# Studies Quantify Use of Sleep Aids in Children

*Insomnia is cited as a major problem in young patients, of whom many, including preschoolers, are medicated.*

BY PATRICE WENDLING
*Chicago Bureau*

NEW YORK — The use of sleep medications in children is considerable in clinical practice in inpatient and outpatient settings, data from two new studies show.

A survey of 1,271 practicing child psychiatrists indicates that 25% of school-age and 30% of adolescent outpatients with primary insomnia are being treated with sleep medication.

"Even 17% of preschoolers are being treated with medication," Dr. Judith Owens said at a psychopharmacology update sponsored by the American Academy of Child and Adolescent Psychiatry.

**In one study, about two-thirds of respondents had recommended over-the-counter antihistamines, and nearly 40% had recommended melatonin.**

The survey respondents were members of AACAP, 47% of the respondents were female, 84% were white, and 58% were affiliated with a medical school. Many of the respondents (33%) had been in practice for more than 20 years.

The respondents reported seeing a median of 70 children per month, most of them were aged 6 years or older. They indicated that insomnia was a major problem in 28% of their school-age and 32% of their adolescent patients, Dr. Owens, a pediatrician at Brown University and director of the Pediatric Sleep Disorders Clinic at the Hasbro Children's Hospital, both in Providence, R.I., and her colleagues reported.

The percentage of respondents who recommended medication for insomnia one-half of the time or more was high in primary insomnia (75%) and delayed sleep phase syndrome (51%), as well as psychiatric disorders such as bipolar disorder (62%), posttraumatic stress disorder (59%), depressive disorders (53%), and anxiety disorders (43%).

About two-thirds of psychiatrists reported recommending over-the-counter antihistamines and nearly 40% had recommended melatonin, although it is not clear whether this was at bedtime for its mild hypnotic effects or earlier in the evening as a chronobiotic for circadian rhythm disruption, Dr. Owens said. Use of herbal remedies was fairly low (19% or less) in the study, which was funded by Sanofi-Aventis.

Overall use of these agents was similar across four clinical groups: mental retardation and developmental disabilities (MR/DD), attention-deficit/hyperactivity disorder (ADHD), anxiety disorders, and mood disorders. Significant differences did emerge across groups for prescription medication use.

α-Agonists such as clonidine (Catapres) were the most commonly prescribed insomnia medications for children with ADHD (81%). The rate was comparable to that found in an earlier survey involving 671 community-based pediatricians conducted by Dr. Owens and her colleagues (Pediatrics 2003;111[5 pt.1]:e628-35).

The use of α-agonists was significantly higher among children with ADHD than among those with MR/DD or mood and anxiety disorders.

Trazodone (Desyrel) was the medication of choice for children with mood (78%) and anxiety disorders (72%), whereas α-agonist use dropped considerably (31% and 40%, respectively). Somewhat understandably, there was an increase in prescriptions for antidepressants of all types, Dr. Owens said.

Anticonvulsants were significantly more likely to be prescribed for children with mood disorders than for all other groups.

Prescription antihistamines were used by at least one-third of psychiatrists to manage insomnia in each of the clinical groups; while the use of benzodiazepines increased in the groups from ADHD (12%), MR/DD (21%), and mood disorders (36%) to anxiety disorder (47%), Dr. Owens said in an interview.

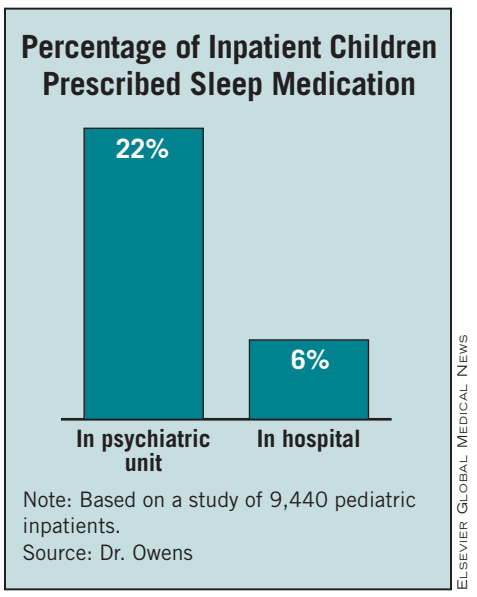
Non-benzodiazepine short-acting hypnotics were used fairly infrequently in any group by child psychiatrists, despite their benign side-effect profile and being the only ones listed specifically developed for insomnia. This finding was true also among pediatricians in Dr. Owens' earlier survey.

Atypical antipsychotics were used significantly more often in the MR/DD group and mood-disordered group (greater than 50%) than they were in the ADHD or anxiety-disordered group (less than 33%).

The relatively high use in the two groups was somewhat surprising, given the drugs' side-effect profile and limited pediatric experience with this class of medication in general, Dr. Owens reported.

Finally, use of adult sleep medications such as chloral hydrate (4%-8%) and barbiturates (0.5%-1.3%) was too low among all four clinical groups for comparison.

The second study involving 9,440 pediatric inpatients (mean age 7.4 years) at three children's hospitals indicates that 562 (6%) of all hospitalized patients and 993 (22%) of the 4,513 children in the inpatient psychiatric unit were prescribed sleep medication, Dr. Owens said.

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Overall, 22 medications in eight classes were included as sleep medications if the child received the medication as a once-daily or an as-needed dosing between the hours of 6 p.m. and 4 a.m.

Sleep medications were more likely to be prescribed for shorter hospitalizations and almost three times more likely if the patient had a psychiatric diagnosis, especially children with autism spectrum disorders and ADHD, regardless of whether they were in a psychiatric unit or not, Dr. Owens said.

Antihistamines were the most commonly prescribed agent, followed by benzodiazepines, antipsychotics, α agonists, antidepressants, selective serotonin reuptake inhibitors, chloral hydrate, and non-benzodiazepine hypnotics, Dr. Owens said. ■

# Consider Behavioral Strategies First Line for Pediatric Insomnia

BY PATRICE WENDLING
*Chicago Bureau*

NEW YORK — Medication should almost never be the first line of treatment for children and adolescents with insomnia, Dr. Judith Owens said at a psychopharmacology update that was sponsored by the American Academy of Child and Adolescent Psychiatrists.

Instead, proven behavioral strategies should be used; caffeine alcohol, and nicotine intake controlled; and good sleep hygiene practices such as regular sleep-wake times and limited late-night stimulation should be optimized.

"Combining pharmacologic treatment with behavioral therapy really is the key here," said Dr. Owens in the pediatrics department at Brown University and director of the Pediatric Sleep Disorders Clinic at the Hasbro Children's Hospital, both in Providence, R.I.

This general principle is supported in a recent consensus statement on the pharmacologic management of pediatric insomnia (Pediatrics 2006;117:e1223-32), developed by the National Sleep Foundation in collaboration with Best Practice Project Management Inc. The expert panel behind the statement unanimously agreed there is a need for pharmacotherapy for insomnia, but also for clinical safety and efficacy trials to fill in "important knowledge gaps" about current pharmacotherapies such as sedatives and hypnotics.

**The treatment of pediatric insomnia is complicated because of a lack of empirical pediatric data and because it could be the result of multiple etiologies.**

"We don't have a lot of empirical data, but a lot of us are using these drugs in practice, anyway," Dr. Owens said.

The first-ever practice parameters for the behavioral treatment of bedtime problems and night wakings in infants and young children, also published last year, indicate that behavioral treatment produces reliable and durable changes in most (80%) children (Sleep 2006;29:1263-76).

Treatment of pediatric insomnia is complicated by the paucity of pediatric data, but also because the definition of pediatric insomnia is complicated, Dr. Owens said. Unlike insomnia in adults, pediatric insomnia is often dependent on parental recognition and definitions; occurs in an evolving developmental context; and can be the result of multiple etiologies, including medical, behavioral, environmental, psychiatric, and psychosocial.

"If you have [children not] falling asleep, it could be that they're drinking a six-pack of Mountain Dew a night; it could be restless legs syndrome; it could be a limit-setting issue, or a sleep-onset associated-type of behavioral insomnia; and each of those has a distinctly different treatment approach," Dr. Owens said. "That's why it's so important to understand what the etiology is."

Other general pharmacologic management principles highlighted by Dr. Owens include:

- Select appropriate medications: short-acting medications for sleep onset and longer-acting ones for sleep maintenance.
- Screen adolescents for alcohol, drug use, and pregnancy.
- Screen patients for the use of over-the-counter sleep medications and herbal remedies to avoid combined effects with prescribed medications.
- Review side effects with family.
- Monitor efficacy and side effects frequently.
- Avoid abrupt discontinuation of medications to minimize withdrawal or rebound effects.

Medication use is contraindicated if insomnia occurs in the presence of untreated sleep-disordered breathing; if it is attributable to developmentally based normal sleep behavior or a self-limited condition; if there is a potential for drug interactions; or if there is limited ability to monitor the medication, Dr. Owens said. ■