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August 31, 2016

Erin Good
BLS Clearance Officer
Division of Management Systems
Bureau of Labor Statistics
2 Massachusetts Ave, NE, Room 4080
Washington, DC 20212

Dear Clearance Officer Good,

Thank you for the opportunity to provide comments on the proposed extension of the *American Time Use Survey* (81 FR 48849). The Sleep Research Society (SRS) would like to stress its support of a continuation of the Survey (ATUS) and provide guidance on potential improvements.

SRS was established in 1961 by a group of scientists who shared a common goal to foster scientific investigations on all aspects of sleep and sleep disorders. Since that time, SRS has grown into a professional society comprising over 1,300 researchers nationwide. From promising trainees to accomplished senior level investigators, sleep research has expanded into areas such as psychology, neuroanatomy, pharmacology, cardiology, immunology, metabolism, genomics, and healthy living. SRS recognizes the importance of educating the public about the connection between sleep and health outcomes. SRS promotes training and education in sleep research, public awareness, and evidence-based policy, in addition to hosting forums for the exchange of scientific knowledge pertaining to sleep and circadian rhythms.

ATUS provides a wealth of information on how sleep time relates to sociodemographic factors and, importantly, to other waking activities. Although some sociodemographic variables associated with short sleep have been identified, less is known about specific activities that short sleepers trade for sleep that could be targeted to increase sleep duration. Furthermore, the importance of the timing of sleep and waking activities in determining whether or not an individual will sleep short hours has not received enough attention. Intervention programs and educational campaigns can only be successful if they target the right behavior, at the right time of day, and in the right population. Time use surveys provide these crucial insights that cannot be derived from experimental or epidemiological studies.

SRS would like to make a suggestion on how to improve the validity of the survey methodology of ATUS in order to enhance the quality, utility, and clarity of the information to be collected. A fundamental problem is that in ATUS, sleeping is coded as 010101 "Sleeping", 010102 "Sleeplessness", and 010199 "Sleeping not

elsewhere classified". The examples provided for tier 010101 are "sleeping, falling asleep, dozing off, napping, getting up, waking up, dreaming, cat napping, getting some shut eye, and dozing". Some of these examples describe rest or transitions into or out of sleep rather than sleep itself. This fact is ignored by many researchers and scientific papers. Some news articles often report ATUS sleep time estimates that exceed those typically derived from other representative epidemiological surveys. For example, a comparison of ATUS sleep time estimates with self-reported sleep time data for weekdays/workdays from the 2005-2008 National Health and Nutrition Examination Survey indicates that ATUS sleep time overestimates self-reported sleep time by approximately an average of one hour. This difference can only be partly explained by the fact that ATUS covers 24 hour sleep time, while epidemiological surveys typically ask about the duration of the main sleep period.

The experimental and epidemiologic evidence that short sleep is a risk factor for a number of negative health outcomes including cardiovascular disease, obesity, and diabetes is overwhelming. Yet according to representative epidemiologic surveys, 35-40% of the population sleeps less than the recommended seven hours per night required to promote optimal performance and health. Publications based on ATUS stating that "adults typically sleep eight hours or more" thus can send a dangerous public health message by overstating the actual amount of sleep the population receives.

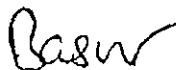
SRS believes that the sleeping category could be further refined into 010101 sleeping (defined as actual sleep) and 010103 resting (defined as activities that qualify as rest or transitions into and out of sleep, like the above mentioned examples "falling asleep, dozing off, getting up, waking up, dreaming, cat napping, and dozing"). By refining the categories, researchers using the 010101 category would get more realistic sleep time estimates. Furthermore, comparing future data to past data would still be possible by combining categories 010101 and 010103 going forward. The Bureau of Labor Statistics may choose a more appropriate method to categorize sleeping and resting, but the SRS definitely suggests distinguishing between these two activities.

Thank you for your time and your consideration of this request. Please consider SRS a resource if BLS has any question or would like any additional information.

Sincerely,



Sean P.A. Drummond
President



Mathias Basner, MD, PhD, MSc
Associate Professor of Sleep and Chronobiology
SRS member