Definition of Acute Insomnia:

Diagnostic and Treatment Implications

Charles M. Morin[1,2]

[1]Université Laval, Québec, Canada

[2]Centre de recherche Université Laval/Robert-Giffard, Québec, Canada

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Correspondance: Charles M. Morin, Ph.D., Université Laval, 2325, rue des Bibliothèques, Pavillon F.A.S., Québec, Québec, CANADA G1K 0A6. Phone: (418) 656-3275; Fax (418) 656-5152; Email: cmorin@psy.ulaval.ca

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The experience of acute insomnia is probably a universal phenomenon during the course of human life, particularly when exposed to a significant life event, a sudden illness, or a rapid change in sleep schedule. Whether such sleep difficulties remain time-limited or evolve into a chronic problem is likely to vary across individuals as a function of predispositions, coping skills, and life circumstances. Should acute insomnia be considered a normal reaction to stress or a sleep disorder in need of treatment? What is the best case definition of acute insomnia in terms of onset, duration, frequency and intensity? These questions have important implications for diagnosis and treatment of insomnia as well as for tracking its natural history.[1,2]

The paper by Ellis and colleagues in this issue[3] presents a critical appraisal of the construct of acute insomnia. Current conceptualizations of acute insomnia according to three diagnostic classifications (*Diagnostic and Statistical Manual of Mental Disorders-4th edition* [DSM-IV-TR],[4] *International Classification of Diseases* [ICD-10],[5] the *International Classification of Sleep Disorders* [ICSD-2],[6] are summarized and a discussion of how this condition fits within selected theoretical models of insomnia is presented. After a review of relevant evidence derived from cross-sectional and longitudinal studies, the authors propose several criteria to define acute insomnia along with suggestions for future research. Overall, this is a very informative paper addressing a topic that has received little attention relative to that of chronic insomnia. It is also timely in view

of the upcoming revisions of DSM-V,[7] ICD, and ICSD diagnostic nosologies.[6]

This editorial addresses selected issues related to the proposed

conceptualization of acute insomnia and some of its implications for the

epidemiology, diagnosis, and treatment of insomnia.

The proposed diagnostic criteria regarding duration, frequency, and

severity of symptoms provide a precise operational framework to study acute

insomnia. These criteria are in general agreement with those used in current

classifications of chronic insomnia, with the exception of duration which is

naturally shorter and specific to acute insomnia. Indeed, the most important

criteria distinguishing acute from chronic insomnia are concerned with duration

and temporal course of sleep difficulties. Within the suggested 3 days to 3

months temporal window, a useful categorization is made between acute (3-14

days), transient (2-4 weeks), and sub chronic insomnia (1-3 months). These time

points, while somewhat arbitrary, provide a useful continuum/dimensional metric

for tracking different temporal stages of insomnia before it reaches a chronic

threshold. The required minimum frequency of three nights per week with sleep

difficulties is consistent with standard definitions of chronic insomnia while the

qualitative (mild, moderate, severe) and quantitative severity criteria (sleep onset

latency and wake after sleep onset > 30 min) offer additional helpful indicators for

setting caseness threshold.

Although the aforementioned criteria are extremely valuable to

operationalize the construct of acute insomnia, it is questionable whether the

additional requirement to identify a precipitant of sleep difficulties resulting in a

significant reduction of quality of life is necessary or even relevant. For instance, what should a clinician (or investigator) do when all other criteria are fulfilled but there is no identifiable trigger impairing quality of life? Should we conclude then that we are not dealing with a case of acute insomnia? In a clinical case series of 345 treatment-seeking patients, a substantial proportion (21.7%) of this clinical sample could not recall any specific precipitating event of their insomnia.[8] Should these patients not be diagnosed with insomnia and be denied treatment?

There is also an assumption with the proposed definition that the precipitating event should be of a psychosocial origin. Should someone who develops acute sleep disturbances in the context of a rapid change in schedule (i.e., jet lag) or in response to the sudden onset of a medical illness be disqualified for the diagnosis of acute insomnia? The latter scenario is a common occurrence among older adults, a segment of the population who uses medication for insomnia more than any other age groups. The need to identify a specific precipitant is somewhat analogous to the requirement in DSM-IV to identify the origin of chronic insomnia in order to make a differential diagnosis between primary and secondary insomnia. It is often difficult in practice to determine whether chronic insomnia is primary or secondary in nature and it may also be hard in some instances to identify the origin of acute insomnia. To prevent erroneous causal attributions and, potentially under treating secondary insomnia, DSM-V will no longer require a differentiation between primary and secondary insomnia; a diagnosis of insomnia disorder ,without inference about its origin, will be made whenever criteria are met. [7] Thus, it would seem preferable

to use a similar paradigm for the definition of acute insomnia and stay away from the need to identify a specific precipitating event. Otherwise, acute insomnia may remain an under diagnosed and under treated condition.

Whether there is consensus or not with all proposed criteria, the definition of acute insomnia has important implications for treatment-decision making. For instance, the authors make a good point that acute insomnia is not necessarily pathological and may at times be a simple variation of normal sleep. The natural question then is whether treatment should be initiated only when insomnia reaches pathological threshold (i.e., becomes a chronic problem)? Probably not! Distress is also an important factor to consider when initiating therapy. For instance, therapy may well be indicated for acute sleep disturbances arising in the context of stressful life events (e.g., separation, death, illness), if only to cope more adaptively during the day with such life events and, possibly, to prevent the development of more persistent sleep difficulties. In fact, treatment in primary care is often initiated in the context of acute insomnia arising under such circumstances.[9] Perhaps then the more important question is when during the initial acute episode of insomnia (3 days to 3 months) is it indicated to initiate treatment and which treatment to use? Clinical guidelines would be helpful in this regard as would investigations of the impact of treating acute insomnia on long-term outcomes (e.g., risk of chronicity, morbidity).

The definition of caseness also has important methodological implications for future epidemiological studies. These studies have traditionally produced very high and quite variable incidence and prevalence rates of insomnia,[9-11] a situation

most likely due to the use of various definitions and assessment procedures across investigations. A more specific and operational definition of acute insomnia is likely to yield more accurate estimates of the true incidence and prevalence of insomnia as a function of its duration (i.e., acute, transient, chronic).

A standardized definition of acute insomnia is also likely to be informative for future studies of the natural history of insomnia. With a clear differentiation between cases of acute and chronic insomnia and cases of insomnia disorder and subsyndromal symptoms, it will facilitate tracking the course transition between normal sleep, acute sleep difficulties, recurrent episodes of insomnia, and chronic insomnia. It would be helpful here to add a minimum interval (e.g., one month) without sleep difficulties to separate the end of an insomnia episode from the onset of a recurrent episode. Indeed, even when insomnia is a chronic problem, individuals often recall some periods of time with partial or complete remission. With a clear definition of acute insomnia, it will be easier to characterize whether insomnia is a recurrent or persistent problem.

Of course, longitudinal and prospective, population-based studies, with repeated and frequent assessments are needed to examine the natural course of insomnia and its different trajectories over time (i.e., incidence, persistence, remission). A recent study showed that the most frequent trajectory over a 3-year period was persistent insomnia for both individuals with a full insomnia disorder and those with subsyndromal insomnia at baseline; yet, individuals with

subsyndromal insomnia at baseline were 3 times more likely to remit than to develop a chronic disorder during the course of the 3-year interval.[12]

Additional longitudinal studies are also warranted to identify predisposing and precipitating factors of acute insomnia as well as mediating and moderating factors that govern different trajectories over time. There is evidence that a personal history of insomnia, even a single episode, is an important risk factor for future insomnia.[13] Studies of high risk individuals exposed to major life events (e.g., cancer diagnosis, natural disasters) would be very informative to validate hypothetical risk factors, monitor the first onset and early development of insomnia, and characterize individuals for whom insomnia will end with a single acute episode and those for whom it will become a more recurrent or persistent condition over time. In turn, such studies would be informative in guiding the development of effective prevention and intervention programs to avert long-term negative outcomes.

In summary, the paper by Ellis and colleagues provides a useful operational framework of acute insomnia that should help standardize current insomnia definitions. Most importantly, it adds an important dimensional measure to current categorical diagnostic systems. Despite their face validity, the proposed criteria need formal validation through studies examining how varying cut-points for the different criteria (e.g., duration, frequency, precipitating event) alter indices of sensitivity and specificity for detecting new cases of acute insomnia. Such research would prove extremely valuable as evidence for guiding

workgroups in their revisions of diagnostic classifications of insomnia (DSM,

ICSD, ICD).

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