

Sleep and Depression in perinatal Chinese Women

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Background

Childbearing women are at increased risk of developing psychological disorders such as postpartum depression (PPD). Maternal sleep changes and disturbances during the perinatal period may be potential risk factors for the development of PPD. Prior findings regarding the relationship between maternal sleep and PPD are inconclusive. While some studies reported that poor sleep in perinatal women could explain their vulnerability to psychiatric disorders (e.g. depression & anxiety) (Okun et al., 2018), others found no difference in sleep patterns between depressed and nondepressed mothers and even reported a decreased risk of recurrent depression among mothers with sleep disturbances (Yu. et al., 2017). A recent study found a significant prospective association between prenatal sleep and increased PPD, after adjusting for prenatal depression in a population sample of Finnish women (Pietikäinen, et al., 2019). However, they did not adjust for postpartum sleep disturbances; the increased risk of PPD might be contributed by concurrent sleep disturbances during the postnatal period. Moreover, the measure used for PPD was the the Center for Epidemiological Studies Depression Scale (CESD), which was not validated for measuring PPD. Finally, cultural differences in the perception and practice of perinatal care might limit the generalizability of prior findings to Chinese women, who adopt strong beliefs about extensive care and support for postnatal women in the month following childbirth. Therefore, the present study aims to investigate the prospective effects of subjectively and objectively-measured maternal sleep on PPD among perinatal Chinese women, adjusting for prenatal depression, concurrent sleep disturbances, marital satisfaction, infant temperament, perceived stress, and social support.

Methods

A convenience sample of 200 perinatal Chinese women will be recruited. They will complete assessments at three study visits: third trimester of pregnancy (Time1), 1 month (Time2) and 10 months (Time3) postpartum. Measures will include the Pittsburgh Sleep Quality index (PSQI), the Postpartum Social Support Questionnaire (PSSQ), the Edinburgh Postnatal Depression Scale (EPDS) and the Perceived Stress Scale (PSS); actigraphic sleep recording will also be used along with a sleep diary for one weeks at each assessment timepoint. Logistic regression analyses will be used to analyze the associations between subjective and objective sleep and postpartum depressive symptoms.

Expected Results and Implications:

We expect that sleep disturbances during pregnancy will predict postpartum depressive symptoms. The findings of this study may provide evidence for the potentially causal role of sleep in the development of PPD and inform future efforts in improving the prevention and treatment of PPD.