

Promoting and supporting sleep health in families of infants

Infant sleep changes dramatically over the first year and parents often have concerns about their infant's sleep. The quantity, quality, and nature of sleep health information can be overwhelming for parents to navigate on their own. Public health nurses are well-positioned to support families in navigating this information and can play a key role in promoting and supporting sleep health in families of young children. This resource provides key information and practical guidance for how public health nurses can promote sleep health when working with families of infants.

Understanding Sleep Health

Since infant sleep is related to infant development, parental sleep, parental mental health, and family relationships, concerns about infant sleep should be identified, assessed, and addressed.

| SLEEP HEALTH DOMAINS | RECOMMENDATIONS & NORMS | TIPS & CONSIDERATIONS |
|-------------------------|---|--|
| Adequate duration | The Canadian 24-hour movement guidelines ² suggest: 14-17 hours for ages 0-3 months 12-16 hours for ages 4-11 months 11-14 hours for ages 1-2 years | The specific amount of sleep a person needs varies based on their individual needs. As nighttime sleep duration increases, daytime sleep duration decreases. |
| Appropriate timing | Timing of sleep shifts from "around the clock" towards more sleep at nighttime, with the biggest changes in the first 2-3 months as the circadian rhythm is established. ³ The proportion of infants who "sleep through" the night depends on how it is defined. About 2/3 of infants aged 6 months will sleep for an 8 hour stretch of nighttime sleep. ³ | You cannot force an infant to sleep, but they can be "set up" for sleep by providing regular routines and external cues that promote sleep. Establishing a consistent bedtime routine (typically no longer than 30-40 minutes; shorter for naps) is sometimes enough to improve infant sleep.⁴ The more consistently this routine is used; the more sleep tends to improve! |

There are six different domains of pediatric sleep health¹ that can be explored with families.

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|-------------------------------------|---|---|
| High efficiency | Efficiency is the amount of sleep a person actually sleeps compared to the total amount of time they are trying to sleep and the actual time they spend asleep. Sleep efficiency can be affected by: Sleep latency (time it takes to fall asleep). About 15 – 30 minutes is typical for sleep latency. This might be a little longer for newborns. Waking & nighttime wakefulness. After the newborn period most: infants spend less than 1 hour (total) awake at night parents may consider pattern of three or more wakings per night to be a problem. | If sleep latency is too long, have parents reflect on current timing and length of bedtime and naptime routines. Coaching parents on reading their infant's subtle and more potent disengagement cues may help with establishing timing that reduces sleep latency. It is normal for people to wake through the night. How quickly they fall back asleep is influenced by the conditions that they have learned to fall asleep with (e.g., sleep associations) and whether these conditions are present. Some infants as young as 5 weeks can resettle themselves back to sleep.⁵ Support parents in learning to differentiate their infant's cues during these wakings. |
| Alertness during waking hours | Alertness impacts emotional regulation, behaviours (e.g., irritability, hyperactivity). Napping is developmentally appropriate for infants. The average number of naps per day is 3 (range of 1-5) naps for infants aged 0-5 months and 2 (range of 1-3.5) naps for infants aged 6-12 months. ⁶ | The amount of wakefulness between naps depends on infant age, environment, routines, and quality of previous sleep. Coach parents to watch infant cues for subtle and potent disengagement cues that indicate the need for sleep. Different babies have different "windows" for moving through states. |
| Sleep behaviours | Sleep promoting behaviours include: Consistent and regular sleep opportunities with pre-sleep routines Sleep associations that are sustainable for the child and family. Sleep-promoting environments may include reduced exposure to bright light (including from parental screens) and dark/cool sleeping environment. | As infants develop, they learn to associate certain conditions with falling asleep (sleep associations). It is important to explore with families what sleep associations they would like their infant to learn and what sleep associations may be unsustainable. Nurses can work with families to develop a plan for teaching their infant sleep associations that they prefer. |

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|-----------------------------|--|--|
| Satisfaction and quality | About 20-30% of parents consider their infant's sleep to be a problem. Persistent and severe sleep problems are a risk factor for subsequent behavioural difficulties. ⁷ Parental satisfaction of infant sleep can be influenced by parenting values, parental mood and mental health, and socio-cultural expectations. | Explore parental reasons for being dissatisfied with their infant's sleep. The number of night wakings, how long it takes the infant to fall asleep, and the length of the longest stretch of nighttime sleep commonly contribute to parental perceptions of poor sleep quality. Helping parents understand what is developmentally appropriate and/or typical can sometimes be helpful in normalizing infant sleep patterns. Positive social supports and parenting partner involvement in nighttime caregiving can improve perceptions of sleep. |

Assessment of Sleep Health in Families of Infants

Establish & Maintain Therapeutic Relationship

Using a non-judgmental & culturally humble approach is important for building and maintaining the nurse-client therapeutic relationship.

Teach parent/caregiver about sleep health domains

Help families determine if current infant sleep patterns are developmentally appropriate.

Review sleep log information with family. Ask about: Is the duration of sleep, number of night wakings and naps, and longest consolidated sleep period, within typical ranges for age? Is there enough sleep pressure being built up between sleep periods? Does "time in bed" generally align with sleep duration and timing of falling asleep? What happens before falling asleep?

Assess infant, parental, familial, and

socio-cultural factors that may

influence sleep. If these contextual

factors are influencing sleep (or

perceptions of sleep), they should be

taken into account when developing

a plan with the family and/or

addressed by the appropriate

healthcare provider.

Sleep log

Explore family interest in maintaining a multi-day sleep log. Sleep logs can also help to monitor less obvious changes that occur over time.

Sample script for introducing sleep log:



"Keeping a sleep log for 5-7 days is helpful in learning more about your baby's sleep and activity schedule. To get you started, could we spend some time reflecting on your baby's activity over the last 24 hours? We will start by recording what is most important to you whether it's when your baby is awake or asleep, fussy or alert and content."

Factors That May Influence Sleep

| Infant | Parental | Familial | Socio-cultural |
|---|---|--|--|
| Age & gestational age | History of sleep difficulties (e.g., insomnia during or before pregnancy, sleep apnea) and/or restless sleep | Infant-caregiver interactions & relationships | Parenting values and practices |
| Infant temperament and/or multiple regulatory concerns (e.g., difficulties with feeding, sleeping, and crying) | Mental health concerns | Involvement of parenting partners and/or additional social supports | Sleep-related beliefs |
| Concerns about development and/or physical growth (e.g., difficulties with feeding and/or weight gain, risk for nutrient deficiencies) | Use of medications and/or supplements | Daily family routines & schedules | Time zone changes and daylight savings time |
| Ability to provide clear cues and responsiveness to caregiver | | Physical home characteristics and sleeping spaces | |
| Parental reports of snoring and/or breathing difficulties during sleep | | | |

Helping Families Manage Sleep Concerns

Considering the above factors can help nurses situate sleep concerns within the broader family context to help families prioritize and develop plans to achieve their sleep goals. Depending on the specific family context, goals, and concerns, it may be helpful to work through the following steps.

| 1. Provide anticipatory guidance | → Share with parents what they can expect with respect to age- appropriate sleep behaviours, factors that may influence sleep, the development of sleep habits, and the importance of social supports. |
|---|---|
| 2. Build sleep promoting behaviours and routines | → Work with parents to plan a pre-sleep routine (no longer than 30-40 minutes; shorter for naps) that is enjoyable and can consistently be implemented – the more consistent, the better for sleep! → Explore opportunities to build daily routines, including consistent waketimes and sleep opportunities. Help parents to use cue-based care to create and follow routines. Coaching parents to understand and differentiate their infant's subtle and potent cues can help create routines and daily rhythms. → Discuss other sleep-promoting behaviours, including building warm and responsive parent-child relationships, opportunities for physical activity (e.g., tummy time), limiting sedentary activity and exposure to screens, and building comfortable and safe sleeping environments. |
| Help parents build a plan for their infant to learn new (sustainable) sleep associations^{8,9}. Behavioural-based Strategies are NOT recommended prior to six months of age Modified extinction (e.g., periodic checking on infant according to pre-set times while they fall asleep without active parental assistance). Gradual approaches (e.g., "camping out" where parents gradually decrease the intensity of their comforting). | → Use therapeutic communication and other assessment information to help families prioritize goals and develop a plan for teaching their infant new sleep associations. For example, is the quality of the parent-child interaction a concern? Does parental mental health need to be prioritized? Are there certain family routines that need to be considered? → Using behavioural-based strategies can be effective in creating new sleep associations that reduce parent-reported wakings with no evidence of long-term negative effects. Gradually adjusting bedtime (5 to 15 minutes every 3-5 days) to more closely align with the actual time of falling asleep may be helpful. → New (sustainable) sleep associations can be introduced before removing existing sleep associations takes repetition. If there are multiple caregivers, it is helpful to use similar routines and build a plan that they can all follow. → The "right" plan is a plan that the parent(s) feel good about |

| | using consistently. It can also be helpful to guide parents in thinking about what they may do if things do not go as planned. The <u>OARS model</u> (PHN-PREP) may be helpful in initiating a conversation that focuses on helping parent(s) develop a plan that fits for them. |
|--|---|
| 4. Consider need for specialized care and/or further assessment. | → It is important to recognize that not all sleep problems can be improved by changing behaviours. Some sleep problems may result from biological and physiological causes, such as snoring or breathing difficulties during sleep. Some infants and families may need specialized assessments and/or supports from other healthcare providers including those with feeding or weight gain concerns, and/or multiple regulatory |

concerns such as feeding, sleeping and/or crying.

Additional Resources and Learning

- Canadian Sleep Research Consortium
- Canadian Sleep Society

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Citation: Keys, E., Cahill, A., Strohm S., & Jack, S.M. on behalf of the PHN-PREP Project Team [2024]. Promoting and supporting sleep health in families of infants. [Professional Resource]. School of Nursing, McMaster University.

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