Sleep and daytime function in adults with attention-deficit/hyperactivity disorder: subtype differences.

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Sleep Med. 2013 May 2. pii: S1389-9457(13)00100-7. doi: 10.1016/j.sleep.2013.03.003. [Epub ahead of print]

OBJECTIVES:
Although sleep disorders have been reported to affect more than half of adults with attention-deficit/hyperactivity disorder (ADHD), the association between sleep and ADHD is poorly understood. The aims of our study were to investigate sleep-related variables in adults with ADHD and to assess if any differences exist between ADHD of the predominantly inattentive (ADHD-I) and combined (ADHD-C) subtypes.

METHODS:
We used the Epworth sleepiness scale (ESS), the Pittsburgh Sleep Quality Index (PSQI), and the fatigue severity scale (FSS) to collect data on daytime sleepiness, sleep quality, and fatigue in 126 subjects (45 ADHD-I and 81 ADHD-C subjects).

RESULTS:
Approximately 85% of subjects reported excessive daytime sleepiness or poor sleep quality. The most common sleep concerns were initial insomnia, interrupted sleep, and feeling too hot. When examining ADHD subtype differences, ADHD-I subtypes reported poorer sleep quality and more fatigue than ADHD-C subtypes. Partial correlation analyses revealed that interrelationships between sleep quality, daytime sleepiness, and fatigue differ between ADHD subtypes; in ADHD-I subtypes fatigue was associated with sleep quality, while in the ADHD-C subtypes fatigue was associated with both sleep quality and daytime sleepiness. There also appears to be a subtype×gender interaction that affects the perception of fatigue, as subjective fatigue was markedly higher in ADHD-I women than in ADHD-C women.

CONCLUSION:
Altogether our data indicate that the interplay of variables associated with daytime function and sleep varies between ADHD subtypes. This finding may have considerable relevance in the management and pathophysiologic understanding of ADHD, and thus lead to tailored treatments for ADHD subtypes.