

**COMPARING SLEEP DURATION AND QUALITY  
PRIOR TO AND DURING LATE PREGNANCY:  
RESULTS FROM A LARGE SAMPLE OF NEW  
ZEALAND WOMEN**

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**Introduction:** Women experience profound changes to their sleep during pregnancy. However, there is currently no information about the sleep of pregnant women in New Zealand. The aim of this study was to compare characteristics of sleep before and during pregnancy in a large sample of New Zealand women.

**Method:** The *E Moe, Ma-ma*: *Maternal Sleep and Health in Aotearoa/New Zealand* study is a questionnaire-based project designed to investigate sleep changes across the perinatal period and the relationship with maternal health and mood. A total of 1091 women aged 16–46 yrs completed the first questionnaire between 35–37 wks gestation at which time they were asked about their pre-pregnancy and current sleep habits. Participants were asked their usual sleep duration across a 24-hour period and to report the number of nights/week they experienced a good night's sleep; loud snoring; breathing pauses during sleep; and legs twitching/jerking during sleep (0–7 nights, where  $\geq 3$  nights/week was considered frequent). Differences between mean sleep in pre-pregnancy and at 35–37 wks were compared using paired t-tests.

**Results:** Participants reported significantly shorter usual sleep duration (mean  $\pm$  SD,  $7.41 \pm 1.82$  vs.  $8.23 \pm 1.23$ ,  $t = 14.02$ ,  $p < 0.0001$ ) and fewer good nights of sleep per week ( $2.63 \pm 1.86$  vs.  $5.23 \pm 1.48$ ,  $t = 40.14$ ,  $p < 0.0001$ ) in late-pregnancy compared with pre-pregnancy. Twenty two percent of women reported snoring  $\geq 3$  nights/week in late pregnancy compared with 15% of women prior to pregnancy ( $t = 6.46$ ,  $p < 0.0001$ ). There was very little change in the proportion of women who reported breathing pauses during sleep in late pregnancy compared with pre-pregnancy (4% vs. 3%,  $t = 1.68$ ,  $p = 0.09$ ). Legs twitching or jerking during sleep was reported by 14% of women in late pregnancy and 16% prior to pregnancy ( $t = 2.67$ ,  $p = 0.008$ ).

**Conclusion:** Compared with pre-pregnancy, self-reported sleep in late pregnancy is shorter and of poorer quality and loud snoring is more common. Future research should investigate the impact of sleep disturbances associated with pregnancy on maternal health and wellbeing and determine whether or not post-partum sleep duration and quality recovers to pre-pregnancy levels.