

Stop blaming ‘demons’ for bizarre delusions or behavior!

I shudder when I read a newspaper or magazine article that describes a person with a psychiatric disorder—often, a celebrity who has fallen from grace—as “struggling with his inner demons.”

That expression is a residue of the absurd belief during the Middle Ages that mental illness is caused by evil spirits—that justified burning the afflicted person at the stake. (Remember Joan of Arc?)

This ignorant, even maliciously unscientific, portrayal of psychiatric symptoms is an appalling disservice to all our patients who struggle with a potentially disabling neuropsychiatric disorder. Regrettably, some religious entities still propagate the fallacy of possession by an evil spirit and call for exorcism of bizarre behaviors sometimes associated with psychosis.¹ What is really needed is an exorcism of unscientific and harmful misconceptions that mental illness is the nefarious work of Beelzebub or Lucifer.

Strange manifestations beget weird explanations

I can understand how ignorance about the neurologic basis of unusual delusions and behavior can trigger absurd religious explanations for their cause. Sometimes, brain pathology can have strange clinical manifestations that are beyond the ken of the average lay-

person, which invites metaphysical, religious, or philosophical explanation. Here are examples of neuropsychiatric symptoms in the category of “very unusual” that might summon a demonic malfeasance.

Delusion of possession or alien control. Some people complain of being possessed²; delusional people who have a strong religious background might believe they are possessed by Satan himself. Some of my patients with psychotic depression believe this, expressing great guilt and anguish about being doomed to go to Hell.

Alternately, patients with schizophrenia often think they are under the control of an “alien force” that shapes their behavior, feelings, and thoughts (a Schneiderian first-rank symptom). In a 2012 editorial, I proposed that this “alien intruder” is the unintegrated right hemispheric consciousness,³ and that disintegration of the 200 million inter-hemispheric white matter fibers of the corpus callosum might be the cause of the loss of integration of the right hemisphere into the dominant left hemisphere.

Some people attribute external control on their lives to a government agency, a foreign country, or a spiteful neighbor; others believe it is the work of evil spirits. Whereas the foundation of the delusion is brain pathology, the content of the delusion is colored by the affected person’s cultural and religious background.



Henry A. Nasrallah, MD
Editor-in-Chief

Brain pathology can have strange clinical manifestations that invite metaphysical, religious, or philosophical explanation

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Apotemnophilia. A neurologic disorder that manifests in a bizarre clinical symptom that invites faulty explanation: A person demands amputation of a leg because “it doesn’t belong to my body.”⁴ The cause of this strange and confusing disorder has been misinterpreted as a paraphilia, a desire by the affected person to achieve greater sexual satisfaction by having a stump. It was first reported in the September/October 1972 issue of the magazine *Penthouse*, where it was described as the motivation to heighten one’s sexual appeal because stumps can be sexually exciting to their partners.

It took many years of neurologic research to demonstrate that apotemnophilia is caused by pathology in the parietal lobe, where the physical representation of the body is located. Incomplete neurodevelopment of the parietal lobe can cause a person to fail to recognize a leg as a “legitimate” part of his body, and he (she) then desperately seeks amputation of the so-called alien limb (see the description of *xenomelia* below) that is attached to his body.

When an affected person is asked to delineate the borders of an alien limb, he draws a line on the skin at the precise border between the alien limb and the rest of his body—where the amputation should take place. Requests for surgical amputation were adamantly denied when the disorder was thought to be a weird sexual practice, but elective amputation in the context of neuropsychopathology is seriously debated now—and has, in fact, been reported.⁵ The term “body impaired integrity disorder” has been proposed, but neurologists consider the disorder an example of *xenomelia*.

Xenomelia (‘alien limb syndrome’).

An odd neurologic disorder produced by brain pathology, in which a person has a sense of estrangement about 1 or

more limbs.⁵ The disorder can be caused by a neurologic lesion such as tumor, Creutzfeldt-Jakob disease, hereditary diffuse leukoencephalopathy, demyelinating disease, progressive dementia, corpus callosotomy, intracerebral hemorrhage, or thalamic degeneration.⁶

So-called “alien hand syndrome,” or *asomatognosia*, is a widely recognized example of *xenomelia*, and is associated with medial frontal lobe damage.

Another variant of *xenomelia* is *somatoparaphrenia*, unawareness of a part of one’s body.⁷

Cotard syndrome. A nihilistic delusion of the nonexistence or dissolution of a body part; in extreme form, the delusion of being dead or nonexistent.⁸ The syndrome sometimes occurs in the setting of severe depression. Research has shown an association with atrophy of the insula,⁹ which is responsible for internal proprioception (interoception).

Delusional misidentification syndrome. A set of neuropsychiatric conditions in which a person misidentifies people, places, objects, or events¹⁰:

- Capgras syndrome (one perceives a familiar person as an imposter)
- Fregoli syndrome (one perceives that a familiar person is repeatedly disguised to change appearance)
- intermetamorphosis (one perceives that a person changes his external appearance and personality or identity)
- lycanthropy (one delusionally misidentifies one’s self as an animal—eg, a wolf, rabbit, or snake, and behaves accordingly)
- Ekbom syndrome (delusional belief of being infested with parasites)
- delusion of hermaphroditism (one has merged in the same body with another person of the opposite sex)
- delusion of sexual transformation (one has changed to the opposite sex)
- delusion of being the Antichrist.

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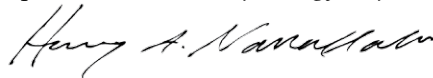
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Researchers have reported an increased risk of violence in delusional misidentification syndromes

Delusional misidentification syndrome can develop after the onset of focal or diffuse brain pathology, such as right hemispheric stroke, multiple sclerosis, hyperparathyroidism, traumatic brain injury, dementia, and schizophrenia. In several studies, researchers have reported an increased risk of violence in delusional misidentification syndromes.¹¹

Neurological, not diabolical!

A disruption in brain anatomy, neurodevelopment, or circuitry/interconnectivity can produce odd beliefs and bizarre behavior that might prompt a lay observer to believe that a demon or an evil spirit is responsible for the incomprehensible symptoms. I have one response to the “blame-the-devil” proponents: *It’s the brain pathology, stupid!*



Henry A. Nasrallah, MD
Editor-in-Chief

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Diagnosing and Managing Depressive Episodes in the DSM-5 Era

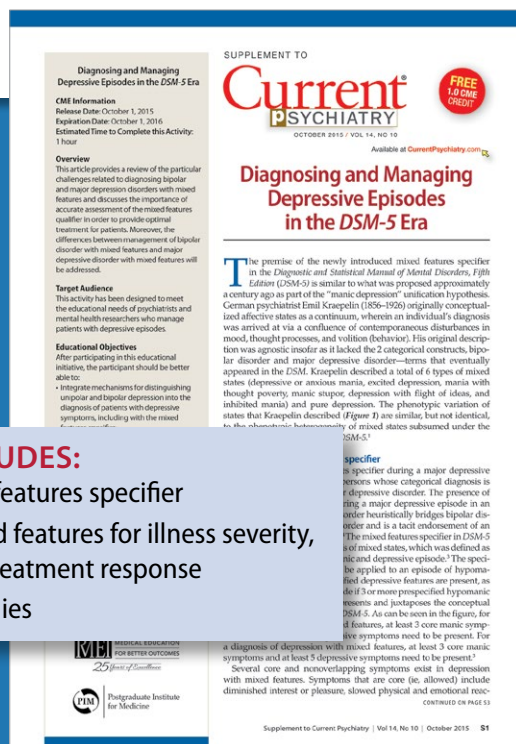
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DISCUSSION INCLUDES:

- Applying the mixed features specifier
- Implications of mixed features for illness severity, comorbidities, and treatment response
- Management strategies



Diagnosing and Managing Depressive Episodes in the DSM-5 Era

CME Information
Release Date: October 1, 2015
Expiration Date: October 1, 2016
Estimated Time to Complete this Activity: 1 hour

Overview
This article provides a review of the particular changes related to diagnosing bipolar and major depressive disorders with mixed features and discusses the importance of accurate assessment of the mixed features specifier in order to provide optimal treatment for patients. Moreover, the differences between management of bipolar disorder with mixed features and major depressive disorder with mixed features will be addressed.

Target Audience
This activity has been designed to meet the educational needs of psychiatrists and mental health researchers who manage patients with depressive episodes.

Educational Objectives
After participating in this educational initiative, the participant should be better able to:
• Integrate mechanisms for distinguishing unipolar and bipolar depression into the diagnosis of patients with depressive symptoms, including with the mixed specifier

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Diagnosing and Managing Depressive Episodes in the DSM-5 Era

The premise of the newly introduced mixed features specifier in the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)* is similar to what was proposed approximately a century ago as part of the “manic depression” unification hypothesis. German psychiatrist Emil Kraepelin (1856–1926) originally conceptualized affective states as a continuum, wherein an individual’s diagnosis was arrived at via a confluence of contemporaneous disturbances in mood, thought processes, and volition (behavior). His original description was agnostic insofar as it lacked the 2 categorical constructs, bipolar disorder and major depressive disorder—terms that eventually appeared in the DSM. Kraepelin described a total of 6 types of mixed states (depressive or anxious mania, excited depression, mania with thought poverty, manic stupor, depression with flight of ideas, and inhibited mania) and pure depression. The phenotypic variation of states that Kraepelin described (Figure 2) are similar, but not identical, to the characteristics heterogeneity of mixed states subsumed under the DSM-5 specifier

specifier during a major depressive episode whose categorical diagnosis is depressive disorder. The presence of firing a major depressive episode in an order heuristically bridges bipolar disorder and is a tacit endorsement of an “The mixed features specifier in DSM-5 is of mixed states, which was defined as manic and depressive episode.” The specifier applied to an episode of hypomanic (depressive) features are present, as the 3 or more proscribed hypomanic (depressive) symptoms need to be present. For a diagnosis of depression with mixed features, at least 3 core manic symptoms and at least 5 depressive symptoms need to be present.¹ Several core and nonoverlapping symptoms exist in depression with mixed features. Symptoms that are core (ie, allowed) include diminished interest or pleasure, slowed physical and emotional reac-

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