Infant sleep consolidation: a preliminary investigation of parental expectations

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Short title: Infant sleep-related expectations

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Infant sleep patterns evolve rapidly over the first year of life and are characterized by substantial changes in sleep duration and fragmentation (1). As such, pediatric health professionals frequently address parents' concerns about infant sleep (2). Parents are particularly concerned about the age at which their infant will consolidate their sleep during a consecutive period, a process often referred to as "sleeping through the night". While many definitions of sleeping through the night exist in the literature, 6- or 8-hour blocks of uninterrupted sleep are commonly adopted definitions (2).

In Western industrialized countries, sleeping through the night is widely regarded as a developmental milestone that is to be attained by 6 months. However, not all professionals believe that nighttime awakenings in infancy are problematic, which sometimes leads to incongruent advice from health-care professionals (3). Moreover, several studies have found that there is considerable interindividual variability in the age at which infants learn to sleep through the night and that this variability reflects a normal development of infant sleep physiology (2,4). In studies of typically developing infants, the proportion of infants who do not sleep through the night naturally decreases with age (4).

Given the natural and considerable interindividual variability observed in the age of sleep consolidation attainment and the conflictual advice given by healthcare professionals, it would be meaningful to assess parental expectations about infant sleep consolidation. Thus, this study aims to document the age at which parents expect an infant to begin sleeping through the night.

The study sample comprised 55 mothers and 49 fathers (49 couples, 1 single mother, 5 mothers without partner data) of 6-month-old infants who were recruited

through social media groups. The participants took part in a larger study. Parents 18 years and older who were fluent in French or English were eligible for participation. Mothers with serious obstetric complications, chronic illness, congenital diseases, or any other serious medical condition were excluded. Infants with severe complications during delivery, serious medical conditions, or born at ≤ 37 weeks' gestation were also excluded. Written, informed consent was obtained (Research Ethics Board of the Hôpital en santé mentale Rivières-des-Prairies and McGill University).

The question, 'Around what age (in months) do you think an infant/child should start sleeping through the night on his/her own?' was used to create two groups: (1) parents who expected infants to sleep through the night by six months and (2) parents who did not expect infants to sleep through the night by six months. Parent age, sex, education, and parity were also documented.

Parents ranged in age from 26 to 52 years, with a mean age of 34.06 ± 4.65. Parents of one, two, or three or more children represented 39.4%, 43.3%, and 17.3% of the sample, respectively. The majority of parents held a university degree (72.9%).

Figure 1 presents the frequency of responses to the sleep consolidation question. Almost a third of parents (31.8%) thought that an infant should begin sleeping through the night by six months of age. By nine months, this number reaches 63.5% of parents. Approximately seventy-four (73.5)% of couples (mother-father dyads) had similar expectations about the age at which they expect an infant to start sleeping through the night. Parent age, sex, parity, and education were not associated with parental expectations ($p > .05$).

This study was the first to assess the age at which parents expect infants to sleep through the night. These preliminary results show that parental expectations about the age at which infants should begin sleeping through the night are characterized by vast interindividual differences, ranging from 1 to 15 months. This finding is consistent with other studies that found variability in the age of regular sleeping through the night (2,4). Approximately one-third of parents expected an infant to sleep through the night by 6 months, one-third expected sleep consolidation after 6 months, and about one-third believed that it depends on the infant. This finding reflects a notable difference in opinions and values about infant sleep consolidation among parents.

Within couples, the majority of participants had similar expectations about infant sleep consolidation. One possibility is that similar expectations within couples arise from shared information sources. Alternatively, it is possible that members of the same couple disclose and discuss their knowledge, perceptions, and expectations with one another.

Some limitations should be noted. First, the definition of sleeping through the night varies widely in the literature, and this study did not use a specific definition. While this approach has the advantage of reflecting parents' subjective interpretations, it would also be interesting for future research to use clear-cut definitions. In addition, the small sample size limits the power of the statistical analyses. Findings from this exploratory study support the need for future research to replicate these findings in a larger sample and examine the association between expectations, parental practices, and infant sleep patterns. Future studies should also assess parental expectations before and after birth to examine the degree to which expectations change with experience.

Notwithstanding these limitations, our results showed grand variability in sleeping through the night expectations and add to existing literature on infant sleep consolidation. Our findings underscore the importance of pediatric health-care practitioners to consider parental expectations when providing new and expectant families with sleep-related counselling and advice.

Funding: Social Sciences and Humanities Research Council (SSHRC); Fonds de la recherche en santé du Québec (FRQS); McGill University

Conflict of Interest: None.

Abbreviations: None.

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Figure 1. Frequency of responses to the question, “Around what age do you think an infant/child should start sleeping through the night on his/her own?” (N=104)