

Review article

Importance and constraints of the DSM-IV use in the clinical practice

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HISTORY

In ancient Greece, 5 b.C., Hippocrates tried to establish a classification system for mental illnesses. Words such as hysteria, mania and melancholy were used to characterize some of them. Over the centuries, a number of terms have been incorporated into the medical jargon, as for example: circular madness, catatonia, hebephrenia, paranoia, etc. The first system including a comprehensive classification and with real scientific profile arose with the studies by Emil Kraepelin (1856-1926), who gathered different mental disorders under a single denomination – dementia praecox, later termed schizophrenia by Bleuler – together with other psychotic disorders, separating them from the clinical status of manic-depressive psychosis.¹ Almost at the same time, Freud (1895) differentiated a syndrome from neurasthenia, named anguish neurosis, which started to be classified and studied with other types of neurosis: hypochondriac, hysteric, phobic and obsessive-compulsive.² Such terminology was used up to the 1980s.

In 1952, the American Psychiatric Association (APA) published the first edition of the “Diagnostic and Statistical Manual of Mental Disorders” (DSM-I). The next editions, published in 1968 (DSM-II), 1980 (DSM-III), 1987 (DSM-III-R) and 1994 (DSM-IV) were reviewed, modified and enlarged.³

The DSM-III (1980) was the most revolutionary of all and became a landmark in the history of modern psychiatry. New diagnostic categories were created, such as: the split of anguish neurosis into panic disorder with and without agoraphobia and generalized anxiety disorder; the social phobia became a nosologic entity; manic-depressive psychosis became bipolar I disorder, with or without psychotic symptoms. Many words started to be avoided. The term neurosis, for example, was no longer used, so that etiologic issues were not invoked; the word hysteria was vanished from the text for the same reason, and the expression mental disorder replaced mental illness, etc.

Besides, an important characteristic of DSM-III was the diagnoses hierarchy. A patient diagnosed as schizophrenic, for example, could not be simultaneously diagnosed as having panic disorder. Schizophrenia, a more severe pathology, was considered superior than the panic disorder.

Such hierarchy followed the well-known practice of medicine that recommends the identification of a single pathology to explain all symptoms of a clinical status.

In 1987, with the publication of the DSM-III-R, such hierarchy was abolished, and the manual started to recommend that two or more diagnoses were made for the same patient.

This allowed for the arousal of the concept of **comorbidity** in psychiatry, later confirmed by the DSM-IV and widely known in the 1990s and today.³

In fact, the concept of comorbidity dates back to 1970, when Feinsten employed it for the first time to define “any additional clinical entity that exist or that can occur during the clinical course of a patient.”⁴ We will approach this issue again later in this article.

WHAT IS THE DSM-IV?

The DSM-IV is, therefore, a diagnostic and statistic manual adopted by the APA⁵ and correlated with the ICD-10 Classification of Mental and Behavioral Disorders,⁶ by the World Health Organization (WHO). It was published in the 1990s, considered the “brain decade” by the WHO. The DSM-IV uses a multiaxial approach to diagnoses organized in 16 distinct classes, which are assigned specific number codes and distributed in five major axis:

Axis I: Describes the clinical disorders. For example: panic disorder without agoraphobia (300.01), major depressive disorder, recurrent (296.3), delusional disorder (297.1), Alcohol Dependence (303.90), etc.

Axis II: Describes mental retardation. For example: **severe mental retardation** (318.1) and personality disorders, which were grouped in three clusters. Group A: individuals with strange or bizarre traits – for example, **schizoid personality disorder** (301.20); Group B: individuals with dramatic and unstable traits – for example, **histrionic personality disorder** (301.50); and, Group C: insecure and anxious individuals – for example, dependent personality disorder (301.6).

Axis III: Describes general medical conditions. For example: **recurrent otitis media** (382.9).

Axis IV: Approaches the psychosocial and environmental problems associated to a mental disorder. For example: **risk of unemployment.**

Axis V: It is a global assessment of functioning (AGF) scale that is assigned a number. For example: AGF = 82.

The main features of DSM-IV are: 1. description of mental disorders; 2. definition of precise diagnostic guidelines through a list of symptoms that configure diagnostic criteria; 3. atheoretical model, without any concern with the disorders etiology; 4; description of pathologies; associate aspects, patterns of family distribution, prevalence in general population, course of pathologies, evolution, differential diagnosis and resulting psychosocial complications; 5. search for a common language in order to provide adequate communication among professionals from the mental health area; 6. research incentive.

ADVANTAGES OF USING THE DSM-IV

The DSM-IV reached many of its objectives. In the clinical practice there is a number of examples. Individuals firstly described as having “hysteria” were mocked in the emergency rooms, because physicians did not understand their suffering. Derogative terms were used to refer to them. In fact, many of them suffered with panic attacks and were demoralized because of their symptoms – paresthesias (numbness and tinglings), heat waves, depersonalization/derealization, dizziness, fear of dying or loose control, among others – which were not well interpreted by care providers.⁷ Other patients were wrongly diagnosed with schizophrenia, and were stigmatized because of that, instead of being diagnosed with mood disorder with psychotic symptoms, which would change not only the prognosis but also the therapeutic approach. The social phobia, neglected by all classifications prior to the DSM-III, was described as a separate nosologic entity, and the subsequent studies showed it is the most common of the anxiety disorders, affecting about 12% of the general population.

The dysthymic disorder could be understood as a clinical disorder that, in spite of its clinical course, is not characterized as a personality trait, as it was firstly considered, but as a

pathologic state that can be diagnosed and treated.⁸ The obsessive-compulsive disorder is more frequent than it was thought to be, reaching about 3% of the general population, and its association with the obsessive-compulsive personality disorder is not so frequent, different from what was firstly postulated.

The development of research in the mental health area had an extraordinary impulse over the last years. Attention to diagnosis and communication among different professionals – psychiatrists, psychotherapists and psychologists – established a new partnership between the clinical psychiatry and the behavioral, cognitive-behavioral (CBT) and interpersonal psychotherapies – that is unique in the history of our specialty. Such an approach resulted in the development of new therapeutic techniques, thus providing a great improvement of our patients' life quality. Some findings have been confirmed in the specialized literature. The obsessive-compulsive disorder, for example, can be effectively managed with antidepressant drugs, which inhibit the Selective Serotonin Reuptake Inhibitors (IRSS), or with behavioral therapy. Original studies say that functional alterations found through brain imaging before such procedures decrease after treatment.^{9,10} On the other hand, it is well known that drugs have better results with obsessive ideas, while therapy is better to treat compulsions. In several cases, both forms of treatment are indicated and one of them may be chosen. The specific phobia does not improve with medication, but it has very good response to behavioral therapy. Mild and moderate depression episodes have a good response to antidepressants or CBT. Associating both procedures, however, may offer even better and long-lasting results. Similarly, patients with social phobia may be indicated both forms of intervention – antidepressants and CBT, because many of them, after remission of physical symptoms resulting from anxiety with medication, need treatment to change behavior, improve assertiveness and increase the sociability.¹¹

LIMITATIONS AND DISADVANTAGES OF THE DSM-IV

The use of the DSM-IV is limited and has also a number of disadvantages. The first one concerns to the system itself, which produces an excessive fragmentation of the clinical states of

mental disorders. This is the reason why many patients are given many different diagnosis simultaneously, once the symptoms overpass the rigid borders the manual proposes. Comorbidity within an axis (or many of them) is almost a rule and not an exception. Eighty percent of individuals with social phobia are given other correlate diagnosis.¹¹ The panic disorder is associated to depression in more than 50% of cases, and many times it is associated with generalized anxiety, social phobia, obsessive-compulsive disorder and other personality disorder as well, from Axis II.¹² The The recommendation of recording all diagnosis obviously poses a disadvantage. Besides, the list of symptoms do not comprise all patient's complaints. For example, headache, dry mouth, blurred sight and cry outbursts are not described as symptoms of panic attack, although they are frequently present in those episodes.

The second problem concerns the professional that will use the manual. The DSM-IV must not be used as an infallible list that automatically provides psychiatric diagnoses after it is filled. The results may be a disaster in non-experienced hands. Many symptoms overlap different clinical conditions, and deciding their origin, or the state they belong is an action exclusively derived from clinical judging, which comes from theoretical knowledge from psychology, psychopathology and psychiatry areas, adequate training and experience accumulated with practice.¹³ The DSM-IV is not a compendium of psychiatry and must not be used as the only source of reference. By listing symptoms, the manual intends to help acknowledge mental disorders, but not to replace the comprehensiveness of the clinical diagnosis, which is overall a result of intuition, perception and feelings that arises from this unique relation between the therapist and the patient. The manual itself warns the reader about such aspects, in the chapter "A word of caution" from the introduction, and users are advised to read it thoroughly.

This shows that the DSM-IV is far from solving the diagnostic and statistic problems of our specialty. It shows us there is a long way to run, which will be successfully accomplished, provided that issues and prejudices of each area are left aside, and a joint effort is made to carry out a collaborative work, gathering scientific findings of psychiatry, which include advances in the field

of neuroimaging and neurophysiology on the one hand, and the application, comparison and systematic measurement of psychopharmacologic and psychotherapeutic procedures on the other.

Thus, the diagnostic systems – DSM-IV and ICD-10 – are nosographic and aim at listing and classifying mental disorders, but they do not replace the clinical practice. The model of such systems is named **categorical**, as opposed to the **dimensional** model.

THE CATEGORICAL AND DIMENSIONAL MODELS

The scope of the categorical model allows for the inclusion of comorbidities. The concept of comorbidity by Feinstein was extended by Klerman, in 1990, as a term that comprises the “occurrence of two or more mental disorders or other medical conditions in the same individual.”¹⁴ Later, Frances et al. (1990) created the following schema for the arousal of comorbid disorders: 1. the disorder A predisposes disorder B; 2. the disorder B predisposes disorder A; 3. A and B are influenced by an underlying factor C, predisposing or causal; 4. the association between A and B happens by chance – for example, by the frequent occurrence of both disorders along life in the general population; 5. A and B are associated because their symptoms overlap.¹⁵

The categorical model distinguishes also the **primary** disorder, the first in a time sequence, and the **secondary** disorder. This is the case of depression secondary to panic disorder, as described by Klein et al. (apud Gomes de Matos).¹⁶ It originates from the patient’s demoralization, when he or she is not provided appropriate diagnosis and treatment. The patient is treated with indifference and hostility by friends and family, backed by a wrong medical diagnosis, and is not able to evaluate the degree of his/her suffering and the functional and social limitations resulting from the disorder. Depression, in this case, has different characteristics than those of a typical (primary) major depression episode, with more favorable progression, and remits with specific treatment for panic disorder, which is considered a primary and causal disorder.¹⁷

On the other hand, the dimensional model gained momentum in the 21st century, especially due to the studies by Kretschmer & Akiskal, who had their basis on Plato’s thoughts and on a

holistic view of the man. They described the mental disease as a unique dysfunction, which is expressed in different ways. The typical symptoms of depression – according to the school by Akiskal et al., for example – are in the extreme of a continuum that comprises anxiety, which on its turn is in the other extreme of the same continuum. Intermediate disorders would be represented by events with mixed symptoms of depression and anxiety. Thus, in the dimensional model, different from the categorical one, depression and anxiety are considered the expression of the same pathology. This makes us think of the concept of spectrum, term used as a metaphor of the physic phenomenon of light decomposition, which takes place when it passes through a prism. Similarly, the spectrum of a mental disorder, which the DSM-IV can not cover, includes predictive symptoms that arise during childhood, and prodromal and peripheral symptoms, which occur together with typical symptoms, or which appear with sufficient magnitude to mask them.¹⁸ The studies by Kretschmer postulate that the schizothymic and cyclothymic temperaments are part of the schizophrenia and mood disorder spectrum, respectively, and that schizoid and cycloid individuals are in an intermediate position between them.¹⁹

Under the point of view of the dimensional model, the clinical pictures are resulting from alterations in **quantity**, which are expressed according to the degree of intensity, different from the categorical model (includes the DSM-IV and the ICD-10), which considers mental disorders as something produced by alterations in **quality**, different for each disorder.

FUTURE PERSPECTIVES

Today, several authors develop research with the goal of refining the categorical systems (DSM-IV and ICD-10). Some groups will be sub-divided into other diagnostic categories, thus widening even more the list of mental disorders. This is what is likely to happen with bipolar mood disorders I and II. In DSM-IV they are characterized by phases of depression and mania or hypomania, respectively, and two new categories shall be included, III and IV. The bipolar disorder III is characterized by symptoms of patients who naturally develop only depression episodes and

start to have mania or hypomania episodes as well, which are triggered by antidepressant drugs. The bipolar disorder IV seems to develop in people with hyperthymic temperament who develop episodes of depression, which are in general very severe with high risk of suicide. The recovery of psychopathologic statuses, neglected by the current classificatory systems, such as hyperthymic alterations, firstly described by Kurt Schneider, is admirable from the scientific point of view.²⁰

On the other hand, some disorders should be reorganized, such as the avoidant personality disorder of Axis II, which may be grouped with the selective child mutism within social phobia, as they present the same symptoms, progress and treatment response. The classic division of schizophrenia into the subtypes (paranoia, hebephrenia, catatonia and simple) may be seen in a new way, having as reference the positive symptoms (delusions and delirious ideas) and the negative ones (cognitive deficits). This results from findings of studies performed with last generation imaging techniques. The schizophrenic patients with predominantly negative symptoms have higher frequency of alterations in some brain structures that act in a correlate way as compared to patients with positive symptoms. The positron emission tomography (PET) allows for an *in vivo* evaluation of the brain flow, which shows to be decreased in the prefrontal cortex, cerebellum and thalamus, the information sensorial filter. The cerebellum coordinates cognition, language and motor skills. The term **cognitive dysmetria** has been used to characterize such disorder found in schizophrenia. If future studies confirm the cognitive loss of logic associations, they will be considered the main signal for the diagnostic of schizophrenia, confirming Bleuler original description of the start of the 21st century.²¹

Other authors consider that some personality disorders (axis II) are in fact part of the spectrum of other mental disorders. Thus, similarly to the dysthymic disorder – firstly acknowledged as a personality disorder and later described as a category from axis I – the borderline personality disorder would not be considered an isolated clinical condition anymore and would be part of the bipolar disorder spectrum; the schizotypal personality disorder, schizoid and paranoid would be included in schizophrenia.

Currently, several clinical research have been conducted with the goal of acknowledging and grouping symptoms that are not typical, but that mix or blur the major symptoms and are not in the DSM-IV list of diagnostic criteria. The objective is to narrow the gap between the categorical and the dimensional models. In the year 2000, the University of Campinas (UNICAMP) implemented an outpatient service, the Center for Treatment and Care of Anxiety Disorders (NATA - *Núcleo de Atendimento e Tratamento dos Transtornos de Ansiedade*) in a partnership with the University of Pisa, where the team formed by Professor Giovanni Cassano developed a project for the study of the mental disorders spectrum. The partnership between both universities will allow for comparisons among different population. The first results will be published in a partnership, in the near future. As an example, we will briefly describe the work developed with panic disorder that is currently ongoing.

The Spectrum Project comprises the assessment of different anxiety and mood disorders. Two scales of diagnostic evaluation were specifically developed for panic disorder. The first was designed for the general population and the second for patients diagnosed with panic: SCI-PAS and PAS-SR, respectively. Both comprise the following items: 1. use of DSM-IV criteria to identify panic attacks; and 2. structured interview composed of several questions that evaluate: a) sensitivity to separation during childhood (considered an important, though not specific, predictor of the panic disorder); b) typical and atypical symptoms of panic (sensations of sight and hearing loss, sensation of something tore within the brain, discomfort with darkness or fog, discomfort with noise, etc.); c) sensitivity to stress (symptoms of physical anxiety, such as palpitations, sweating, trembling, etc., in non-intense stress situations, such as excessive work, family problems, etc.); d) sensitivity or phobia to drugs and other substances (intolerance to antidepressants, anxiolytics, coffee, perfume and other smells, etc.); g) hypochondriac symptoms and disease phobia (sensation of being trapped or suffocated when in the dentist's chair, fear of medical procedures, such as electroencephalogram, blood collection, visualization of a scalpel, etc.; and h) sensitivity to reassurance (look for help as frequent visits to emergency hospitals, catastrophic interpretations of situations, dramatization, etc.).²²

CONCLUSION

Adequately consulting and using the DSM-IV is extremely important for professionals that work with mental health care. Over the last years, the use of the DSM-IV has provided significant scientific advances in the clinical practice and epidemiologic study of mental disorders. It also made possible a wide communication between psychiatrists and psychologists through a language that could be understood all over the world. Its use, however, is limited, as it does not replace the study of the classical treaties of psychology, psychopathology and psychiatry, nor the clinical experience and the training resulting from practice. Hybrid models that try to join the categorical and dimensional models, comprising psychiatrists and psychologists, have been currently developed, providing promising perspectives for the development of our specialty.

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ABSTRACT

Introduction: *The DSM-IV is a diagnostic and statistical system for the classification of mental disorders that follows a categorical model. It is used in the clinical practice and research in*

the psychiatry area. The aim of this study was to analyze the use of the DSM-IV in the clinical practice and to report on its advantages and limitations.

Methods: A wide bibliographic review was made to show the relevance of the topic. Some probable changes were pointed out, which will be included in the next editions. A discussion on the diagnostic models, both dimensional and categorical, was carried out as well. The paper was divided into the following sections: history, concept, advantages and disadvantages of the DSM-IV, discussion and conclusion. The article also presents a project developed by the Núcleo de Atendimento dos Transtornos de Ansiedade (NATA), from the Department of Psychiatry at FCM/UNICAMP, which will use an instrument for the diagnostic of the agoraphobia disorder that will follow a dimensional model.

Keywords: DSM-IV, multiaxial system, psychopathology.

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