(e.g., fidgeting) resulted in a risk for data loss (e.g., pulled wires). Taping wires to the recording box eliminated data loss. This modification should be implemented when using ambulatory PSG with this population.

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0763
THE IMPACT OF MEDICATIONS ON SLEEP IN THE LAB FOR CHILDREN WITH ADHD
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Introduction: Children with ADHD have a higher prevalence of sleep problems: prolonged sleep latency, increased night wakings, and restlessness. Stimulant medications are known to increase sleep difficulty while non-stimulant medications (alpha-agonists) are known to improve sleep. Some published studies indicate that parents overestimate sleep difficulty based on actigraphy results. Very few studies have evaluated sleep in children with ADHD using polysomnography. We hypothesize that patients on stimulant medication will have more difficulty with sleep and patients on an alpha agonist would have less difficulty with sleep compared to patients not taking medication based on results from polysomnography.

Methods: A retrospective chart review was performed on all children under 18 years of age with ADHD referred to our sleep lab in a one-year period, by child neurologists, child psychiatrists and developmental pediatricians. We obtained information on the patient’s age, sex, sleep efficiency, sleep latency, and wakefulness after sleep onset (WASO). Analyses included regression modeling and scaled ZJS Bayes factor analyses. Bayes factor analyses allow for greater certainty than traditional frequentist tests when establishing a lack of effect (i.e., accepting the null hypothesis).

Results: Of the 69 children studied, 28 children were taking a stimulant, 8 were taking an alpha agonist, 9 were on both medications, and 24 were not on either. Bayes factor analyses report on the likelihood that the null hypothesis is correct (no difference in sleep parameters caused by medication), as compared to the likelihood of the alternative hypothesis (medications are associated with a difference in sleep parameters). Our data suggest no relationship between either medication and any sleep parameter. For stimulants, sleep efficiency Bayes factor was 2.9, WASO was 3.9, and sleep latency was 2.4. Regression modeling established no association between either medication and any sleep parameter, even when controlling for age and/or sex.

Conclusion: Our data suggests that medication likely has no impact on sleep for children with ADHD in the lab. These findings are limited by the retrospective nature of the study.

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0764
CHANGES IN SLEEP PATTERNS ACROSS ATTENTION-DEFICIT/HYPERACTIVITY DISORDER TREATMENT: FINDINGS FROM THE MTA STUDY
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Introduction: Dyssomnias and parasomnias are common in youth with Attention-Deficit/Hyperactivity Disorder (ADHD). While stimulant medication is effective for ADHD, it can be associated with sleep worsening. Conversely, behavior therapy may provide symptom relief without disrupting sleep. This study examined change in sleep patterns in the Multimodal Treatment Study of ADHD (MTA) for youth receiving stimulant medication, behavior therapy or their combination. The impact of baseline ADHD symptoms and psychiatric comorbidity on change in sleep patterns was also explored.

Methods: Participants were 576 children (aged 7 to 9) with ADHD-Combined type from the MTA trial, which compared methylphenidate, behavior therapy, and their combination to community care. Total sleep problem, dyssomnia, and parasomnia composites were derived from the Child Behavior Checklist (6–18). Youth completed depression and anxiety ratings, and parents completed ratings of oppositionality and ADHD symptom severity.

Results: General linear mixed effects models (GLMMs) assessed change in sleep composites across treatment. While the combined group exhibited a significant reduction in total sleep problems (z = -5.81, p < .001), both methylphenidate (z = -3.11, p = .001) and behavior therapy groups (z = -2.99, p = .008) exhibited trends towards significance. However, there was no significant reduction in total sleep problems in community care (p = 1.00). There were no treatment differences in dyssomnia change (p = 0.40). Parasomnias decreased significantly for combined treatment (z = -6.92, p < .001) and methylphenidate (z = -3.53, p = .001) groups, but not for behavior therapy (p = 1.00) or community care (p = 1.00). Greater baseline ODD severity predicted less reduction in total sleep problems (z = 2.23, p = .03). Greater baseline inattentiveness severity predicted less reduction in dysomnia (z = 2.34, p = .02). However, there were no significant predictors of change in parasomnias or moderators of change in any sleep composite by treatment group.

Conclusion: Findings suggest the combination of methylphenidate and behavior therapy is more robust at reducing sleep problems compared to either treatment alone or community care. Implications for clinical care are discussed.

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0765
PARENTAL GOALS FOR INFANT AND TODDLER SLEEP
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Introduction: The aim of this study was to assess parent perceptions of their child’s sleep and sleep-related goals, regardless of sleep quality.

Methods: Caregivers (97.6% mothers) of 807 infants and toddlers (birth to 37 mos; M = 16.5 months; 49.0% male) reported on child sleep patterns and problems via an online survey. The survey included an abbreviated version of the Brief Infant Sleep Questionnaire, and a list of potential sleep-related areas of change.

Results: 29.1% of caregivers reported a perceived sleep problem, whereas 90.1% indicated an area of desired change related to their child’s sleep. Overall, parents most commonly wanted their child to sleep for longer stretches overnight (19.4%). An additional 14.1% of parents wanted an earlier bedtime or later morning wake time.