

**Home Visitation to Prevent and Reduce Postpartum Depression**

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### **Abstract**

Postpartum depression (PPD) occurs in 13-19% of women worldwide, and is a stigmatized medical condition affecting maternal and infantile long term outcomes. The purpose of this evidence-based practice project was to determine if women at high risk for PPD are affected by home visitation programs from discharge up to three years postpartum. CINAHL Ultimate, Google Scholar, and Medline databases were used. Current evidence supports the use of home-visitation programs for postpartum women to decrease the prevalence and the symptoms of PPD by allowing nurses access into homes to provide early intervention for PPD. In addition to providing care for prevention and treatment of PPD, nurses are able to educate mothers on proper infant care and provide additional resources for potential needs (car seats, formula, food stamps, etc.). Screening for PPD at least four times from 28 weeks prenatal up to 12 weeks postpartum is optimal for identifying and treating high risk women. The benefits of home visitation programs should be discussed during prenatal and postnatal appointments. In conclusion, home-visitation programs and frequent screenings should become the standard of care for prevention and treatment of postpartum depression. Future research should include how to generate use of home based visitation programs and feasibility of developing these programs as the standard of care for PPD.

*Keywords:* postpartum depression, infant outcomes, maternal outcomes, home healthcare, postpartum treatment, EDPS screening.

### **Home Visitation to Prevent and Reduce Postpartum Depression**

Welcoming a child into the world is one of the most exciting times of a parent's life. But bringing a child from hospital to home is both anxiety and depression inducing for first time and experienced caregivers. Postpartum depression (PPD) occurs in 13-19% of all women worldwide and has negative consequences for the mother, infant, and the family (Bina, 2019). Many who are diagnosed and referred for help do not follow up on those recommendations, despite many successful treatment models. Maternal PPD impacts both maternal outcome and infantile outcomes. Maternal consequences of PPD include strained social relationships, impaired physical health, and decreased quality of life (Slomian et. al., 2019). Infant language and cognitive development, quality of sleep, and overall health concerns were also negatively affected .

**PICO** This project will determine how postpartum women (16-35) with a high risk of postpartum depression are affected by consented outpatient home visitation (up to 3 years postpartum) in which healthcare professionals provide emotional and educational support, as opposed to inpatient hospital care, and if prevalence and symptoms of PPD are decreased.

### **Background**

Regarding evidence based practice when treating postpartum depression, the standard of care is screening, medications, and talk therapy. Most states now agree that screening for PPD should be mandatory but there are not set guidelines as to when and how often they should be screened. (Knights et. al., 2016). Women were given two screenings, one after four days after birth and one 2-8 weeks postpartum to determine their depression risk. This has important implications to nursing outcomes because resources should be directed to those who score high on the EPDS in order to be rescreened and receive follow up care, as well as giving guidelines on

how often to screen (Knights et. al., 2016). Although there is an evidence based approach to PPD, often it is underutilized. Home health visitation to treat depressive disorders has been proven to reduce hospitalization by 35% within 30 days of treatment, and 28% within the first 60 days (Bruce et. al., 2016). Home health visitation takes the pressure off of the patient to schedule and attend appointments, and has also been proven to effectively reduce hospitalization due to depression.

### **Methodology**

When conducting a literature review associated with home health care and PPD the Steely Library resource page was used to research articles and narrow down the search criteria. The database list was narrowed down to the use of Medline, CINAHL Ultimate, and Google Scholar for inclusion criteria. When reviewing the articles using the advanced search option to set limitations to literature review which included Nursing and Allied health under disciplines, selecting full text and peer reviewed articles under limit your results category, and using the date published section to narrow down EBP articles related to the topic that have only been published within the last four years. Once all parameters were set for the search criteria the use of key words in combination into the search bar was performed. Twelve articles met the criteria and are included in our review. The keywords used included the search terms: “postpartum depression”, “home healthcare”, “infant outcomes”, and “postpartum treatment”.

### **Literature Review**

Postpartum depression affects women of all statuses and cultures across the globe. Yet many women do not seek help for their symptoms, and find the process of seeking help and finding resources to be rather difficult (Hatfield & Wittkowski, 2017). To understand how to better treat PPD, healthcare providers must first better understand the origin of PPD because

their choice of intervention is most dependent on their theoretical perspective (Abdollahi & Zarghami, 2016). There is no single etiology for developing PPD but there are a variety of theoretical research based perspectives as to how it can develop; Abnormal reaction to hormonal changes, life stressors, psychological problems (parental divorce, low parental support), low self esteem, and interpersonal struggles/conflicts are all theoretical perspectives (Abdollahi & Zarghami, 2016). Understanding that all of these factors can play a role in postpartum depression can broaden your perspective as a healthcare provider, and help women make the best informed decisions regarding their treatment.

**Barriers to Treatment** When examining the incidence of postpartum depression, one of the largest barriers to care is the stigma around depression/anxiety (Hadfield & Wittkowski, 2017). Barriers to care include feeling disconnected from healthcare, not being taken seriously, not knowing help is available, reluctance to take antidepressants, shame, being a "bad mom", and not knowing what postpartum depression symptoms are (Bina, 2019).

**Provider barriers to care** The feeling of being disconnected from healthcare is also caused by biases and knowledge deficit from healthcare providers. When nurses were interviewed about their knowledge and screening tools of postpartum depression, they used their observation and personal experiences rather than clinical tools (Alexandrou et. al., 2018). Although the sample size was small, this observation is observed throughout healthcare providers. When observations and personal experience are at the forefront of decision making, this can lead to potential biases when planning interventions. This can affect maternal and infantile outcomes if the best plan of care is not implemented (Alexandrou et. al., 2018).

### **Evidence Based Interventions**

**Screening** In order to establish successful home visitation programs to treat PPD, evidence based clinical interventions should be established as best practice. In almost all current published literature, the most accepted and used clinical screening tool for PPD is the Edinburgh Postpartum Depression Scale (EDPS) (Bina, 2019) (Khang et. al. 2022) (Knights et. al., 2016) (Greve et. al., 2018) (Rotheram et. al., 2018) (Tandon et. al., 2020) (Van Horne et. al., 2022). This screening is the most accepted in clinical practice and should be used to evaluate symptoms of postpartum depression. In one study, women who scored a positive PAP10 were rescreened 2 weeks or 8 weeks after the initial screening 96 hours after birth (Knights et. al., 2016). PAP10 stands for psychiatric history, anomaly, preterm delivery, and an EDPS score of ten or greater. By rescreening women who had a positive PAP10, health outcomes were improved and detection of PPD was increased. Thorough screening at different postpartum time frames shows that high risk women remained at high risk for postpartum depression. Healthcare providers are then able to direct resources to women who are at a high risk for PPD in order to implement and maintain treatment. Extending beyond eight weeks, it is critical to observe maternal depression longitudinally, up to when the child is three. The longer that the mother remains depressed, the worse the child's adjustment and health outcomes will be (Rotheram et. al., 2018). Screening postpartum women periodically (at 2 weeks, 6 months, 18 months) up to three years generates longitudinal results of PPD effects on children. Therefore interventions should be maintained throughout the first three years of a child's life in order to promote optimal maternal and pediatric outcomes (Rotheram et. al. 2018).

**Resources and Support:** Longitudinal care allows for families to receive further education as well as retain and implement that knowledge. In one study of 500 surveyed women, the majority (88%) were in support of nursing home visitation services, and further analysis revealed areas in

which they needed support (Khang et. al., 2022). The most common needs were diarrhea, vomiting, and fever in newborns, skin care, home environment for the infant, nutritional needs, and physical activity during pregnancy. Husbands/partners also reported emotional support for depressed mothers and baby care (e.g. diaper changing) (Khang et. al., 2022). We conducted a personal interview with a nurse who goes on home visitations and is a supervisor of the HANDS (Health access nurturing development services) program in rural Kentucky. The program extends throughout the state and provides families with resources like, “Food stamps, WIC (women infants and children) program, child care assistance, cheap car seats and car seat programs, churches, dental referrals, pregnancy care center, and local events (support groups)” (L. Johnson, personal communication, September 23rd, 2022).

***Developing a Positive Relationship:*** When postpartum patients allow healthcare providers into their homes to provide them with care, it indicates the first step to developing trust. During pregnancy, women who had an elevated EPDS score were selected during their 24-28 week check up. Midwives contacted the mothers after giving birth to set up a home visitation appointment. During the visit, they educated parents on the NBO (Newborn Behavioral Observations) system, and afterwards the parents felt better educated and prepared to care for their newborn (Greve et. al. 2018). Parents also reported that they developed a positive alliance with healthcare workers and that they welcomed home visits and preferred them to clinic visits. By using home visitation, it develops an open and positive relationship between the HCP and families and can actually lower EDPS scores after programs are complete (Greves, et. al. 2018).

**Home Visitation Effects on Postpartum Depression:** Combining screening tools, resources, and support of a midwife/nurse into home visitation programs have been proven to be just as effective as the standard of care in reducing PPD symptoms (Van Horne et. al., 2022). Other

benefits of home visitation that the current standard of care lacks include increased education, trust in their healthcare provider, and relieving transportation issues. In the same study, the rate of the first home visitation rate was 96% compared to 65% completion of the first psychiatric appointment, indicating an appointment outside the home could be an issue in the standard of care. In one home visitation program, there was an increased percent of women that were screened for PPD, verbally accepted help from evidence based services, and received evidence based services (Tandon et. al., 2020). Support from midwives and being in a comfortable environment (e.g home) may contribute to this increase of willingness to receive help. Family nursing care, which is used in home visitation care models, includes education about ways to deal with stress, manage family tensions and change in dynamics, lactation consultations, dietary education, and basic skills of caring for a newborn such as bathing, feeding schedules, and child safety (Zhuang et. al. 2020). This care model led to higher patient and nurse satisfaction regarding care and education as opposed to inside of a hospital setting. Mothers participating in home visitation also had a decrease in progesterone and estrogen, which in high concentrations has been linked to depression. According to L. Johnson (2022), home visitation is “very effective for people that do it” and currently it is “very underutilized”. By implementing home visitation as the standard of care, incidence of PPD will decrease, and women who have PPD will experience a reduction of symptoms.

### **Recommendations**

There is a theme throughout the literature suggesting the utilization of home visitation for women in their postpartum period is beneficial in prevention and treatment of postpartum depression, and it also promotes knowledge of self care and care of an infant. The recommendation for nurses and healthcare providers are to include promotion of home health



visitation services in the prenatal and postnatal period. One screening of PPD should be conducted in the prenatal period at 28-32 weeks. If screening indicates high risk of PPD, three postnatal screenings should be administered (24-72 hours after birth, 2-3 weeks after birth, 8-12 weeks after birth). High risk women should be recommended one home visitation as the standard of care in order to assess education and readiness of a newborn, and to rescreen for PPD to see if further intervention and resources are necessary. If women participating in the program are experiencing positive outcomes, more home visitations should be scheduled by the healthcare organization to properly follow up on treatment and to give them contacts to other resources and programs. Ideally, this care model will demonstrate continuity of care meaning that the same organization would be taking care of women in the prenatal period, during birth, and in the postnatal period. For example, a labor and delivery birthing center in a hospital could extend to an outpatient home visitation program that would follow up on high risk women giving birth within the birthing center.

### **Nursing Implications**

If implementation of these practices becomes the standard of care, the nurses within the obstetric and community health spectrum can anticipate more utilization of home visitations programs and should be knowledgeable on resources available to aid families on breastfeeding/nutrition, infant care such as bathing and changing, local support groups, and stress management/therapy (Zhuang et. al. 2020). Labor and delivery nurses should expect to extend their postpartum standard of care to incorporate home visitation models of care, and will need proper education about conducting a home visit. Education should also include not implementing their own biases and personal experiences in deciding appropriate intervention and referring the

mother out to community resources if other interdisciplinary care is needed (Abdollahi & Zarghami, 2016).

### **Theoretical Framework**

The theorists selected to be the basis surrounding the PICO question and the EBP research is Anne Casey's model of nursing. The nursing model combines the use of pediatric nursing and community/home-health nursing to better increase the outcomes physically and mentally of children and families. The nurse works in close contact with the child and family within the comforts of their home and forms a partnership and strong rapport to promote beneficial care and positive outcomes for the family. The five main paradigms of this model include child, family, health, environment, and the nurse. The use of this framework contributes to the structure of the EBP project because it encompasses the nursing care of the child and family as a whole and the continuation of care past discharge from the hospital. It also keys in on one of the most important factors of home visitation programs which is forming an alliance between nurse and family so that the caregivers learn new ways of caring for their child based on evidence based care models such as stress management and self care.

### **Conclusion**

Postpartum depression in both new and experienced mothers is very common and can greatly impact the outcomes of the infant, caregivers, and family. PPD is not only socially stigmatized but healthcare professionals often use their own experience and biases to determine treatment. Therefore education about PPD and advocacy for women who are at high risk for PPD by healthcare professionals that work in the obstetric, postpartum, and community health setting is extremely necessary. Educating providers on the implementation of screening tools,

follow-up care through home visitation to those at risk for developing PPD, resources in the community, and education of infant care will change the standard of care for PPD. Resources within the community for essential needs include food stamp programs, safety supplies such as car seats, and daily infant care needs such as diapers, formula, and clothing. Another essential component of the program is developing a positive and trusting rapport with the patient. In order for patients to be honest with themselves and their provider, there has to be a therapeutic relationship between them. The incidence of postpartum depression will be decreased through these programs and the symptoms in women with PPD will be decreased or absent.

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