

Deconstructing the DSM-5

By Jason H. King

Assessment and diagnosis of sleep-wake disorders

According to Arline Kaplan's article "Catching up on sleep: From comorbidity to pharmacotherapy" that appeared in *Psychiatric Times* in August 2013, not only is obstructive sleep apnea (a sleep-wake disorder) linked with coronary artery disease, heart failure, systemic hypertension, stroke and diabetes, but it is also a significant risk factor for depression.

On the flip side, psychiatric disorders are highly comorbid with sleep-wake disorders. This is why the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)* uses the terminology "coexisting with" or "comorbidity" instead of the previous edition's terminology of "related to" or "due to."

For example, Bogdan Ioan Voinescu and colleagues in 2012 published "Sleep disturbance, circadian preference and symptoms of adult attention deficit hyperactivity disorder (ADHD)" in the *Journal of Neural Transmission*. They reported that study "subjects with probable ADHD complained more frequently of sleep disturbance of the insomnia type (more than 50%) and reported shorter sleep durations and longer sleep latencies and more frequent unwanted awakenings.

Individuals likely to suffer from ADHD and/or insomnia disorder were significantly more evening oriented than controls. Inattention was associated with both insomnia and eveningness, while impulsivity was associated with poor sleep. Hyperactivity and sleep timing were associated with poor sleep only in probable insomnia group."

Such research results support the DSM-5's new pediatric, developmental criteria and text that are integrated on the basis of existing neurobiological validators and genetic evidence. They also bolster the DSM-5's greater emphasis on the dynamic relationship between sleep-wake disorders, certain mental or medical conditions (for example, Alzheimer's disease and Parkinson's disease) and substance use disorders.

As I review the DSM-5, I find the following mental health disorders have sleep-wake problems embedded in the diagnostic criterion:

- Bipolar I (manic symptoms) and bipolar II (hypomanic symptoms): Decreased need for sleep, usually rested after three hours of sleep
- Major depressive disorder: Insomnia or hypersomnia nearly every day, with insomnia and loss of energy being the most uniformly reported Criterion A symptoms
- Persistent depressive disorder (dysthymia): Insomnia or hypersomnia
- Premenstrual dysphoric disorder: Hypersomnia or insomnia

- Separation anxiety disorder: Repeated nightmares involving the theme of separation
- Generalized anxiety disorder: Sleep disturbance (difficulty falling or staying asleep, or restless, unsatisfying sleep)
- Posttraumatic stress disorder: Sleep disturbance
- Acute stress disorder: Sleep disturbance
- Alcohol, cannabis, opioid, sedative, hypnotic, anxiolytic, stimulant or tobacco withdrawal: Insomnia, hypersomnia or sleep difficulty (for example, insomnia or disturbing dreams)
- Caffeine intoxication: Insomnia

A further review of the DSM-5 reveals that the following mental health disorders tend to coexist with and/or exacerbate sleep-wake disorders:

- Autism spectrum disorder
- Attention-deficit/hyperactivity disorder
- Schizophrenia spectrum and other psychotic disorders
- Panic and other anxiety disorders
- Obsessive-compulsive and related disorders
- Adjustment disorders
- Dissociative disorders
- Somatic symptom and related disorders
- Feeding and eating disorders
- Elimination disorders
- Amphetamine or other stimulant use disorders
- Neurocognitive disorders
- Persistent complex bereavement (see DSM-5 pages 789-792)

In summary, some form of sleep-wake disorder or sleep disturbance symptom is present in most, if not all, of our counseling clients across the life span. For this reason, all counselors should carefully read Catherine Milner and Kathryn Belicki's article "Assessment and treatment of insomnia in adults: A guide for clinicians," published in the Spring 2010 *Journal of Counseling & Development*, and actively incorporate the associated psychological approaches into their clinical treatment planning. As I read their article, I find Table 2, "Overview of Factors That Contribute to Insomnia," to be very clinically enlightening.

The new landscape

The DSM-5 presents an entirely new conceptualization and organization of 10 sleep-wake disorders. First, because both arousal (wake) cycles and sleep cycles become dysregulated in these disorders, the word "wake" has been added to the previous DSM title of "sleep disorders." The "sleep-wake" title also aligns with common language used by sleep-related

disorder clinics and in descriptive literature. All of the sleep-wake disorders share resulting daytime distress and impairment as core features.

Second, epidemiological, neurobiological and interventions research influenced organization of the DSM-5 sleep-wake disorders chapter. It facilitates client differential diagnosis of sleep-wake complaints (necessitating a multidimensional approach) and clarifies when referral to a sleep specialist for further assessment and treatment planning is indicated.

This contrasts with the previous DSM edition's effort to simplify sleep-wake disorders classification and aggregated diagnoses under broader, less differentiated labels that were not necessarily research or clinically informed. Ironically, the sleep disorders chapter in the DSM-IV-TR was not prepared by experts in sleep medicine, but rather by mental health professionals and general medical clinicians.

Third, biological validators are essential in confirming the presence of a sleep-wake disorder independent of a prominent mood, anxiety, psychotic or substance use disorder. This increased emphasis on medical testing requires all sleep-wake disorders except for insomnia and hypersomnolence to be confirmed by polysomnography (a multiparametric test used in the study of sleep and as a diagnostic tool in sleep medicine), quantitative electroencephalographic analysis (numerical examination of electrical activity along the scalp and associated behavioral correlates) or laboratory results indicating a deficit of orexin (a neurotransmitter that regulates arousal, wakefulness and appetite).

Fourth, counselors are to use the DSM-5 child or adult Level 2 Sleep Disturbance Patient-Reported Outcome Measurement Information System (PROMIS) Short Form (located at psychiatry.org/practice/dsm/dsm5/online-assessment-measures). This reliable and precise instrument assesses self-reported perceptions of sleep quality, sleep depth and restoration associated with sleep. This includes perceived difficulties and concerns with getting to sleep or staying asleep, as well as perceptions of the adequacy of and satisfaction with sleep.

Counselors should understand that sleep disturbance does not focus on symptoms of specific sleep disorders, nor does it provide subjective estimates of sleep quantities (for example, total amount of sleep, time to fall asleep or amount of wakefulness during sleep). The sleep disturbance short form is generic rather than disease specific, and it assesses sleep disturbance during the past seven days in clients age 18 and older.

Charles F. Reynolds III, chair of the DSM-5 Sleep-Wake Disorders Work Group, told *Psychiatric News* in 2012 that use of dimensional assessment measurements, such as the PROMIS, "speaks to the concept of measurement-based care, a pervasive theme that has informed the entire DSM-5. Clinicians will see in the accompanying text a listing of useful dimensional measures of sleep impairment to help them understand how troublesome the symptoms are and to measure improvement as patients go through treatment. The dimensional measures will also help researchers correlate measures of severity with underlying brain dysfunction."

Fifth, the DSM-5 mirrors sleep-wake disorder conceptualizations contained in the American Academy of Sleep Medicine's second edition of the International Classification of Sleep Disorders (ICSD-2). This primary diagnostic, epidemiological and coding resource for clinicians and researchers in the field of sleep and sleep medicine has historical roots in the European Sleep Research Society, the Japanese Society of Sleep Research and the Latin American Sleep Society.

Because the ICSD-2 was published in 2005, the DSM-5 reflects more recent pathogenic process evidence for parsimonious and credible sleep-wake phenotypes, while the ICSD-2 contains many more sleep-wake disorder types than the DSM-5.

Sixth, counselors will find an expanded listing of descriptive specifiers (details to inform treatment planning), course specifiers (time frames related to symptom onset or symptom absence) and severity specifiers (rating the intensity, frequency, duration or symptom count) for each of the sleep-wake disorders. Examples of descriptive specifiers include "with mental disorder," "with medical condition" and "with another sleep disorder." Examples of course specifiers include episodic, persistent, recurrent, acute and subacute. Examples of severity specifiers include mild, moderate and severe (based on quantified day-time alertness, cataplexy, apneas, hypoxemia and hypercarbia).

As a whole, these six changes promote clinical judgment and will help counselors to experience feasibility. With these conceptual changes in mind, let's examine the practical and categorical changes to sleep-wake disorders in the DSM-5.

Circadian rhythm sleep-wake disorders contain six types: delayed sleep phase type, advanced sleep phase type, irregular sleep-wake type, non-24-hour sleep-wake type, shift work type and unspecified type. Please note that jet lag type has been removed from the DSM-5.

Under insomnias (problems with initiating/maintaining sleep), primary insomnia and insomnia related to another mental disorder (both found in the previous edition of the DSM) have become insomnia disorder.

Primary hypersomnia and hypersomnia related to another mental disorder have become hypersomnolence disorder.

Narcolepsy now requires either the presence of cataplexy (sudden loss of muscle tone), hypocretin deficiency as measured using cerebrospinal fluid or REM sleep latency deficiency as measured using polysomnography. This disorder also has five new descriptive specifiers, each with its own diagnostic code.

Breathing-related sleep disorder, found in the DSM-IV-TR, becomes the classification title for this section of the sleep-wake disorders chapter, and the disorder itself is now designated as obstructive sleep apnea hypopnea. New for the DSM-5 are obstructive sleep apnea hypopnea, central sleep apnea and sleep-related hypoventilation.

Under parasomnias (abnormal behavior/physiological events), sleepwalking disorder and sleep terror disorder have become non-rapid eye movement sleep arousal disorder.

Parasomnia not otherwise specified is now known as rapid eye movement sleep behavior disorder.

Dyssomnia not otherwise specified is now known as restless legs syndrome

Case study: Jasmine

I worked with Jasmine, a 36-year-old Caucasian woman who is married and has four children, last year. Jasmine reported a history of major depression (with two to three episodes of intense suicidal ideation) and generalized anxiety disorder. Results from the Adult ADHD Self-Report Scales (ASRS) indicated possible ADHD combined presentation.

Results from the psychometric Conners' Continuous Performance Test II confirmed the presence of a mild to moderate ADHD combined presentation profile. Psychological testing further indicated the moderate presence of social communication/social interaction deficiencies and the mild presence of restricted/repetitive behaviors and narrow interests/activities as manifest in autism spectrum disorder.

Despite pharmacological (both prescription and over the counter) and psychological (sleep hygiene and behavioral-focused) interventions, Jasmine continued to report daytime sleepiness, fatigue and unrefreshing sleep throughout the week, lasting for many months. This resulted in functional impairment with employment obligations and interpersonal relationships.

In the spirit of the DSM-5 and in collaboration with her general practitioner, I referred Jasmine to a local sleep center to receive formal sleep disorder testing (polysomnography). This was done to confirm the presence of an independent sleep disorder outside of her depression and anxiety symptoms.

The resulting sleep study report included the following excerpts:

This is 36-year-old female patient with a past medical history that is remarkable for gastric reflux, allergies and asthma. Patient is overweight with a BMI (body mass index) of 26.31. There is a longstanding history of: frequent awakenings, use of sleeping pills, frequent difficulty waking up, nonrestorative sleep, excessive daytime sleepiness, nasal congestion, frequent loud snoring, palpitations, night sweats, and waking up with muscle paralysis.

Patient complains of excessive daytime sleepiness with an Epworth Sleepiness score that is abnormal at 14 out of 24. Total sleep time is adequate at 8 hours per night. Patient denies smoking and drinking alcohol. Current medications include: Pantoprazole, Simvastatin, Amitriptyline, Loratadine and Fluticasone. As such, an overnight sleep study was ordered for evaluation of an underlying sleep-related breathing disorder.

Interpretation:

- Obstructive apneas (suspension of external breathing) of 17.1/hour associated with oxygen desaturation to as low as 72%. This is consistent with the diagnosis of moderate Obstructive Sleep Apnea.
- Sleep-related hypoventilation/hypoxemia due to sleep apnea is present.
- Multiple factors such as obesity, hypothyroidism and structural/obstructive abnormalities in the upper airways can be contributory. An appropriate evaluation and management of these conditions can be helpful.
- Severe initial insomnia. This could be secondary to first night effect. Clinical correlation is needed.

Recommendations:

- Continuous positive airway pressure (CPAP) therapy should be offered to this patient given the risk of stroke and the significant daytime sleepiness. As such, a second overnight sleep study for CPAP titration is strongly recommended. If daytime sleepiness persists despite adequate CPAP therapy, then further evaluation for hypersomnolence should be considered. Close clinical follow-up is strongly recommended.
- Positional therapy is recommended for this patient. Patient should be advised to sleep with the head elevated. In addition, one or more tennis balls can be placed in the back pocket of a sleeping shirt to prevent sleeping in supine position. Close clinical follow-up is strongly recommended.

Sample DSM-5 diagnosis

Putting it all together, I developed the following DSM-5 diagnostic conceptualization:

- Moderate obstructive sleep apnea-hypopnea (see DSM-5 pages 378-383)
- Relationship distress with spouse (see DSM-5 page 716)
- Moderate major depressive disorder, recurrent
- Mild idiopathic sleep-related hypoventilation (see DSM-5 pages 387-390)
- Mild attention-deficit/hyperactivity disorder combined presentation
- Mild generalized anxiety disorder
- Autism spectrum disorder, without accompanying intellectual impairment and without accompanying language impairment; requiring substantial support with social communication and social interaction; requiring support with restricted repetitive behaviors, interests and activities

Until next month, be well!

Bio

Jason H. King is core faculty in the CACREP-accredited mental health counseling program at Walden University. He is a state-licensed and national board certified clinical mental health counselor and an AMHCA diplomate and clinical mental health specialist in substance abuse and co-occurring disorders counseling. He received the 2012 AMHCA Mental Health

Counselor of the Year Award. He provides face-to-face and video trainings on the DSM-5.
Visit him at mellivoragroup.com.
Letters to the editor: ct@counseling.org