研究業績 英文表記

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Title	Dependence of nighttime sleep duration in one-month-old infants on alterations in natural and artificial photoperiod
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Abstract	Human sleep-wake cycles are entrained by both natural and artificial light-dark cycles. However, little is known regarding when and how the photoperiod changes entrain the biological clock after conception. To investigate the dependence of sleep patterns in young infants on the natural and artificial light-dark cycles, 1,302 pairs of one-month-old infants and their mothers were asked to answer a questionnaire. Birth in spring, longer daytime sleep duration, early/regular light-off times, and longer maternal nighttime sleep duration were identified as independent variables for longer infant nighttime sleep duration in both univariate and multivariate analyses. Longer maternal nighttime sleep duration was dependent on shorter naps and early/regular bed times but not on the season. We found that nighttime sleep duration depended on both natural and artificial diurnal photoperiod changes in one-month-old infants. Although sleep patterns of infants mimicked those of their mothers, nighttime sleep duration depended on the season, and was positively associated with daytime sleep duration, only in the infants. These specific variables, which render sleep patterns of the infants different from those of their mothers, might be a clue to reveal the covert acquisition process of mature circadian rhythms after birth.
keyword	Adult, Female, Humans, Infant, Male, Mothers, Photoperiod* Seasons, Sleep / physiology, Surveys and Questionnaires Time Factors