

Title:

Relationship of Sleep Quality, Mood, and Work Schedule Among Low-Income Pregnant and Postpartum Women

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Session Title:

Promoting Pediatric Health

Slot:

H 15: Monday, 30 October 2017: 2:45 PM-3:30 PM

Scheduled Time:

2:45 PM

Keywords:

Maternal Mood, Sleep Quality and low income women

References:

Abeysena, C., Jayawardana, P., & R, De A. Seneviratne. (2009). Maternal sleep deprivation is a risk factor for small for gestational age: a cohort study. *Aust N Z J Obstet Gynaecol*, 49(4), 382-387. doi: AJO1010 [pii]

10.1111/j.1479-828X.2009.01010.x [doi]

Ashford, M. T., Olander, E. K., & Ayers, S. (2016). Computer- or web-based interventions for perinatal mental health: A systematic review. *J Affect Disord*, 197, 134-146. doi: 10.1016/j.jad.2016.02.057

Baglioni C, Spiegelhaldera K, Lombardob C, Riemanna D. (2010). Sleep and emotions: A focus on insomnia. *Sleep Medicine Reviews*, 14(4), 227-238.

Bei B, Coo S, Trinder J. (2015). Sleep and Mood During Pregnancy and the Postpartum Period. *Sleep Medicine Clinics*, 10(1), 25-33.

Braveman, P. A., Cubbin, C., Egerter, S., Williams, D. R., & Pamuk, E. (2010). Socioeconomic disparities in health in the United States: what the patterns tell us. *Am J Public Health*, 100 Suppl 1, S186-196. doi: 10.2105/ajph.2009.166082

Abstract Summary:

The audience will discuss the relationship between sleep quality during pregnancy and early postpartum period and maternal mood, gestational disease, work schedule among low income women.

Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
Describe the sleep quality during pregnancy and early postpartum and its relationship with maternal mood, gestational diseases, and work schedule.	Discuss the methods and results form our study

Discuss the consequences of poor sleep quality during pregnancy.

Discuss the consequences of poor sleep quality during pregnancy on mothers and fetal health.

Abstract Text:

Objectives: Sleep quality during pregnancy affects maternal and fetal health. The purpose of this study was to assess sleep quality during pregnancy and early postpartum and test its relationship to mood, blood glucose, gestational disease, work schedule, and electronic device use^[AAH1] among primiparous low income women.

Methods: Ninety-two primiparous women were recruited for a prospective longitudinal observational study. Upon enrollment demographic and work schedule data were collected. Discrete data on mood and sleep quality were collected using Edinburgh Postnatal Depression Scale (EPDS) and Pittsburgh Sleep Quality Index (PSQI) at weeks 22 (G22) and 32 (G32) of gestation and one week postpartum (PPW1). Blood glucose, disease status, and body mass index were extracted from medical charts. Relationship of variables was analyzed within and across weeks.

Results: Forty-three women completed the study and represented primarily low-income, African American (63.4%) women, with mean age of 23 years. Rate of poor sleep quality increased between G22 and PPW1. At G22 and G32, 25% of women had EPDS scores indicative of depression; rate dropped to 12% at PPW1. PSQI and EPDS scores were positively correlated between G22 and G32, supporting a link between sleep quality and mood. Women with hypertension, gestational diabetes and/or preeclampsia had poorer sleep quality at G22 and PPW1 ($P=0.1$). At G22 women who worked nights or shift schedules had significantly ($P<0.05$) poorer sleep scores. Interestingly, women who were out-of-work had the most variability in sleep scores, which were not different from night or shift workers.

Conclusions: In a population at high risk for maternal and infant morbidity, poor sleep quality during pregnancy was associated with poor mood, night work and development of gestational-related disease. Interventions that target sleep hygiene may be effective in improving health outcomes of mothers and developing babies.

^[AAH1]We want to decrease the study main variables per reviewers comments, so I took it out of the purpose and keep it in the results under lifestyle behavior. If you want to keep it that is fine with me.