

A Systematic Review of the Relationship Between Postpartum Sleep Disturbance and Postpartum Depression

Sue Bhati and Kathy Richards

Correspondence

Sue Bhati, Northern Virginia Community College, 6699 Springfield Center Drive, Room 326 I, Springfield, VA 22150. sbhati@nvcc.edu

Keywords

postpartum sleep and postpartum depression
postpartum sleep disturbances
effect size
systematic review

ABSTRACT

Objective: To examine the relationship between postpartum sleep disturbance and postpartum depression and describe the characteristics and demographics of the samples.

Data Sources: Electronic databases Medline, PubMed, Cochrane, EPOC, CINAHL, ProQuest, and Psych INFO. In addition, hand searches of bibliographies supplemented the electronic search.

Study Selection: English language primary studies on the relationship between postpartum sleep disturbance and postpartum depression were included. Thirteen observational studies met the inclusion criteria.

Data Extraction: Data that specified the relationship between sleep disturbance and postpartum depression were extracted from the studies. The data were organized per author, year, participants, setting, country, demographics, design, sample size, outcomes, evidence, and effect size.

Data Synthesis: The effect size indicating the relationship between sleep disturbance and postpartum depression across the studies ranged between 0.4 and 1.7. There was evidence of a strong relationship between sleep disturbance and postpartum depression; however, the participants in the 13 studies were predominantly educated, middle class, older than age 30 years, and White. Likewise, the definition and measurement of *postpartum sleep* varied across the studies, which increased the possibility of bias.

Conclusions: Further research within the postpartum period involving underserved, younger women and samples with more diversity in race and ethnicity are needed.

JOGNN, 44, 350-357; 2015. DOI: 10.1111/1552-6909.12562

Accepted January 2015

Sue Bhati, PhD, FNP-BC, NP-C, MSN, RN, is a professor at Northern Virginia Community College, Springfield, VA and a family nurse practitioner at My Urgent Care, Alexandria, VA.

Kathy Richards, PhD, FAAN, RN, is a professor and assistant dean of Doctoral Programs and Research Development, School of Nursing, College of Health and Human Services, George Mason University, Fairfax, VA.

The authors report no conflict of interest or relevant financial relationships.



Like nutrition and exercise, sleep is a determinant of health and illness (Institute of Medicine, 2006). An adequate night of sleep for a healthy adult is falling asleep within 5 to 10 minutes after the light is turned off, sleeping at least 7 hours, and spending less than 10% of the night awake, (Lee, 1998, 2007). Nocturnal sleep when longer or shorter than 7 to 8 hours is significantly associated with cardiovascular disease, metabolic syndrome, automobile and workplace accidents, learning struggles, memory deficits, fibromyalgia, and increased mortality (Holshoe, 2009; Krueger & Friedman, 2009). In addition, there is a sleep disparity between the sexes, with women having shorter sleep durations (Baker, Wolfson, & Lee, 2007; Chang, Pien, Duntley, & Macones, 2010; Lee, & Caughey, 2006; Moore, Adler, & Williams, 2002; Soares & Murray, 2006). Women in the postpartum period, defined as the interval between the birth of the infant and 6 to 8 weeks

later, are more likely to experience sleep disturbance than all other women.

Postpartum sleep disturbance is a combination of sleep deprivation and sleep fragmentation (Lee, 1998). Sleep deprivation is sleep loss, and sleep fragmentation is frequent awakenings after sleep onset (Lee, 2007). Among postpartum women, primiparous women experience the greatest incidence of sleep disturbance (Kennedy, Gay, Gardner, & Lee, 2007). Postpartum sleep disturbance begins after birth and may persist for 6 to 12 months until the infant sleeps through the night (Dennis & Ross, 2005; Hiscock et al., 2007). Kennedy et al. (2007) explored sleep in a purposive sample of 20 postpartum women. The women described their sleep loss as extreme, resulting in exhaustion and impatience with their partners. In addition, the women lost the ability to concentrate and lowered their expectations of

motherhood to include a poor quality of life with sleep disturbances and fatigue.

Although postpartum sleep disturbance is not a disease, it is associated with a poor quality of life, a decrease in daytime attentiveness (Rychnovsky & Hunter, 2009), and a lack of general wellness (Letourneau et al., 2012; Moline, Broch, Zak, & Gross, 2003) that affects the postpartum woman, her infant, and her family (Letourneau et al., 2012). More importantly, postpartum sleep disturbance may be a risk factor for postpartum depression (Dorheim, Bondevik, Eberhard-Grad, & Bjorvatn, 2009; Lumley & Austin, 2001). Postpartum depression carries serious implications for the postpartum woman's health and the health of her infant (Corwin & Pajer, 2008; Letourneau et al., 2012).

Minor depression does not meet full criteria for a major depression disorder but includes two symptoms of depression that are present for 2 weeks (American Psychiatric Association [APA], 2013). However, postpartum depression is classified as a major depression episode in the *Diagnostic and Statistical Manual of Mental Disorders (DSM)* (APA, 2013). The criteria for a diagnosis of major depression are three of the following consistent symptoms for a period of 2 weeks or more: a depressed mood, insomnia or hypersomnia, impaired concentration, loss of pleasure, worthlessness or guilt, anxiety, fatigue, irritability, and recurrent thoughts of suicide or death (APA, 2013; Daley, MacArthur, & Winter, 2007). Perinatal mood disorders are one of the most common complications of childbirth (Letourneau et al., 2012). Approximately, 10% to 17% of new mothers experience diagnosable postpartum depression (Centers for Disease Control and Prevention [CDC], 2012; Letourneau et al., 2012; Ross, Murray, & Steiner, 2005; Ugarriza, 2002; Wolfson, Crowley, Anwer, & Bassett, 2003).

Biological and psychosocial factors may contribute to postpartum depression. Biological factors include the circadian rhythm disturbance (sleep disturbance) due to infant nighttime feeding and extensive hormonal shifts after giving birth (Lee, 1998). Shifts in estrogen, progesterone, prolactin, thyroid, cortisol, and hemoglobin are known to affect mood disorders (Lee, Zafke, & McEnany, 2000b; Okun et al., 2011; Ross et al., 2005). Supplementation with estradiol showed improvement in postpartum depression (Ahokas, Kaukoranta, Wahlbeck, & Aito, 2001). Additionally, hypothyroidism and anemia must be ruled out be-

Sleep may be one of the few modifiable risk factors for postpartum depression but evidence for the strength of this relationship is lacking.

fore initiating therapy for postpartum depression (Corwin, Murray-Kolb, & Beard, 2003; Horowitz & Goodman, 2005). Psychosocial factors include prenatal depression, stress related to child care, infant temperament, infant gender, infant health problems, low self-esteem, and poor social support (Corwin & Pajer, 2008; Dennis & Chung-Lee, 2006; Friedman, Resnick, & Rosenthal, 2009; Glavin & Leahy-Warren, 2013; Lee & Gay, 2004).

In qualitative studies with postpartum depressed mothers, the mothers spoke of being unable to care for themselves and their infants, having harmful thoughts and feelings toward their infants, and little to no interest in them (Amankwaa, 2003; Barr & Beck, 2008; Beck, 1992; Chan, Levy, Chung, & Lee, 2002; Hall, 2006; Lauer-Williams, 2001; Meighan, Davis, Thomas, & Droppleman, 1999; Ugarriza, 2002). Despite the large body of literature on sleep and mood disorders, the association between sleep disturbance and postpartum depression remains ambiguous. Postpartum depression is multifactorial in nature, and postpartum depression and sleep disturbances have many similar symptoms.

Sleep may be one of the few modifiable risk factors for postpartum depression, but evidence for the strength of this relationship is lacking. The purpose of this systematic review was to examine the strength of the relationship between sleep disturbance and postpartum depression in postpartum women.

Methods

Literature Search Strategy

A systematic review was conducted following the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) guidelines (Moher, Liberati, Tetzlaff, & Altman, 2009). We searched for published, peer reviewed English language primary research articles using the electronic databases Medline, PubMed, Cochrane, EPOC, CINAHL, ProQuest, and Psych INFO. Inclusion criteria for relevant articles were as follows: quantitative research studies (including systematic reviews) on the relationship between sleep disturbance and depression in postpartum women and published in peer reviewed journals

Download English Version:

<https://daneshyari.com/en/article/2632482>

Download Persian Version:

<https://daneshyari.com/article/2632482>

[Daneshyari.com](https://daneshyari.com)