

**NIGHTLY SLEEP ARCHITECTURE IS RELATED TO FREQUENCY OF DAYTIME  
MALADAPTIVE BEHAVIORS IN INDIVIDUALS WITH DEVELOPMENTAL  
DISABILITIES\***

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**Objectives:** Maladaptive behaviors in individuals with developmental disabilities (DD) are prevalent, costly, and resource intensive. Approximately up to 86% of individuals with DD also experience some type of disturbance during sleep. Previous studies have examined the relation between quantity of sleep and maladaptive behaviors. However, little is known regarding the details of sleep organization in respect to the emergence of such behaviors.

**Study Design:** Sleep data and daytime maladaptive behaviors of 23 institutionalized individuals with mental retardation were examined over an eighteen month period. Sleep was observed nightly in 15 minute intervals from 10:45 pm to 6:15 am. The frequency of maladaptive behavior was recorded daily, concurrent to the sleep data. These behaviors included aggression towards others, self-injurious behavior, and property destruction. Sleep patterns were charted to distinguish different categories of sleep architecture. Means of maladaptive behavior per subject were compared to the respective mean of each 15 minute sleep interval.

**Results:** Four distinct sleep categories emerged: 1) no sleep disturbance, 2) delays in onset of sleep, 3) nighttime awakening, and 4) erratic sleep. The highest frequency of challenging behavior was exhibited by subjects in the third category.

**Conclusion:** Preliminary findings suggest a relationship between being awake at specific intervals and frequency of daytime maladaptive behaviors.

\*Supported by award HD048947 from the National Institutes of Health to CAS