Behavioral Sleep Medicine

Thomas Roth, Ph.D.; Christopher Drake, Ph.D., F.A.A.S.M.; Timothy Roehrs, Ph.D., F.A.A.S.M.

Sleep Disorders & Research Center, Henry Ford Health System, Detroit, MI

Behavior plays a key role in the development and treatment of virtually all sleep disorders. While behavioral medicine in the field of sleep medicine is most often associated with CBTI as a treatment modality for chronic insomnia, this view does not capture the importance of understanding and modifying behavior in sleep disorders medicine. A simple example of this is the daily behavior of bedtime. Too much time in bed, relative to total sleep time, is a contributory factor in the development and perpetuation of insomnia. In contrast, too little time in bed leads to chronic insufficient sleep, exacerbates obstructive sleep apnea, and can elicit parasomnia events. Finally, the timing of bedtime can be a critical element in many circadian rhythm disorders. Other behavioral issues that are important in sleep medicine include factors related to presleep behaviors both in terms of improving sleep (e.g., exercise) or making it worse (e.g. obsessing, consuming alcohol, or caffeine). The influence of daytime behavior is most evident in the exposure to light and dark. In the management of sleep disorders associated with shift work, light/dark exposure is the critical therapeutic intervention. In sleep medicine, like virtually all areas of medicine, the behavior of compliance with treatment recommendations is a critical element in the effectiveness of therapy. A unique aspect of sleep disorders is the use of CPAP in OSA. In CPAP we have a therapy which essentially (assuming there is a patent nasal airway) has 100% efficacy in the treatment of airway obstruction, and yet because of compliance issues it has poor effectiveness.

The question then becomes why are all of these maladaptive sleep behaviors so prevalent? Certainly part of the answer must lie in the fact individuals are not educated about the importance of sleep and good sleep practices. This is true from elementary education in health courses through medical school curricula. When an average person eats the “wrong foods,” he is aware of it. However, when they have inappropriate sleep related behaviors, they typically are not. In the absence of knowledge, personal preference and superstition take over. Yet given the high prevalence of bad sleep practices such as insufficient time in bed and late bedtimes in adolescents there must be more at work than a simple lack of education. There must be some short term “value” to the individual for these

maladaptive behaviors. Why do a substantial number of elderly individuals sit in relative darkness in the evening? Is this an economically motivated behavior? Why do insomniacs spend too much time in bed? Are they desperate to get more sleep because they believe that loss of sleep can have catastrophic consequences? Identification of these “perceived” benefits are needed if we are to motivate true behavior change.

The importance of behavioral issues in the field of sleep is also evidenced by looking at who entered the field early in its evolution. Behavioral scientists like Artie Lubin, Bernie Webb, Rosalind Cartwright, Harold Williams, Bob Wilkinson, and Laverne Johnson, to name a few, were pioneers in the field. That tradition of behavioral researchers making significant contributions to sleep research has had a continuous history of excellence, ranging from Dave Foulkes’ seminal research using dream content as a means of studying cognitive development in children to Arthur Spielman’s classic study on sleep restriction therapy as a treatment of insomnia. Given this broad and important knowledge base, the evolution of a Behavioral Sleep Medicine Society and Journal were a natural result. However, it is critical for behavioral sleep researchers to always remember that to maximize the impact of their work, it is important not simply to talk to each other but to present their work in the broader field of sleep medicine. This includes presenting at the annual sleep meeting and publishing major scientific works across the broad spectrum of sleep-related journals. As sleep medicine evolves from a procedure-based specialty to a knowledge-based specialty, behavioral sleep medicine must play a key role in its evolution.

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Address correspondence to: Thomas Roth, Ph.D., Henry Ford Sleep Disorders Center, 2799 W. Grand Boulevard, CFP-3, Detroit, MI 48202; Tel: (313) 916-5171; Fax: (313) 916-5167; Email: troth1@hfhs.org

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Dr. Roth has served as a consultant for Abbott, Acadia, AstraZeneca, Aventis, AVER, Bayer, BMS, Cypress, Ferrer, Glaxo Smith Kline, Impax, Intec, Jazz, Johnson & Johnson, Merck, Neurocrine, Novartis, Proctor & Gamble, Pfizer, Purdue, Shire,

Somaxon, and Transcept. He has received research support from Cephalon, Merck and Transcept and serves on the Speaker's Bureau with Purdue. Dr. Drake served as a consultant for Teva and has received grant support from Teva and Merck. He also serves on the Speaker's Bureau with Teva, Jazz, and Purdue. Dr. Roehrs serves on the speaker bureau with Pfizer.