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Sleep matters:
Why getting toddlers to sleep, and to stay asleep, is important

Sleep problems exacerbate emotional and behavioral problems among young children. In fact, they are as strongly linked to these problems as having a depressed parent, according to a recent study by UWO psychologist Graham Reid[1] and colleagues Ryan Hong[2] and Terrance Wade[3].

This study is part of the broader CIHR-funded ***Parenting Matters Program*** headed by Dr. Reid. Bringing research to practice, this program aims to help parents of young children deal effectively with sleep and discipline problems - the two most common early childhood problems, both of which can have a lasting impact on child development. Although the link between sleep and behaviour problems has been well-established by past research, few studies have attempted to identify other factors, such as parenting styles, that might account for this link. Nor have they developed models to explain how such factors might contribute to these problems.

Parenting Matters
HELPING PARENTS WITH YOUNG CHILDREN
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The present study set out to fill these research gaps using data on three separate cohorts of 2-3 year old children from Canada's National Longitudinal Study of Children and Youth (NLSCY). From 1994 onwards, this survey has collected information every two years from the mother (or another adult close to the child) on a wide range of aspects about herself, her family and her child.

The questions used in this analysis relate to children's sleep difficulties (specifically night waking and bedtime resistance), emotional and behaviour problems (anxiety, hyperactivity, and aggression) - and characteristics of the family (family functioning, income, marital status) and parent (parenting, depressive symptoms).

In all three samples, young children who had difficulty getting to sleep or staying asleep were more likely to suffer from emotional and behavioural problems. The regression analyses found that this relationship remained even after other well-established risk factors were taken into account. In fact, among young children, sleep problems were as strongly associated with anxiety, hyperactivity and aggression as parental depression. In other words, sleep has a unique effect on young children's emotional and behavioural functioning.

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To investigate how these different risk factors contribute to sleep and behaviour problems, the researchers then constructed possible pathways in which they might be linked. They used structural equation modeling to test whether their models were a good fit for the data, and checked their results in three cross-sectional samples.

These models showed that “family functioning” plays a key role. This tended to be higher in high income and two-parent families, and those where parents are older and highly educated. When families were functioning better, mothers were less depressed; this was in turn related to fewer sleep problems and fewer emotional and behavioural problems.

The child’s temperament also appears to be part of the equation. Survey respondents who perceived their child as having a difficult temperament also reported that they had a more hostile and punitive parenting style and that the child had more sleep, emotional and behaviour problems.

It is important to note that the models could not look at patterns over time. It is possible that having a child with sleep problems may contribute to maternal depression and having a child with a difficult temperament may, over time, provoke more negative responses from parents.

This study adds to the growing body of literature that supports the important role that sleep has in children’s development. Although problems with bedtime resistance and nightwaking are common amongst young children, and some may argue that these “normal” problems of childhood do not warrant research attention or intervention, based on these findings we would argue that for young children, sleep matters.

To find out about these models and their findings, come and join us at the UWORDC Brown Bag on Wednesday, December 9, 2009, 12:30-1:30 PM, at the Social Science Centre Room 5220.

Note: Summary prepared by Heather Juby, CRDCN Knowledge Transfer Coordinator, based on Reid, G. J., Hong, R. Y., and Wade. T. J. 2009. The relation between common sleep problems and emotional and behavioral problems among 2- and 3-year-olds in the context of known risk factors for psychopathology. *Journal of Sleep Research* 18, 49-59. For more information, please contact Graham Reid (greid@uwo.ca or tel. 519-661-2111 ext. 84677).

The analysis was carried out at the University of Western Ontario Research Data Centre. The Research Data Centre program is part of an initiative by Statistics Canada, the Social Sciences and Humanities Research Council, the Canadian Institutes of Health Research and university consortia to strengthen Canada's social research capacity.