

DIFFERENCES IN ACCURACY OF SELF-REPORTED SLEEP DURATION BETWEEN WOMEN WHO RECEIVE PRENATAL SLEEP EDUCATION AND THOSE WHO DO NOT

BRONWYN SWEENEY, T LEIGH SIGNAL, DUNCAN BABBAGE
Massey University, Wellington, New Zealand

Introduction: A growing body of knowledge exists about the direction and magnitude of sleep changes during the peripartum, and new evidence is emerging around women's subjective experiences of sleep at this time. The purpose of this study was to trial a behavioural educational sleep intervention for first time mothers, aimed at promoting mother and infant sleep in the first 12-wks postpartum. Analyses were conducted to 1) determine how accurate self-reported total sleep time in 24 hrs (TST) is compared to objectively measured TST, 2) investigate if accuracy differs by level of sleep education.

Method: Forty first-time mothers (mean age 33.32 yrs, $SD = 2.84$), participated in the Parent Information on Parent & Infant Sleep study. Control group mothers (CGM), $n = 20$, attended a short, prenatal, general information session and received two contact-only telephone calls at 2 and 4 wks postpartum. Intervention group mothers (IGM), $n = 20$, attended a 2-hour prenatal sleep education session and received weekly support calls in the first 6 wks postpartum. Self-reported TST was collected from a health and sleep habits questionnaire at 12 wks postpartum. Actigraphy and sleep diaries (48 hrs) were completed for all mother-infant pairs at 12 wks postpartum (mean infant gestational age 52.1 wks, $SD = 1.52$). Mean actigraphic TST in 24 hrs was calculated and t-tests were used for all analyses.

Results: At 12 wks postpartum CGM mean self-reported TST was 461 mins compared to mean 413 mins as measured by actigraphy (+48 mins, $t(19) = 2.29$, $p = 0.03$). IGM mean self-reported TST in 24 hours was 428 mins compared to 420 mins using actigraphy (+8 mins, $t(19) = 0.588$, $p = 0.56$). Fifty percent of CGM overestimated TST by >30 mins whereas only 30% of IGM made the same level of over-estimation (35% and 15% respectively overestimated by >60 mins). Further analysis showed that the extent of over-estimation was not significantly different between these two groups ($t(36) = 1.73$, $p = 0.09$).

Conclusion: Women in this study who received prenatal education, including information about realistic postpartum sleep patterns, showed a tendency to more accurately self-report actual TST compared to those who received no formal sleep education. The effect of surmised self-report biases (such as *being seen* to sleep well) and the contribution of sleep education to these findings warrant further investigation in a larger sample of peripartum women.