Schizophrenia and Other Psychotic Disorders in Diagnostic and Statistical Manual of Mental Disorders (DSM)-5: Clinical Implications of Revisions from DSM-IV

Our current systems of classifying psychiatric disorders (Diagnostic and Statistical Manual of Mental Disorders [DSM] and International Classification of Diseases [ICD]) have evolved over the past 60 years from the first edition of the DSM (DSM-1)\(^1\) to the current DSM-5\(^2\) and from the sixth revision of the ICD (ICD-6)\(^3\) to the current ICD-10.\(^4\) Each revision has sought to incorporate new knowledge about various psychiatric disorders, improve reliability and validity, provide diagnostic clarity and enhance clinical utility. In addition, DSM-5 sought to address limitations in the DSM-IV definitions of various disorders; with regard to psychotic disorders, these included:\(^5\) (i) Unclear boundary between schizoaffective disorder and schizophrenia; (ii) variable definitions and discrepant treatment of catatonia across DSM-IV manual; (iii) poor description of clinical heterogeneity of schizophrenia and other psychotic disorders; (iv) spurious comorbidity of delusional disorder and obsessive-compulsive disorder; (v) poor reliability and low diagnostic stability of the diagnosis of schizoaffective disorder; and (vi) inappropriate special treatment of Schneiderian first-rank symptoms (“bizarre” delusions or “special” hallucinations) in the definition of schizophrenia.

Revisions in DSM-5 sought to address these limitations, while incorporating new information about various psychotic disorders generated since the publication of DSM-IV in 1994. In addition, revisions were intended to enhance clinical utility by reducing unnecessary complexity and improving coherence across this group of disorders. The major revisions in the definition of schizophrenia and other psychotic disorders from DSM-IV to DSM-5 are summarized along with the implications of these changes for clinical practice.

**Schizophrenia**

In view of its fair validity and clinical utility, changes in the diagnostic criteria of schizophrenia are relatively modest, and broad continuity with DSM-IV is maintained. The significant heterogeneity of the schizophrenias is, however, poorly explained by DSM-IV and consequently, major changes in this regard were made in DSM-5. The special treatment of bizarre delusions and other Schneiderian first-rank symptoms in criterion A (active phase symptoms) is eliminated because these symptoms have not been found to be specific for schizophrenia and the distinction between bizarre versus nonbizarre delusions has been found to have poor reliability.\(^6\) These symptoms lack any special significance in the context of schizophrenia. In DSM-5, “Schneiderian first-rank symptoms” are treated like any other positive symptom with regard to their diagnostic implication: Two criterion A symptoms will be required even if one of them is a bizarre delusion. The impact of this change on clinical practice will be limited because <2% of DSM-IV schizophrenia meets criterion A exclusively by virtue of a single first-rank symptom.\(^7\) This small proportion of patients will instead receive a diagnosis of delusional disorder.

A second change is the addition of a requirement that at least one of the two required symptoms to meet criterion A be delusions, hallucinations, or disorganized thinking. These are core “positive symptoms” and should be necessary for a reliable diagnosis of schizophrenia.\(^8\) Again, this change will have negligible impact on clinical practice as <1% of all DSM-IV schizophrenia meet criterion A solely on account of negative symptoms + catatonia.\(^7\) Such patients would appropriately be reclassified either as “catatonia not otherwise specified” (new residual condition added in DSM-5)\(^9\) or major depressive disorder with catatonia versus other condition based on associated symptomatology.

One major change in DSM-5 will be the elimination of
the classic subtypes of schizophrenia. These subtypes have limited diagnostic stability, low reliability, poor validity, and little clinical utility.\cite{6,10} Whereas this change represents a significant departure from a 100-year tradition, it will have relatively little clinical impact as except for the paranoid and undifferentiated subtypes, the other subtypes are rarely utilized in most mental healthcare systems across the world. In fact, clinicians will be able to utilize dimensional assessments,\cite{11} which better describe the heterogeneity of schizophrenia and will be much more useful in terms of providing measurement-based treatment for persons with schizophrenia.\cite{12-14}

Schizophrenia along with other psychotic disorders are characterized by several psychopathological domains, each with distinctive courses, patterns of treatment-response, and prognostic implications. The relative severity of these symptom dimensions varies across patients, as well as within patients at different stages of their illness. Relevant symptom domains include positive symptoms (delusions, hallucinations), negative symptoms, disorganization, cognitive impairment, motor symptoms (e.g., catatonia), and mood symptoms (depression, mania).\cite{15} Measuring the relative severity of these symptom dimensions through the course of illness in the context of treatment can provide useful information to the clinician about the nature of the illness in a particular patient and in assessing the specific impact of treatment on different aspects of the patient’s illness. A 0–4 scale rating scale with anchor points for each of the eight items (delusions, hallucinations, negative symptoms, cognitive impairments, disorganization, catatonia, depression, and mania) to rate these six dimensions is provided in Section 3 of the DSM-5 manual. As a simple rating scale, it should encourage clinicians to explicitly assess and track changes in the severity of these dimensions in each patient with schizophrenia and use this information to individualize measurement-based, collaborative treatment.

These changes in the DSM treatment of schizophrenia are consistent with the proposed changes in ICD-11,\cite{16,17} which will also include deletion of classic subtypes, elimination of the special treatment of Schneiderian first-rank symptoms, and addition of dimensions to characterize the heterogeneity of schizophrenia. The current discrepancy in the duration criteria for schizophrenia between DSM and ICD (6 months vs. 1 month, respectively) will likely remain.

Schizoaffective disorder
Characterization of patients with both psychotic and mood symptoms either concurrently or at different points during their illness has always been a nosological challenge, and this is reflected in the poor reliability, low diagnostic stability, and questionable validity of DSM-IV schizoaffective disorder.\cite{18} In DSM-5, an effort is made to improve reliability of this condition by providing more specific criteria and schizoaffective disorder is explicitly conceptualized as a longitudinal and not a cross-sectional diagnosis. Changes are made in criterion C, with the requirement that a “major mood episode” be present for “a majority of the total duration of the illness” in order to make a diagnosis of schizoaffective disorder in contrast to schizophrenia with mood symptoms. This change will provide a clearer separation between schizophrenia with mood symptoms from schizoaffective disorder. This will also likely reduce rates of diagnosis of schizoaffective disorder while increasing the stability of this diagnosis once made - it should be noted that DSM-IV schizoaffective disorder is an unstable diagnosis over time, with the diagnosis most often changing to schizophrenia. Furthermore, DSM-5 explicitly specifies that schizoaffective disorder is a life-time and not an episode diagnosis; this should also substantially improve the stability of the diagnosis as also enhance its clinical utility.

Catatonia
In DSM-IV, two different sets of criteria are used to diagnose catatonia in different parts of the manual, and the syndrome is treated discrepantly (e.g., a subtype of schizophrenia, but a specifier of major mood disorders). In addition, catatonia is found to exist in psychiatric and general medical conditions outside of DSM-IV conditions in which it can be diagnosed.\cite{19} Given the fairly specific treatment implications of catatonia, its appropriate recognition and treatment is a clinical imperative. Catatonia will be treated consistently across the DSM-5 manual using a single set of criteria and will be a specifier for various psychotic disorders (including schizophrenia) and major mood and bipolar disorders. Catatonia associated with a general medical condition will be retained as a category. A new residual category of “catatonia not otherwise specified” is added to classify individuals with catatonia associated with other psychiatric disorders or those whose contributing general medical condition has not yet been identified. These changes should improve the consistent recognition of catatonia across the range of psychiatric disorders and facilitate its specific treatment.

Attenuated psychosis syndrome
It is believed that the poor outcome of schizophrenia in many individuals with the disorder is because of the late identification and intervention in the course of the illness by which time patients have experienced a substantial amount of socio-occupational decline and brain damage. A fairly characteristic prodrome, characterized by attenuated psychotic symptoms, precedes onset of frank
psychosis in schizophrenia. Although individuals with a defined attenuated psychosis syndrome are 500-times more likely than the general population to develop a psychotic disorder in the next year, the vast majority of such individuals do not develop schizophrenia.[20] In addition, many of these individuals experience a current mood or anxiety disorder, which should be the focus of intervention.[21] In view of the uncertain nosologic status of this condition, attenuated psychosis syndrome will be added to Section 3 of DSM-5 as a condition for further study.[22] The clinical impact of this change will be the availability of a reliable set of criteria for attenuated psychosis syndrome, which should allow its appropriate recognition and encourage careful ongoing monitoring, which might facilitate early diagnosis and appropriate treatment should conversion to overt psychosis occur. Disappointment has been expressed about the fact that this entity was not included in the main body of the DSM-5 manual,[23] but data necessary to address various questions about its precise nature and nosological status can be generated and this will allow future diagnostic systems to better characterize this condition.

CONCLUSIONS

While high reliability and validity were important considerations, changes in the DSM-5 treatment of schizophrenia and other psychotic disorders are principally designed to facilitate clinical assessment and treatment. Hopefully, the revisions in DSM-5 criteria for schizophrenia and related disorders will make them more useful to patients and clinicians, while providing a more useful platform in integrating emerging genetic and other neurobiological information about these conditions. The addition of psychopathology dimensions with a simple rating scale should encourage the provision of measurement-based care.

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