EDITORIAL

Assessing Insomnia in Epidemiological Studies: What Do We Need?

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Insomnia is widely recognized to be the most common form of sleep complaint in the general population. This is true across the adult age range, and in every country and region in which sleep problems have been assessed (1). In recent years, there has been increasing focus on defining insomnia not just as a complaint, but as a specific disorder characterized by sleep symptoms that occur with a certain frequency, severity, duration; adequate opportunity for sleep; and (most importantly) interference with daytime function. This broad view of insomnia as a clinical disorder is the one endorsed by the US National Institutes of Health State of the Science Conference, "Manifestations and Management of Chronic Insomnia in Adults," (SOS) (2) and by the Research Diagnostic Criteria for Insomnia (RDC) (3) and the International Classification of Sleep Disorders, Second Edition (ICSD-2) (4). One assumption underlying these consensus documents is that sleep symptoms of a certain severity are most likely to be associated with health consequences and to warrant treatment. In addition, defining insomnia this way limits the prevalence from approximately 30-40% of the adult population to 5-10% -- a still large, but much more plausible figure for estimating the proportion of the population that may warrant intervention (1).

Despite the broad consensus regarding

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insomnia definitions, epidemiological studies continue to face an important challenge: The absence of a single, simple, and widely accepted tool for case definition. Very few epidemiologic studies have defined insomnia as recommended by the SOS Conference, ICSD-2, or RDC. More commonly, a simple symptom checklist has been used, with insufficient regard for duration, severity, sleep opportunity, and waking consequences.

It is within this context that the Arabic Scale of Insomnia (ASI) has been developed. In this issue, Abdel-Khalek reports psychometric data supporting the test-retest reliability, internal consistency, and converegent validity of the ASI. These data represent an important step toward standardizing insomnia case definitions. The ASI assesses sleep and waking symptoms of insomnia over a one-month reporting frame, and the factor analysis supports the importance of including both sets of symptoms. The ASI has the additional advantage of being short, easy to understand, and easy to score.

On the other hand, it is also worth keeping in mind the further work that will be needed to further validate the ASI. The participants in this report included convenience samples of different ages, rather than actual patients with clinical diagnoses of insomnia, and the ASI was not validated against the current gold standard of a clinical interview. Related to this, the current data also do not indicate a cut-off score that could be used for actual

case definition. The instrument has a continuous range of scores, viewing insomnia as a dimensional phenomenon rather than a categorical one; dimensional characteristics are typically more useful for characterizing the severity of a phenomenon in groups of subjects rather than identifying "cases." A particularly difficult aspect of insomnia scales is developing items to assess whether or not an individual has adequate opportunity for sleep. To my knowledge, no current insomnia scale (including the ASI) attempts to make this determination. One particular strength of the ASI is that its items were developed with input from multiple professionals. However, it is becoming increasingly important in the development of new rating scales and diagnostic tools to also consider patient input; this may be an additional useful step for the ASI. Finally, the ASI does not attempt to determine specific quantitative characteristics of sleep, e.g., specific sleep latency or amount of wakefulness after sleep onset. Although such "quantitative" aspects of sleep have long been included in definitions of insomnia, there is substantial evidence that insomnia is better defined by the distress associated with falling asleep and awakenings, rather than by any specific duration of these phenomena. In this regard, the ASI's focus on symptom intensity is quite appropriate.

There is no perfect instrument for assessing any clinical phenomenon or disorder. But in the field of insomnia research, the ASI is a welcome addition which deserves further study and application, particularly in epidemiological studies.

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