comprehendible, and useful. The volunteers felt moms understood the content

and reported high implementation fidelity. Notable challenges to implementing the training were client engagement and difficulty switching between the MB content and other visit activities (Tandon et al., 2018). In a follow-up cluster-randomized study, the same researchers returned to the MB group-based intervention format. They compared depressive symptom reduction and prevention in moms who received usual community-based services and moms who received the group MB training from paraprofessional home visitors versus from mental health professionals (Tandon et al., 2021). Researchers concluded that neither MB intervention was better than usual care in reducing depressive symptoms, however they found that paraprofessional home visitors produced similar results as mental health professionals. The professional MB group intervention appeared to be uniquely effective for women with mild PPD symptoms (Tandon et al., 2021).

Tel et al. (2018) conducted a quasi-experimental study of the impact of home visits with planned training on maternal PPD and quality of life. The authors did not note if the home visitors were professionally credentialed. The training included topics like coping with stress for moms, and basic baby care such as proper bathing and vaccines. Researchers saw mothers' quality of life scores increase throughout the 12-week intervention, found a significant negative relationship between depression and quality of life scores, and concluded that home visitation intervention that focuses on identifying a mother's physical, psychosocial, and emotional needs can reduce depression symptomology and risk (Tel et al., 2018).

Another community-based participatory research project looked at depression outcomes after a community health worker (CHW)-led intervention for at-risk pregnant women (Mundorf et al., 2018). Researchers looked at the predictive value of multiple risk factors and the degree of depressive symptom change in various time periods. Researchers determined that women in the CHW intervention had lower PPD scores six months postpartum compared to the control group,

and the effect was greatest for single moms. Notably, the difference in depressive symptoms was not seen among participants who reported a relatively poor relationship with their assigned CHW. Researchers emphasize the impact that non-mental health professionals can have in reducing symptoms in at-risk populations across the perinatal time period, the need to monitor the relationship between CHW and moms, and that CHW interventions may be especially effective for populations of low-income, single moms with limited support networks or who have babies admitted for intensive care (Mundorf et al., 2018). The final study was a randomized controlled trial of a distance-delivered program aimed at decreasing mild to moderate PPD compared to usual care (Wozney et al., 2017). The intervention utilized paraprofessionals to deliver the three treatment components: a handbook, videos, and telephone-based coaching. Participating moms reported high satisfaction with the program and were more likely to experience PDD diagnostic remission at three, six, and twelve months (Wozney et al., 2017).

The review of existing literature found several insights and promising interventions regarding non-traditional treatment for PMADs and their application in today's healthcare system. First, unstructured, non-directive social support can be an essential component of care aimed at reducing PMADs. Strengthening connections to social support resources should be a focus of healthcare providers working with antenatal and postpartum moms. Second, populations with increased exposure to ACEs, like childhood maltreatment, require special screening and intervention, potentially targeting depressive symptoms and building resiliency in the antenatal period. Finally, targeted interventions delivered by non-mental health professionals in the home or remotely can reduce PMADs symptoms in at-risk groups. Healthcare professionals and programs aiming to reduce the burden of PMADs should consider these less traditional modalities as they develop or modify perinatal interventions.

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