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DSM-5: An Introduction

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More than a half-million copies of the new edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)* have been sold since its release nearly a year ago. That's more than all the psychiatrists, psychologists, and social workers in the United States combined. This suggests that many nonspecialists and members of the public are buying the manual.

"I've long involved family members in the diagnosis and treatment of [behavioral health] patients. DSM-5 gives them a tool to help understand what is going on. Knowledge is not dangerous. Providing information to the families and involving families in treatment plans is very important. Making DSM-5 accessible was one of our goals, and it seems as if we've been successful," says David Kupfer, MD, who served as chair of the DSM-5 Task Force.

When developing DSM-5, the primary goal was to create a document with its basis in science and experience, and that would lay the groundwork for improved patient care. This process included professionals from the fields of psychiatry, psychology, and other medical specialties.

This diverse team covered a range of topics, not just disorders, but ways of thinking about disorders, so they could be could grouped differently and the diagnostic criteria considered differently. This work led to the publishing of 200-250 peer-reviewed articles and nine books.

The timing of DSM-5 also was strategic. DSM-IV and ICD-10 were published around the same time (in the early 1990s), and ICD-11 is currently being developed. Members of the DSM-5 and ICD-11 work groups agreed to create overlap between disorders and organizational structure of DSM-5 and ICD-11, so they might complement rather than conflict with each other.

In the next issues of *UPMC Synergies*, we will look at some of the major changes reflected in DSM-5. This issue includes a full overview of DSM-5, as well as more detailed reviews of sleep/wake disorders and mood disorders.

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DSM-5 Overview

Revising the DSM

Revising DSM-5 was not a simple task. The process took more than a decade, starting with three conferences to develop the broad outline of a research agenda.

The original meetings were followed by 13 international conferences held in areas from Mexico City to London to Beijing to gather as much expertise as possible. These conferences included international scientists, as well as the World Health Organization (WHO), the National Institute of Mental Health (NIMH), the National Institute on Drug Abuse (NIDA), and the National Institute on Alcohol Abuse and Alcoholism (NIAAA).

The outcome was the formation of 13 work groups, primarily based on the classifications of mental disorders in previous editions of the DSM. Work groups had about a dozen members, each with their own advisors. The result was that more than 500 mental health professionals from around the world had input in the development of DSM-5.

The wide range of experience led to a variety of ideas and approaches for the work groups to consider. Every aspect of DSM-IV could be reviewed, but it was important to have a threshold to consider changes. Guidelines were established for any modifications, and all proposed changes were submitted to special committees for review. Similar to submitting a grant, a very rigorous, fairly long process was implemented to reach consensus on the recommendations for DSM-5.

Across the Lifespan

The format and organization of DSM-5 were modified to make information easier to access. The primary difference compared to DSM-IV is the increased focus on development across the lifespan.

Since development is a lifelong process, earlier DSM-5 chapters talk more about neurodevelopmental issues. Then, within each subsequent chapter, disorders that occur earlier in life are listed first so that there is a consistent theme of development throughout the book.

Gender and Culture

A second theme throughout the manual is the emphasis on two critical factors — gender and culture. The work groups focused on differences in symptom frequency or prevalence of a disorder between men and women, boys and girls.

A special study group added more cultural perspectives. The DSM-5 includes interview guides to help clinicians get a better cross-cultural assessment of mental health issues. For example, Hispanics who live in Puerto Rico, New York, Colorado, or California have very different cultures, adding more complexity to the assessment process.

Multi-Axial System

In earlier editions of the DSM, diagnoses were made on the multi-axial system:

- Axis I – psychiatric diagnosis
- Axis II – included mental retardation and mental disorders
- Axis III – medical disorders

In DSM-5, the multi-axial system was eliminated, and everything was moved over to Axis I. The single-axis system allows for better integration of medical and psychiatric conditions.

New Name

An obvious change to DSM-5 is in the name — from the Roman numeral IV to the Arabic 5. There is a sound basis for a seemingly cosmetic change:

- The "5" targets the younger population which is accustomed to designations on the decimal point system (2.0, 5.0, 6.0).
- It will be easier to update the manual as more study results become available and disorders set aside for further study become better defined.

With the new naming convention, DSM-5 can be updated without redoing the entire manual (e.g. DSM-5.1).

Electronic Availability

When work on the DSM-5 began, the term "app" barely existed. Now, clinicians rely on apps on a daily basis. If information is needed in an emergency room, the DSM-5 Diagnostic Criteria Mobile App can be accessed immediately.

DSM-5 Controversy

Some changes to DSM-5 were the source of controversy. Physicians and other health care professionals need to review the manual themselves in order to determine how the changes will impact their own clinical behaviors.

One example of this controversy is related to Asperger's Syndrome. News reports have said that the diagnosis no longer exists, but this is misleading. The diagnosis is not included in DSM-5 because no scientist or clinician was able to separate Asperger's — by accepted criteria — from high-functioning autism. If someone was previously diagnosed with Asperger's, the diagnosis can be kept for that individual, or if a clinician wants to diagnose Asperger's, he or she certainly can.

Sleep/Wake Disorders

The Sleep/Wake Disorders Work Group for DSM-5 included psychiatrists, psychologists, epidemiologists, neuroscientists, cardiologists, and other specialists, because sleep cuts across so many traditional specialties. The goal was to translate the science into a clinically useful format for the non-sleep expert.

"Sleep is a very complicated field, very sophisticated medically, but we wanted to give general mental health clinicians, who are not experts in sleep/wake disorders, as well as general practitioners, internists, family physicians, and pediatricians, a product that would be easy for them to use," explains Charles Reynolds, III, MD, chair of the Sleep/Wake Disorders Work Group. "Our hope was that we would be able not only to teach people about differential diagnosis, but also to help them recognize when referral to a sleep specialist could be important."

Changes to Insomnia Disorder

In the sleep/wake chapter, the major conceptual changes impacting clinical practice were made within insomnia disorder. The core clinical features that define sleep/wake disorders concern dissatisfaction regarding the quality, timing, and amount of sleep, resulting in daytime distress and impairment.

Sleep dissatisfaction did not have as prominent a position in the old definition of insomnia. Complaints such as trouble falling asleep or staying asleep were considered significant. Now sleep dissatisfaction is emphasized because it drives help-seeking behavior.

This is challenging for some sleep clinicians to accept, but there are large epidemiological databases to support it. The strongest correlate with help-seeking behavior is dissatisfaction with the amount and quality of sleep. In DSM-5, the core clinical criteria that define sleep/wake disorders are quantified. For example:

- Timing – at least three times a week
- Duration – at least three months
- Amount – an amount of sleep that results in daytime distress and impairment

Causal Attribution

Another change that caused some controversy was dropping the concept of "causal attribution" and adopting a framework that focused on coexisting disorders. For example, a patient may have both an insomnia disorder and be likely to have a common mental disorder like major depression. To get the patient to an optimal outcome, the clinician needs to focus on and appropriately manage both conditions.

The shift away from causal language is because the relationship is not that A causes B, but rather that A and B are interrelated, and each makes the other worse. This is also why DSM-5 moved away from the term "primary insomnia," inherent in DSM-IV. Now it's diagnosing the insomnia disorder then specifying coexisting psychiatric and medical conditions. Initially, this can be a difficult adjustment to make. The idea is not for clinicians to get hung up on cause and effect, because often we don't know whether A causes B, or vice versa, but all of the evidence shows they interact and mutually exacerbate. If clinicians can help both conditions, the patients have the best chance of achieving and maintaining an optimal outcome.

Biological Validators

The use of biological validators marks another major change in the sleep/wake disorders. In sleep disorders there are lab tests that can validate diagnoses, particularly disorders such as excessive sleepiness, breathing-related sleep disorders, or restless leg syndrome. Patients can be tested in the sleep lab, where objective data to validate diagnoses and distinguish one condition from another is generated.

This is a key difference between sleep/wake disorders and the other 12 work groups, which depend solely on clinical presentation and history. Laboratory validators were not used in previous editions of the DSM, even though tests existed and had been validated.

Lifespan Perspective

Another modification, impacting all of DSM-5, is that sleep/wake disorders incorporates a lifespan-oriented

Sleep/Wake Case Study

AJ, a 30-year-old graduate student with long-standing asthma, visited a psychiatrist to discuss his problem staying asleep.

After having no problems falling asleep or staying asleep his entire life, four months earlier, he started waking up at 3 a.m. every day, no matter when he went to sleep. As a result, he felt "out of it" during the day and had trouble completing his work. He began worrying that he wouldn't be able to finish his dissertation because of exhaustion. He reported a history of three years of psychodynamic psychotherapy in his early 20s.

A physician assistant at the university's student health service prescribed a sedative, which didn't help. Falling asleep was never the problem, so AJ changed his behavior; not drinking coffee after 2 p.m., and restricting his tennis playing to early morning. He continued to have wine with dinner, because he felt it helped him sleep.

In talking with the psychiatrist, AJ didn't appear tired but said he scheduled the visit early in the day. He did not appear sad or on edge, but acknowledged a feeling of ongoing, low-level anxiety, blaming the sleep issues that were interfering with his work and his relationship with his fiancée.

Diagnosis: Insomnia Disorder

AJ reports four months of dissatisfaction with his sleep: difficulty staying asleep and early awakening most nights, daytime fatigue, difficulty concentrating, mild symptoms of anxiety, and interpersonal and vocational impairment. He does not appear to exhibit symptoms of other medical, psychiatric, sleep, or substance use disorders.

AJ meets the DSM-5 clinical criteria for insomnia disorder.

The treatment approach includes:

- Determining if the way the patient uses asthma medication could be contributing to insomnia
- Exploring AJ's three years in psychodynamic psychotherapy to determine whether his insomnia is related to an earlier mood or anxiety disorder
- Investigating a family history of mood, anxiety, substance use, or sleep disorders
- Asking the patient to keep a two-week sleep-wake diary
- Obtaining a history from his fiancée to determine sleep-related pathologies such as apnea, loud snoring, leg jerks, non-REM, or REM parasomnias
- Documenting the severity of sleep complaint with self-report inventory

As illustrated here, DSM-5 moved away from categorizing "primary" or "secondary" forms of insomnia disorder. Instead, DSM-5 mandates concurrent specification of coexisting conditions (medical, psychiatric, and other sleep disorders) for two reasons:

1) To underscore that the patient has a sleep disorder warranting independent clinical attention, in addition to the medical or psychiatric disorder present.
2) To acknowledge bidirectional and interactive effects between sleep disorders and coexisting medical and psychiatric disorders.

This reflects the shift away from making causal attributions. This is important because there is limited empirical data to support such attribution, and optimal treatment requires attention to both conditions.

perspective. Diagnoses take into account the patient's age, from pediatrics to geriatrics, and this factor may result in a change in the differential diagnosis.

Referral to a Sleep Specialist

DSM-5 can support nonsleep clinicians in appropriately referring to a sleep medicine specialist. The strongest indication for referral is severe daytime sleepiness, which puts the patient in harm's way, for example, falling asleep while driving a car. If a patient seeks treatment for sleep apnea, which includes daytime sleepiness, loud snoring, and obesity, he or she often has unusual or even dangerous behavior during sleep.

REM sleep behavior disorder is recognized in DSM-5, when it wasn't previously. Patients with REM sleep behavior disorders can exhibit unusual or even dangerous behavior during sleep, including beating up their partner. In a sense they're enacting dream behavior. Typically during REM sleep the body is paralyzed (a condition called muscle atonia), but in REM sleep behavior disorder, muscle atonia is abolished.

Mood Disorders

Previous editions of the DSM divided "Mood Disorders" into two chapters, one devoted to bipolar disorders and one covering depressive disorders. The new sequence in DSM-5 reflects developmental processes and possible genetic connections from one set of disorders to another. Psychotic disorders, including schizophrenia, come before bipolar disorders, followed by depressive disorders.

"We have genetic evidence to suggest a strong relationship between disorders on the schizophrenia spectrum and bipolar disorders. We don't have similar evidence for any connection between schizophrenia and the depressive disorders" explains Ellen Frank, PhD, chair of the DSM-5 Mood Disorders Workgroup.

Part of the rationale behind this change considered that after depressive disorders comes anxiety disorders, and there is evidence suggesting that depressive disorders have genetic and familial connections to anxiety disorders.

Changing Criteria

Within the broader category of mood disorders, the majority of changes were made within bipolar disorders. One of the most significant changes addressed the initial criteria for mania and hypomania. As it appeared in previous versions, the so-named "A" criterion focused strictly on changes in mood, which the work group considered too limiting. The group agreed that there was often a long delay between first presentation to a mental health professional and a bipolar disorder diagnosis.

Typically, patients do not ask for help when they're in an episode of mania or hypomania, because they actually feel good. Patients come in when they're in an episode of depression. It becomes the clinician's responsibility to do a history of prior experiences. Many patients who have had episodes of hypomania feel it's a natural part of who they are. This kind of mood change isn't easily identified retrospectively.

DSM-5 added a change in activity or energy to the "A" criterion, which is easier for people to recall themselves, and much easier for outside observers to identify. If a person's mood improves, those around him or her don't necessarily see that, but if he or she is racing around the house, rearranging the furniture, and doing five times the number of activities as two weeks ago, others will notice.

Moving that change in energy and activity to the "A" criterion has the potential to improve the early identification of people who have bipolar disorders, which is important because early treatment can change the long-term prognosis.

Existing data indicates that the typical individual with bipolar disorder waits seven to 10 years for the correct diagnosis. That's a long time to go without treatment, or with inappropriate treatment. If those years run from high school graduation through college, the impact of this

disorder going untreated or inappropriately treated can negatively impact a person's life trajectory. Making the appropriate diagnosis, and initiating appropriate treatment, can profoundly change someone's life.

Expanding Specifiers

Other significant changes in this section expanded the use of specifiers to bipolar disorders.

Seasonal Patterns

Previously, there was a seasonal pattern in the depressive disorders section, but not for bipolar disorders. The DSM-5 work group agreed that it's equally likely, if not more so, that people may have a seasonal pattern to their bipolar disorder.

Psychosis and Severity

In DSM-IV, psychosis and severity were linked. If a clinician wanted to diagnose a disorder with psychotic features, it was automatically a "severe episode." That is not always the case. A patient can have relatively mild episodes — that is with few other symptoms — even with psychotic features, and vice versa. Furthermore, patients can suffer severe depressions and severe manias that are not necessarily psychotic, therefore; removing the link between severity and psychosis is a significant change.

Anxious Distress

DSM-5 adds a specifier called "with anxious distress" that includes different severity levels, and can occur in both bipolar and depressive disorders. This is important because the presence of anxiety is a poor prognostic sign. Patients with anxious distress, whether they have a unipolar or bipolar diagnosis, are more challenging to treat with either psychotherapy or pharmacotherapy.

Specifiers Impact When a Diagnosis Can Be Made

In the past, the one specifier for postpartum depression was termed "with postpartum onset." The condition could apply to both bipolar and depressive disorders and, in fact, may apply more to bipolar disorders because the risk for postpartum psychosis is particularly high among individuals who have bipolar disorder or a bipolar family history.

The specifier was also revised to 'with peripartum onset,' because if this can identify mood disturbances during pregnancy, it has implications for fetal development, birth complications, and the immediate care of the woman following childbirth. It points to the fact that clinicians should be looking for, not so much mania or hypomania, but for depression both during pregnancy and in the postpartum period.

"Mixed Episode" Changes

DSM-5 presents an updated definition and criteria for a "mixed episode." The DSM-IV definition required that individuals simultaneously meet the full criteria for an episode of depression and an episode of mania or hypomania, with the exception of duration.

DSM-5 defines a mixed episode as one that has some features of the opposite pole. So depression with hypomanic or manic features is now defined as an individual who meets the full criteria for major depression, and has at least three non-overlapping symptoms of the opposite pole.

In addition to the full criteria for major depression, they may show euphoria or overspending, which are not overlapping symptoms of depression. Agitation can be seen in both depression and mania, so that would not count as "with mixed features." The opposite also is true. An episode of mania can be diagnosed as "mania with mixed features." That would mean three non-overlapping symptoms of depression were also present.

This change was designed to bring the criteria into sync with what clinicians were actually seeing, because even a small number of "mixedness" is important for treatment decision-making.

Children's Disruptive Mood Dysregulation Disorder and Changes to Depressive Disorders

In the depressive disorders arena, a major change is the inclusion of a new disorder for children called Disruptive Mood Dysregulation Disorder (DMDD). This was intended to reduce the number of false positive diagnoses of bipolar disorder in children.

There has been a big increase in the diagnosis of bipolar disorder in children, and that's both a good and a bad thing. It's a good thing when it's a correct diagnosis; a bad thing when it's the wrong diagnosis.

Detecting bipolar disorder in children is complicated. Children can't describe their moods as well as adults. We can observe their activity, but a lot of the things professionals look for when identifying bipolar disorder in an adult are not easily observed in children, like contacting a lot of their old friends, spending a lot of money, and getting into foolish business ventures.

DMDD is defined as a condition in children who have very frequent and extreme temper outbursts that are inappropriate for the developmental level of the child. These outbursts are essentially uncontrollable and happen across multiple contexts. This diagnosis is not related to children who have these temper outbursts at school, but not at home or with their friends, or those who have temper outbursts just at home, but not at school.

DMDD is a controversial diagnosis, and some experts feel it should have been referred for further study. The work group believed it was important to get this diagnosis right because there are studies that indicate these children grow up to have depressive or anxiety disorders, not bipolar disorders.

The Bereavement Exclusion

Another controversy in depressive disorders stemmed from the elimination of the "bereavement exclusion." In DSM-IV, the clinician was "prohibited" from giving a diagnosis of major depression for two months after the loss of an important person.

Some aspects of bereavement — definitely normal healthy bereavement — overlap with aspects of major depression. However, we know that when someone presents in a full-blown episode of major depression, even in the context of bereavement, it doesn't improve unless treated. The other problem with the bereavement exclusion was that it implied normal bereavement should only last two months. That is not always true, especially in the loss of a child, which may go on for years or even an entire lifetime.

This change allows people to get appropriate treatment earlier than two months, but does not restrict normal grieving to a two-month time limit. Prolonged bereavement, called complex bereavement disorder, was moved to Section 3 of DSM-5, as a condition for further study.

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