Introduction

Definitions, Measurements, and Management in Insomnia

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The articles in this journal supplement are the result of a symposium on insomnia, highlighting the importance of recognition, diagnosis, and appropriate treatment of insomnia. The specific issues addressed, chosen to present the current thinking in this field, include the prevalence and impact of insomnia, advantages and limitations of existing insomnia nosologic systems, measurements of sleep difficulties, the management of chronic insomnia, and issues particular to special populations of insomnia patients including those with depression, the elderly, and those with pain conditions.

The article by Walsh presents data on the prevalence and impact of insomnia and demonstrates that insomnia is a common condition that is associated with substantial socioeconomic impact. Individuals with insomnia experience a gamut of consequences related to their condition. Subjective consequences include impaired mood, poor coping skills, reduced ability to accomplish daily tasks,[1] and poor memory and confusion,[2] while objective ones include evidence of reduced cognitive function,[3,4] higher rates of absenteeism,[5] higher health care utilization,[6,7] and increased accident risk.[8,9] These consequences ultimately carry a substantial economic burden; total costs of insomnia have been estimated to be approximately $100 billion.[10] Despite the prevalence and consequences of insomnia, there is evidence that this condition is underrecognized and undertreated in clinical practice.

Measurement of sleep problems includes the use of subjective self report and objective polysomnographic measures in a laboratory setting. Objective measures are often perceived as more useful in establishing the efficacy of treatments; however, the patient's report of improvement or lack thereof is extremely important and remains the basis of clinical management. Of the existing objective measures of insomnia, such as total sleep time, sleep latency, and wake time after sleep onset, few have been correlated with improvements in next-day functioning or improved outcomes in comorbid medical and psychiatric illnesses. Future directions for measurement in insomnia are discussed in the Roth article, which focuses on the measurement of treatment efficacy in insomnia.

Chronic insomnia is perhaps the greatest challenge in the clinical management of patients with insomnia. The article by Krystal reviews some of the factors that stand in the way of optimal management of this condition, including the absence of a consensus about whether to distinguish chronic from short-term insomnia in clinical practice and how this distinction should be made. Another important consideration is the concerns about long-term use of the medications approved for the treatment of insomnia by the U.S. Food and Drug Administration (FDA), which are due to (1) the absence of research data on longer-term treatment with these agents, (2) concerns about dependence and abuse, (3) FDA approval of these agents for short-term treatment of insomnia, and (4) longstanding clinical guidelines discouraging treatment with these agents beyond the short term.[11,12] The fact that these guidelines, formulated 20 years ago, are now considered obsolete by the National Institutes of Health signals a changing perspective on chronic insomnia management. This change in perspective is based on a number of recent studies, reviewed in this article, which suggest an improved capacity to treat insomnia.

Some evidence suggests that the risk of recreational use and nontherapeutic dose escalation are likely to be low among insomnia patients and may be particularly low with the newer nonbenzodiazepine hypnotics.[13–19] There is also evidence that untreated chronic insomnia leads to significant adverse consequences.[7,20–26] Another important development is the emergence of studies of longer-term treatment with hypnotic agents, including a large-scale 6-month placebo-controlled trial of a nonbenzodiazepine agent, suggesting that insomnia can be treated safely with sustained efficacy.

Of considerable importance are the populations who have insomnia associated with aging, psychiatric disorders, or chronic pain. These conditions are more likely to be associated with chronic sleep maintenance problems. As demonstrated in the Benca, Ancoli-Israel, and Moldofsky article, many of these patients present with

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chronic insomnia that is characterized by sleep maintenance difficulties,[27–33] 2 features that make treatment particularly challenging given currently approved medications and existing guidelines. A strong link clearly exists between insomnia and depression,[7,26,34–38] requiring further research to more fully determine the nature of the interaction. Studies in patients with chronic pain and fatigue syndromes suggest a pattern of mutual exacerbation between sleep disturbance and perception of pain.[39,40] Elderly patients require special consideration since they are more likely to have a greater number of medical illnesses than younger patients and, therefore, are more likely to have daytime impairment associated with their insomnia.

Finally, sleep experts continue to debate the most suitable classification system for insomnia. Existing classification systems have several shortcomings, which are elucidated in the article by Edinger on clinically useful ways to classify insomnia. However, despite the discordance between diagnoses when different classification systems are used,[41] treatment decisions should be guided by diagnostic decisions.[42] Development of an optimal nosologic system for insomnia would facilitate communication among clinicians and researchers, allow for greater diagnostic reliability, result in improved research, and—most importantly—improve the treatment of patients with insomnia.

In conclusion, insomnia, whether primary or secondary to other medical or psychiatric conditions, is associated with a sizable individual burden and significant societal cost, yet the condition is underrecognized and undertreated.[43] Obstacles to adequate diagnosis and treatment of insomnia include difficulties with the use and utility of existing diagnostic classification systems, the dearth of meaningful measurements of treatments for insomnia, challenges faced in longer-term management of chronic insomnia, and unique circumstances encountered in certain populations that make their symptoms more difficult to manage. This supplement and the symposium on which it is based were designed to identify and further elaborate on unmet needs in the classification, measurement, diagnosis, and treatment of insomnia; to explicate the current thinking in the field of insomnia regarding clinical management; and to propose future directions for dealing with these difficulties.

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