## Work time is the largest influence to the duration of a person's sleep

WESTCHESTER, III. Work time is the primary lifestyle factor with the largest reciprocal relationship to a person's sleep time the more hours a person works, the less sleep that he or she gets, according to a study published in the September 1 issue of the journal SLEEP.

The study, authored by Mathias Basner, MD, of the University of Pennsylvania, focused on a total of 47,731 respondents to the American Time Use Survey (ATUS) conducted in 2003, 2004 and 2005. The telephone survey was 15-20 minutes in length, and asked people how they spent their time between $4 \mathrm{a} . \mathrm{m}$. the previous day and $4 \mathrm{a} . \mathrm{m}$. the interview day, including where they were and whom they were with.

According to the results, most waking activities were inversely related to sleep time. The largest reciprocal relationship to sleep on both weekdays and weekends was found for work time. Respondents who slept four-and-a-half hours or less worked an average of 93 minutes more on weekdays and 118 minutes more on weekends than the average sleeper, while those who slept 11-and-a-half hours or more worked an average of 143 minutes less on weekdays and 71 minutes less on weekends than the average sleeper.

These cross-sectional results in a nationally representative sample suggest that compensated work time is the most potent determinant of sleep time, in which case work time should be considered an important factor when evaluating the relationship between sleep time and morbidity and mortality, said Dr. Basner.

Dr. Basner noted that travel time (which composed of work commute time and all other travel time) on both weekdays and weekends was an unexpected second-place factor reciprocally related to sleep time. These data suggest avenues for further research, such as how sleep time may be squeezed by work commutes that are starting earlier in the morning (to work) and/or later in the day (to home), or commutes that are getting longer due to such factors as urban sprawl or traffic volume growing faster than transport capacity, said Dr. Basner. The findings
also highlight how little is known about how non-commute travel, such as to shops, to schools, to religious and social events, or long distance travel might be reducing sleep time, added Dr. Basner.

Short sleep was also moderately related to time spent for socializing, relaxing and leisure on weekends. Short sleepers also spent more time engaged in education, household activities and, for very short sleepers, watching TV. Except for time spent watching TV, which increased with longer sleep times, all waking activities decreased with increasing sleep time.

The differences between weekday and weekend results were minor, except for two activities. Short sleepers spent less time watching TV than respondents with average sleep times on weekends in all sleep categories, and long sleepers spent less time socializing, relaxing and leisure activities than respondents with average sleep times.

The extent to which sleep time was exchanged for waking activities was also shown to depend on age and gender. Sleep time was minimal while work time was maximal in the age group 45-54 years, and sleep time increased both with lower and higher age.

The ATUS is a federally administered, continuous survey on time use in the United States sponsored by the Bureau of Labor Statistics and conducted by the U.S. Census Bureau. The goal of the survey is to measure how people divide their time among life's activities in a nationally representative sample.

Experts recommend that adults get seven-to-eight hours of sleep each night for good health and optimum performance.

Those who suspect that they might be suffering from a sleep disorder are encouraged to discuss their problem with their primary care physician or a sleep specialist.

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SLEEP is the official journal of the Associated Professional Sleep Societies, LLC, a joint venture of the American Academy of Sleep Medicine (AASM) and the Sleep Research Society.

SleepEducation.com, a Web site maintained by the AASM, provides information about the various sleep disorders that exist, the forms of treatment available, recent news on the topic of sleep, sleep studies that have been conducted and a listing of sleep facilities.

For a copy of this article, entitled, American Time Use Survey: Sleep Time and Its Relationship to Waking Activities or to arrange an interview with an AASM spokesperson regarding this study, please contact Jim Arcuri, public relations coordinator, at (708)492-0930, ext. 9317, or jarcuri@aasmnet.org.

