

POPULATION-LEVEL SOCIO-DEMOGRAPHIC FACTORS ASSOCIATED WITH INFANTS' SLEEP PATTERNS AND ENVIRONMENTS IN AOTEAROA/NEW ZEALAND

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Introduction: Sleep is associated with development, but limited research exists on infants' sleep patterns and the role of socio-demographic factors in different facets of babies' sleep. The study aimed to investigate the association between maternal ethnicity, socioeconomic deprivation and age, and 11-13-week-olds' sleep in a prospective cohort of infants (Māori: n=316 and non-Māori: n=635) and mothers.

Methods: Logistic regression models were used to examine independent predictors of parentally-reported infant sleep duration, sleep location, bed-type and day-to-day sleep pattern variability. Maternal ethnicity (Māori/Non-Māori), socioeconomic deprivation (NZDep: a neighbourhood measure of socioeconomic deprivation) and maternal age were independent variables in analyses.

Results: Babies of Māori mothers were less likely to have variable day-to-day sleep patterns (OR=0.65, 95% CI 0.47-0.88), or short (<2hrs) diurnal sleep durations (OR=0.66, 95% CI 0.49-0.89). They were more likely to change sleeping location during the night (OR=1.77, 95% CI 1.28-2.45) and sleep in parents' bedrooms (day: OR=1.73, 95% CI 1.29-2.34; night: OR=2.42, 95% CI 1.75-3.35) and/or beds (day: OR=2.28, 95% CI 1.17-4.45; night: OR=2.15, 95% CI 1.30-3.55). The likelihood of an infant sleeping in their own room (day: OR=0.91, 95% CI 0.87-0.96; night: OR=0.93, 95% CI 0.88-0.98) or being held while sleeping (day: OR=0.89, 95% CI 0.82-0.97) decreased with increasing neighbourhood deprivation. Conversely, the likelihood of sleeping in the parent/s' bedroom (day: OR=1.08, 95% CI 1.02-1.13; night: OR=1.09, 95% CI 1.03-1.15) and/or bed (night: OR=1.14, 95% CI 1.04-1.25) increased with increasing neighbourhood deprivation. Increasing maternal age was associated with a lower likelihood of sleeping in the parent/s' bed during the day (OR=0.91, 95% CI 0.86-0.96).

Conclusion: Maternal ethnicity, neighbourhood socioeconomic deprivation and maternal age independently predicted how and where 3-month-old infants slept in this sample. Further investigation is needed to ascertain what these differences in sleep patterns and environments mean for infants' sleep and development, cross-sectionally and longitudinally.

<http://www.sleepmeeting.org/docs/default-source/attendee-documents/sleep-2015-abstract-supplement.pdf?sfvrsn=2>