Should DSM-V Include Dimensional Diagnostic Criteria for Alcohol Use Disorders?

John E. Helzer, Kathleen K. Bucholz, Laura Jean Bierut, Darrel A. Regier, Marc A. Schuckit, and Sarah E. Guth

This program calls attention to the upcoming timetable for the revision of the Diagnostic and Statistical Manual (DSM)-IV and the publication of DSM-V. It is vitally important for Research Society of Alcoholism members to be aware of the current discussions of the important scientific questions related to the next DSM revision and to use the opportunity for input. The title of the symposium highlights 1 key question, i.e., whether the DSM definitions should remain strictly categorical as in the past or whether a dimensional component should be included in this revision. Two substantive and 1 conceptual paper are included in this portion of the symposium. The fourth and final presentation detailing the revision timetable and the opportunities for input is by Dr. Darrel Regier. Dr. Regier is the director of American Psychiatric Institute for Research and Education the research and education branch of the American Psychiatric Association and the organization within the APA that will oversee the DSM revision. The discussion is by Marc Schuckit, who was chair of the Substance Use disorders (SUD) Committee for DSM-IV and cochair of the international group of experts reviewing the SUD definitions for DSM-V.

Key Words: DSM, Diagnosis, Categorical Criteria, Dimensional Approaches.

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DESPITE BROAD AGREEMENT that the alcohol use disorders (AUD) are heterogeneous and are best described on a continuum of severity, the illness definitions of the AUD in Diagnostic and Statistical Manual (DSM)-IV are categorical (dichotomous). There are many advantages to categorical diagnoses in terms of clarity, simplicity of communication, and timely treatment decisions. However, a dichotomous (categorical) diagnosis is disadvantageous for other purposes such as etiological studies and even for clinical decision making, especially if the category of interest represents a heterogeneous phenotype.

The American Psychiatric Institute for Research and Education (APIRE) has constituted a panel of international experts in each of the major disorder categories to review the evidence base for proposing revisions in diagnostic criteria or even a new structure for the DSM-V nomenclature. The process of creating the DSM-V definitions is due to begin in 2008, with the publication of DSM-V scheduled for 2012. Most of the participants in this symposium are members of the APIRE research review group for the substance use disorders (SUD). Dr. Darrel Regier is the organizer of the APIRE effort. The discussant, Dr. Marc Schuckit, is the cochair of the APIRE substance disorders committee.

One of the issues that the substance use and other committees are grappling with is whether there should be an attempt to incorporate dimensional (scaled) criteria into DSM-V. The rationale of this publication is to present background information relevant to this question, to discuss the pros and cons of including dimensional criteria

for the alcohol use disorders, to offer a proposal for how dimensional scaling could be accomplished in DSM-V, and to generate discussion from the readership that would be informative to the members of the APIRE substance use committee. There are 4 topics as described below.

DO ALCOHOL USE DISORDERS FIT A DIMENSIONAL MODEL? SOME CONSIDERATIONS

Kathleen Keenan Bucholz, PhD

The debate over whether alcohol use disorders fit a dimensional, as opposed to a categorical, model has been longstanding in the field (see, for example, Krueger et al., 2004; Muthen, 1996) and one that will be prominent in the deliberations of the group charged with designing the new DSM classification system, called DSM-V, scheduled to be published in 2011 (see Regier in this summary). However, this issue extends beyond substance abuse nomenclature to the whole of psychiatric diagnostic classification (e.g., Kraemer et al., 2004; Krueger and Piasecki, 2002); it was a topic seriously considered during the most recent revision of the DSM (DSM-IV), as the following passage attests: "It was suggested that the DSM-IV classification be organized following a dimensional model rather than the categorical model used in DSM-III-R. A dimensional system classifies clinical presentations based on quantification of attributes rather than the assignment to categories, and works best in describing phenomena that are distributed continuously and that do not have clear boundaries. Although dimensional systems increase reliability and communicate more clinical information, they also have serious limitations and thus far have been less useful than categorical systems in clinical practice and in stimulating research." (APA, 1994). However, contrary to this assertion, of interest is that the DSM system, while traditionally being thought of as promoting a categorical diagnosis, has actually had embedded within it a dimensional approach in the form of the inclusion of severity indicators of mild, moderate, or severe as options for most disorders. These are based primarily on a symptom count for the substance use disorders (see Bierut in this summary for the utility of this method of assessing dimensionality.) In the arguments mustered to date on the dimensional (often defined as "severity") approach to substance use disorders (see, e.g., Bucholz et al., 1996; Heath et al., 1994), one perspective that has been given little attention is that of a longitudinal perspective. Course of disorder has been an important element of diagnostic validity (see, e.g., the classic paper of Robins and Guze, 1970), so that the extent to which a dimensional approach may enhance that construct merits consideration as the process of revision of diagnostic criteria begins. We present data from the collaborative study on the genetics of alcoholism (COGA) to illustrate this issue.

Collaborative study on the genetics of alcoholism is a multicenter high-risk family study of alcoholism designed to identify the susceptibility genes for alcoholism (Begleiter et al., 1995). Briefly, families were ascertained through individuals ("probands") who were in inpatient or outpatient alcohol treatment facilities; probands and their first-degree relatives were assessed with a psychiatric diagnostic interview. In families with 2 or more alcoholic first-degree relatives of the proband, additional relatives were sought for interview.

We applied latent-class analysis (McCutcheon, 1987) to 15 lifetime alcohol dependence and abuse symptoms that were elicited in personal interviews with relatives of COGA probands at 2 points in time, about 5 years apart. We also analyzed lifetime DSM-IV diagnosis at both time points. We used the latent-class results in a latent transition analysis. As described by Collins et al. (1994), latent transition analysis is "the probability of moving to a particular latent status at the second occasion of measurement, conditional on the latent status membership at the first occasion." At both time points, a 5-class solution yielded the best fit, with the resulting classes characterized similarly at both time points and indicative of classes distributed on a spectrum of severity rather than being distinguished by a particular symptom profile. The classes (I–V) were characterized as follows (values in parentheses reflect class prevalence at times 1 and 2): I, unaffected (47% time 1, 45.6% time 2); II, heavy drinking (23.9% time 1, 26.6% time 2); III, heavy drinking plus social, physical, psychological problems from drinking (14.3%, 14.7%); IV, heavy drinking, class III problems, plus serious problems from drinking, like a considerable amount of time spent drinking, regularity of drinking, role interference, reduction of activities to drink (9.3%, 9.1%); and V, heavy drinking, class III, IV problems plus withdrawal (5.5%, 4.1%).

We cross-tabulated the categorical diagnosis (DSM-IV alcohol dependence) at the 2 time points, using 3,118 individuals who were interviewed at both times. We also ran (in Mplus) (Muthen and Muthen, 2004) latent transition analysis. Cross-tabulation of time 1 DSM-IV alcohol dependence with time 2 DSM-IV AD revealed that of those who fulfilled DSM-IV criteria at time 1, only 59% fulfilled the criteria at time 2. These cross-classified data might lead one to infer that the phenotype of alcohol dependence was quite unstable. However, in evaluating the results from the latent transition analysis, using the dimensional latent classes, a markedly different conclusion prevailed. Using the dimensional approach (via the latent classes), the overwhelming impression is one of stability. The transition probabilities indicate that each of the 5 classes is stable, with 85% or more of each time 1 class remaining in the same class at time 2. The unaffected class shows the least stability, which is not surprising because one would expect that over a 5-year time period, some of the individuals in this class would develop more severe alcohol symptomatology, particularly in a high-risk study such as COGA. About 15% of members of the unaffected class transiti-

oned into 1 of the affected classes at time 2. There is a small group over the 5-year interval that manifested an accelerated transition from the unaffected class at time 1 to the severely affected class at time 2. These may be individuals who are particularly susceptible to development of alcohol problems, through their genetic makeup, environmental stressors, or some combination of these. This group would be an especially interesting one to target for additional study. The highest stability was observed in the 2 most severely affected classes, with over 91% remaining in the same class, conditional on their time 1 class membership.

The table of transition probabilities is not entirely "clean" in that there are modest transition probabilities of backward movement, i.e., movement from membership in an affected class at time 1 into membership in the unaffected class at time 2. However, the probabilities for such transitions are modest, ranging from 6% to 12%.

In summary, a latent class/latent transition methodology yielded a considerably different interpretation as to the course and stability of alcohol classes that were dimensional rather than categorical in character, in comparison with the results obtained from a simple cross-tabulation of time 1 to time 2 categorical DSM diagnosis. At the threshold of the DSM-V revision process, findings like these, as well as others' work, may encourage further elaboration of a "dimensional subclassification" (Guze, 1992) to improve both patient care and research.

USE OF DIMENSIONAL CRITERIA

Laura Jean Bierut, MD

Medicine has successfully used ordinal criteria to set diagnosis and treatment thresholds for many different illnesses. Thresholds have been determined from empirically data-driven points at which negative outcomes become more prominent and intervention confers benefit. Examples of criteria and thresholds from medicine include measurement of blood glucose levels and blood pressure measurement. For example, hypertension, diagnosed by blood pressure measurement of systolic blood pressure greater than 140 mmHg or a diastolic blood pressure measurement greater than 90 mmHg, has been set using analyses of blood pressure measurements in the population and examining the associated morbidity and mortality (Andreoli et al., 2004). There is an increasing incidence of heart disease, strokes, and death when blood pressure is elevated beyond this diagnostic threshold. Interventions can also be based on thresholds. For instance, with an elevation of blood pressure only slightly above the diagnostic threshold, lifestyle changes may be recommended. However, when blood pressure is greatly elevated, more intensive treatments are undertaken. The thresholds in a scale often represent the balance between the outcomes with the natural history of the disorder and the benefit and risk of treatment.

Fig. 1. Smoking rates in alcohol-dependent and nondependent individuals.

How can the measures of medicine be used to inform an ordinal scale with alcoholism? There is considerable evidence that alcoholism is a diagnosis that is based on a continuum (for e.g., Bucholz et al., 1996), with increasing severity illness. But, does this evidence of a continuum extend beyond alcohol-related symptoms to comorbid disorders and treatment?

Using data from the COGA, comorbid conditions were examined in alcohol-dependent and nondependent individuals using an ordinal measure of lifetime DSM-IV symptoms count compared with a categorical DSM-IV lifetime diagnosis of alcohol dependence. When examining comorbid conditions such as smoking, drug dependence, and major depressive disorder, there were increasing rates of comorbidity associated with an increasing number of DSM-IV symptoms. For example, Fig. 1 demonstrates the prevalence of smoking among alcohol-dependent and nondependent men and women using a categorical diagnostic classification. Figure 2 demonstrates that there is an increasing prevalence of smoking that is correlated with the number of lifetime DSM-IV alcohol dependence symptoms. Similar findings are seen when examining comorbid drug dependence and major depressive disorder. Thus, alcoholism lies on a severity index and an increasing number of DSM-IV alcohol-dependent symptoms associated with many comorbid conditions.
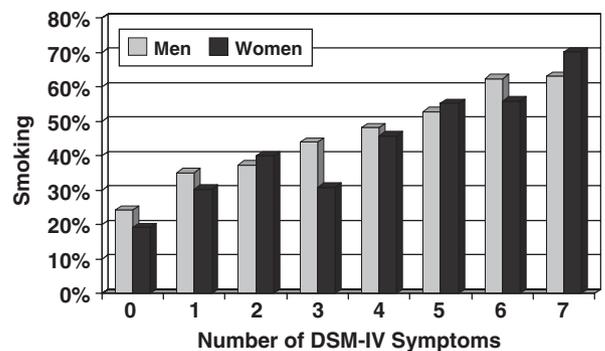

Fig. 2. Smoking rates in alcohol-dependent and nondependent individuals categorized by the DSM-IV alcohol-dependent symptoms.
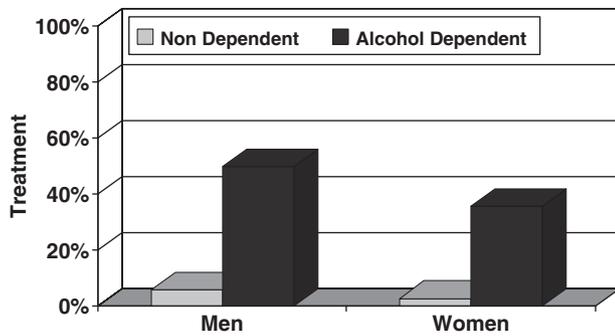
Fig. 3. Prevalence of treatment in alcohol-dependent and nondependent individuals.

Fig. 4. Prevalence of treatment in alcohol-dependent and nondependent individuals categorized by the DSM-IV alcohol-dependent symptoms.

Interventions can also be examined from a threshold on an ordinal scale. With alcoholism, one of the most common interventions is chemical dependency treatment, which may be defined as attendance at self-help groups such as Alcoholics Anonymous to inpatient treatment. Treatment interventions follow the pattern expected with the categorical diagnostic category for alcoholism (see Fig. 3). Among individuals with a diagnosis of alcoholism, about 50% of men and 35% of women have received some treatment for alcoholism whereas among individuals without an diagnosis of alcoholism, very few individuals report any treatment. When examining alcoholism on an ordinal scale of alcohol dependence symptom counts, again a pattern of increasing treatment with a greater number of symptoms is seen. Subjects who reported no symptoms of alcoholism also reported no history of treatment. Conversely, among individuals with severe alcoholism, defined as reporting 7 symptoms of alcoholism, the maximum possible using DSM-IV counts, about 85% of men and 70% of women reported a history of treatment.

Several important points can be made about using an ordinal scale with thresholds for diagnosis and treatment. First, thresholds need not be static and can change as more data and outcomes are accumulated. With further study, it may be found that long-term outcomes are worse than expected and so diagnostic thresholds may be lowered. In addition, interventions may improve so that risk–benefit ratios change and a new lower threshold for treatment can be set. Finally, ordinal scales can incorporate numerous factors so that the scale becomes a multifactorial composite. This will allow the incorporation of individual characteristics that can guide a personally tailored and more effective treatment (Fig. 4).

In summary, there is an implicit ordinal scale underlying the diagnosis of alcoholism using a count of DSM-IV criteria for alcohol dependence. Using the simple DSM-IV symptom count for alcohol dependence, further information can be gained compared with the categorical diagnosis alone. This symptom count is simple and effective, and as these data are currently collected on subjects in research and patients in clinical care, they can be incorporated into our current studies and patient care.
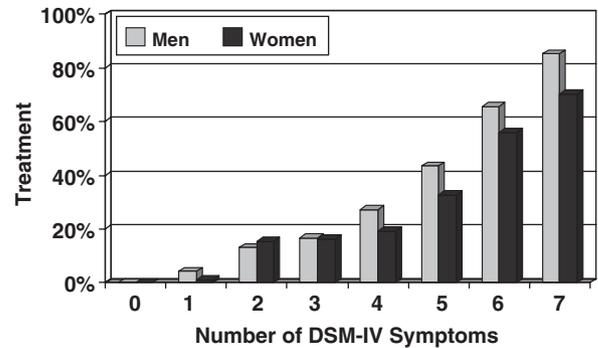
THE ICD MODEL: A TWO-CRITERIA OPTION FOR THE DSM-V SUBSTANCE USE DISORDERS

John E. Helzer, MD; Sarah Guth, BA

The original *Diagnostic and Statistical Manual of Mental Disorders* (APA, 1952) was published more than 50 years ago. During that period, the DSMs have stimulated considerable progress in psychiatric taxonomy (Kendell and Jablensky, 2003). As of the publication of DSM-III, we have had well-defined diagnostic criteria that in turn have fostered structured diagnostic instruments that reflect those criteria. The use of these tools has enabled us to move from unacceptable levels of diagnostic reliability to reliability that is comparable with that achieved by physicians in other fields including those interpreting more objective diagnostic tests such as EKGs and X-rays (Helzer et al., 1977). But science is iterative. By moving us from a descriptive to an explicit categorical classification system, DSM-III was a sometimes controversial paradigmatic shift in how we define and perceive psychiatric illness. The progress this change enabled now reveals the inadequacies of a strictly categorical diagnostic model. In this paper, we argue that in order to foster continued progress, the next iteration of our psychiatric taxonomy (DSM-V) requires yet a new definitional paradigm for the substance use disorders.

Heretofore, the DSM has been a categorical diagnostic system. One characteristic of a categorical taxonomy is that the illness categories are generally defined in a "top-down" fashion. In the DSMs, a group of experts (diagnostic workgroup) determines how each illness will be defined and creates a set of criteria to reflect that definition. Anyone passing the minimum threshold specified by the criteria is given the same diagnosis regardless of severity; those falling below the minimum are not diagnosed regardless of how close they may come. This is a highly efficient process resulting in a series of yes/no (categorical) decisions for each diagnosis and generating, in statistical terms, nominal-level data. By contrast, a dimensional taxonomy is typically created in a "bottom-up," empirically driven fashion. Rather than relying on a group of experts to

define disorder, large groups of symptoms are ascertained through a general population survey and subjected to statistical analysis to determine which symptoms group together in the individual respondents. Each group of symptoms is labeled according to the types of symptoms it contains (e.g., alcohol problems, depression, anxiety). Individual patients receive a score for each class depending on the number of symptoms they have. The end result is a syndrome profile reflecting the relative severity of each syndrome, i.e., ordinal-level statistical data.

Because it is empirically derived and because it preserves more information about individual cases (severity for example), a dimensional classification is a more powerful taxonomic tool. It serves the basic function of defining and naming illness so as to facilitate communication and focus clinical decision making. But by preserving more clinical information (e.g., pattern and severity of symptoms), it is a more powerful tool for research aimed at understanding the nature and etiology of illness. Importantly, a dimensional taxonomy also enables more accurate clinical decision making. As Dr. Bucholz noted in her paper, consideration was actually given to a more dimensional approach in DSM-III.

In reality, both categorical and dimensional systems have their advantages. A dimensional diagnostic approach seems especially pertinent for alcohol use disorders. There is considerable evidence that the alcohol disorders are more logically seen as dimensional than as categorical conditions. There is also continuing evidence that categorical nosologies are insufficient in capturing important distinctions among alcoholic individuals. For example, Babor et al. (1992) tested 5 such typologies and found that none was a strong predictor of outcome and did not discriminate well with respect to other key parameters such as pattern of consumption and presenting symptoms. On the other hand, categories are very useful for some purposes. These include ease of communication, diagnostic coding for statistical record keeping and billing, to name just a few. Dimensional methods are very useful for measuring severity, detailing a treatment plan, tracking changes over time, and genetics and other research. Research can be hampered by a strictly categorical system as so much of the diagnostic variance between individuals is lost. A categorical threshold fails to acknowledge the variance among those who fall below the diagnostic threshold (i.e., not given a diagnosis) and the considerable variance among those who fulfill the threshold criteria. As so much individual variation is lost by a simple categorical distinction, much larger subject samples are necessary to achieve the same statistical power in looking for important or explanatory relationships.

In this paper, we offer a proposal for adding a dimensional component to the DSM-V classification for alcohol use disorders while preserving the traditional DSM categorical system. We suggest that the diagnostic work group for the substance use disorders create the new DSM-V categorical definition as has been the case in the past. After the categorical definition has been specified, a dimensional approach would be created to reflect the categorical definition. This could be done by scoring each of the symptoms for a particular alcohol diagnosis on a simple dimensional scale (such as mild/moderate/severe). This alone would expand the variance within the definition. For example, if there were 8 symptoms in the categorical definition, each scored on a 0 to 1 to 2 scale, the potential diagnostic score could range from 0 to 16. Receiver operating (ROC) analysis could then be used to determine the point on the dimensional scale that most closely relates to the categorical definition. This would create a 2-criteria option as is the case with international classification of diseases (ICD)-10 clinical and research criteria. It would differ from the ICD in that the 2 definitions contained there are both categorical, with the ICD clinical diagnosis being descriptive (as in the DSM-II) while the research criteria are more explicitly defined (similar to DSM-III and its successors). In our proposal the clinical (categorical) criteria would be explicit just as they currently are in DSM-IV and the corresponding research criteria would be dimensional. However, the 2-criteria option, we propose would be similar to the ICD in that the 2 sets of criteria would define the same clinical entity, would relate directly to one another, and would not represent 2 independent sets of criteria. Without close concordance, a 2-criteria system like the one we propose would be unfortunate in that it would likely create diagnostic confusion. Our proposal would offer both clinicians and investigators the convenience of a categorical diagnosis for communication, coding, investigative assignment, and other purposes, but it would also offer the greater breadth of a dimensional score for measuring initial severity and tracking treatment progress or for adding statistical power to investigative designs.

ADVANCE PLANNING FOR DSM-V: OPPORTUNITIES FOR INPUT FROM THE FIELD

Darrel A. Regier, MD, MPH

Publication of the DSM-IV in 1994 and, more pivotally, the DSM-III in 1980 reshaped the scientific foundations of psychiatry over the past quarter-century. The hallmark contribution of DSM-III was the introduction of well-defined, discrete syndromes based on observable, measurable criteria. In enhancing the reliability of psychiatric diagnoses, the new approach served to advance the quality of clinical care as well as psychiatric research in multiple areas. Reliable diagnostic categories provided clear indications for pharmacologic and psychosocial treatments, defined phenotypes for genetic studies, and enriched the body of research extending from preclinical animal studies, to functional imaging and other neurobiological research comparing patients and controls. The new reliability made possible standardized clinical trials, facilitated cross-cultural research on mental disorders, and

underpinned a new generation of national and cross-national epidemiology studies such as the epidemiologic catchment area (Regier et al., 1984) and national comorbidity study (Kessler et al., 1994).

Even as these and other dividends were being realized, however, shortcomings of the modern psychiatric classification became increasingly evident. Key among these was that the successful emphasis on reliability of diagnoses was achieved in the absence of equal assurance about their validity. High levels of comorbidity pointed to problems with the delineation of syndromes; in some instances, such as depression/anxiety and various childhood disorders, comorbidity was more the rule than the exception. Other issues related to the question of validity concerned the lack of an objective, systematic process for ascertaining, on the basis of measurable criteria, the severity and disability of disorders that fulfill diagnostic thresholds. Without such information, epidemiologic studies were generating prevalence rates that many contended were too high to allow a clinically meaningful public health response. Also, by the late 1990s, the rapid evolution and expansion of the treatment armamentarium, particularly in psychopharmacology, undermined the utility of treatment response criteria: the introduction of clozapine and atypical antipsychotics for schizophrenia and mounting evidence supporting off-label use of anticonvulsants and antipsychotic medications for mania made moot criteria that differentiated bipolar response to lithium and schizophrenia response to neuroleptics. The treatment response picture became even murkier as SSRIs and related antidepressant medications were shown to be effective across a wide array of disorders. Finally, dissatisfaction has grown with the inability of the multiaxial classification to capture the quantitative components of categorical diagnoses.

In 1999, the American Psychiatric Association and the National Institute of Mental Health (NIMH) began collaboratively to fashion a research agenda that would address these and other shortcomings of DSM while expanding the scientific base for future psychiatric classifications. An initial research planning conference identified a series of white papers to guide future research; the topics were developmental issues, gaps in the current classification, disability and impairment, neuroscience, and nomenclature. A sixth white paper on cross-cultural issues was added. The papers were developed by work groups of investigators with relevant expertise, with each team including liaison members from NIMH as well as the National Institute on Drug Abuse (NIDA) and the National Institute on Alcohol Abuse and Alcoholism (NIAAA) with the aim of facilitating the integration of workgroup recommendations into the institutes' research programs and new requests for applications (RFAs).

Upon publication in 2002 of *A Research Agenda for DSM-V* (Kupfer et al., 2002), the APA leadership envisioned a series of conferences that would address specific diagnostic topics in greater depth. American Psychiatric Association sponsored a prototype symposium on mood disorders at the XII World Congress of Psychiatry in Yokohama, Japan. Presentations addressed diverse topics in depression-related research, including preclinical animal models, genetics, pathophysiology, functional imaging, clinical treatment, epidemiology, prevention, medical comorbidity, and the public health implications of the full spectrum of mood disorders. This trial effort underscored the importance of structuring multidisciplinary research planning conferences in such a manner as to force interaction among investigators from different fields and to demand of presenters a sharp focus on the diagnostic implications of recent and pending research. These emphases strongly influenced the National Institutes of Health (NIH) research planning conference grant application that was prepared by the APA's component APIRE and was cofunded in 2003 by NIMH, NIDA and NIAAA.

The ongoing research planning conference series, which is being administered under the sponsorship of APA, the World Health Organization (WHO), and the 3 NIH institutes, is a 5-plus-year effort designed to pave the way for a unified, international research-based classification of mental disorders. The official ICD developed by WHO does not include diagnostic criteria but only the names of diagnoses and a classification code number; historically, the WHO/ICD Directors have left development of diagnostic criteria to medical specialty groups. However, the WHO division of mental health has published a glossary of terms for mental disorders in ICD-9 and suggested clinical and research criteria for mental disorders identified in ICD-10. American Psychiatric Association's landmark DSM-III set a new standard for explicit mental disorder diagnostic criteria that was emulated and resulted in about 90% congruency between DSM-IV and ICD-10. Hence, the APA views its stewardship of the DSM as a critical role for a medical professional organization on behalf of the international, multidisciplinary mental disorder research community.

The research planning project began with a launch/methodology conference held in February 2004 to review cutting-edge statistical analytic approaches to nosologic research and, quite simply, to begin to build a necessary rapport between mental disorder investigators and methodologists. At the core of the planning effort are 11 work groups, each charged to convene a working conference as the centerpiece of an extended effort to review the state of the science in a given diagnostic area and, to the extent possible, initiate research, including secondary analyses of existing databases.

With an eye toward achieving a unified *DSM-ICD* classification system, the conferences will encourage an unprecedented degree of international collaboration. As described in Table 1, each conference will be cochaired by a US investigator and an international colleague. Invited work group members will represent a mix of US and international scientists, and half of the conferences are being

Table 1. Schedule for APA/WHO/NIH Conference Series: The Future of Psychiatric Diagnosis: Refining the Research Agenda

2004
  February: Launch and Methodology (US)
    Helena Kraemer & Patrick Shrout
  December: Dimensional Models of Personality Disorder (US)
    Thomas Widiger & Eric Simonsen
2005
  February: Substance Use Disorders (US)
    Marc Schuckit & John B. Saunders
  June: Stress and Fear-Circuitry Disorders (US)
    Dennis Charney & Gavin Andrews
  September: Dementia (Geneva, Switzerland)
    Trey Sunderland, Olusegun Baiyewu, & Dilip Jeste
2006
February: Deconstructing Psychosis (US)
  Carol Tamminga & Jim Van Os
April: Dimensional Approaches in Psychiatric Diagnosis (US)
  John Helzer, Helena Kraemer, & Robert Krueger
June: Obsessive-Compulsive Disorder Spectrum (US)
  Eric Hollander & Joseph Zohar
September: Somatic Presentations (Beijing)
  Arthur Kleinman & Yu Xin
2007
  February: Externalizing Disorders of Childhood (Mexico City)
    Luis Augusto Rhode, Judith Rapoport & David Schaffer
  June: Depression and GAD (London)
    David Goldberg & Kenneth Kendler
  September: Public Health (Geneva)
    Benedetto Saraceno & Norman Sartorius
Establish DSM-V Task Force Structure and appoint members

APA, American Psychiatric Association; WHO, World Health Organisation; NIH, National Institutes of Health; DSM, Diagnostic and Statistical Manual.

convened in sites outside the United States. The cochairs, in collaboration with the APA–WHO–NIH Executive Steering Committee, are responsible for planning detailed conference programs, generating resources such as literature reviews, ensuring timely production of a "proceedings" for each session, and recruiting the approximately 25 presenters and discussants who will participate in each conference.

The conference proceedings will constitute source documents for the official DSM-V revision workgroups when APA establishes these panels in 2007. In addition, APA has commissioned another series of white papers focused on the nosologic implications of special research associated with gender, infant and child development, and geriatric mental health.

Because the research planning conferences and work groups are open only to invited participants, APIRE has established a website designed to solicit from the broader research and clinical communities, as well as the public at large, comments and suggestions regarding changes in DSM-V. This site, at www.DSM5.org, will serve as a repository for information that will be indexed and transmitted to appropriate DSM-V work groups when the official revision begins.

Publication of DSM-V is scheduled for 2011, timing that will coincide with the slated publication of ICD-11.

DISCUSSION AND CONCLUSION

Marc A. Schuckit, MD

The papers presented here offer an important basis from which additional data can be gathered to address the question of the optimal use of dimensional versus categorical diagnoses in DSM-V. I approach my role as discussant with no preconceived conclusions regarding the use of dimensional versus categorical diagnoses labels and will attempt to synthesize my perception of some of the major points made in this set of papers.

Perhaps my discussion might best begin by offering some perspective on the role of DSM overall. This is a clinically oriented diagnostic manual aimed primarily at a broad range of clinicians including general practitioners, psychiatrists, psychologists, and a host of other individuals working in the health care professions. The manual also serves as an important structure for decision points for health care administrations, as well as insurers who use it as a guideline regarding the optimal use of treatment slots and health care dollars. Most of these "consumers" of the DSM product are not experts in substance use disorders and, unfortunately, often do not see these diagnoses as a major focus of their work. Thus, the structure and content of the DSM's must recognize the importance of a clinically oriented audience.

In addition, DSM criteria have to be stated in broad enough terms to allow the clinicians and administrators to apply their commonsense and clinical knowledge when using these diagnoses among diverse populations. These include older versus younger patients, men versus women, and individuals from a wide range of cultural and ethnic-based groups.

As a result, DSM criteria must be relatively simple and easy to use and relatively easy to remember. If these attributes are missing, even the best and most precise criteria are not likely to be generally used by clinicians.

The requirement for simplicity, however, is not necessarily optimal for research endeavors. Scientists require an ability to understand problems in depth and can tolerate (even demand) relatively complex definitions and descriptions. In addition, researchers have a tendency to prefer to define concepts in their own ways, often using terminology and definitions that differ in important ways from study to study.

With these ideas in mind, here are some conclusions that I have drawn from today's discussion. First, as suggested by several authors in the literature and noted by Dr. Bierut, there may not be a perfect way to define substance use disorders. In the final analysis, each set of criteria for substance use disorders offers relatively unique assets and liabilities, rather than an answer for absolute precision. Thus, there may not be huge differences in accuracy between categorical versus dimensional criteria. The 2 approaches have different pluses and minuses with, as noted by Dr. Bucholz, potentially

higher κ's for categories and greater precision for dimensions.

Second, as pointed out by several of the presenters, clinicians already have dimensions available to them when dealing with the substance use disorders. One approach is to count up the number of symptoms, and another is to attempt to use the broad dimensions of mild, moderate, and severe. All of the papers presented here demonstrate that there are wonderful data sets available for our use as we evaluate different forms of diagnostic approaches.

Third, no matter what road we take, the lack of a likely perfect answer means that we need to keep our minds open to appropriate compromises. John Helzer has suggested that one such approach might involve basing diagnoses on categories, but offering dimensions as qualifiers. This offers an approach that might be useful across the entire DSM-V and need not be limited to the substance use disorders alone.

A combined categorical and dimensional approach would also be very useful if a companion research manual is developed to go along with the DSM. Such a manual might also suggest to researchers how they might best operationalize concepts within the DSMs. This could apply to a range of questions, including how one defines whether a patient or subject was intoxicated enough to have placed themselves at risk for injury when driving, swimming, etc. (e.g., the number of drinks over a known period of time could be used to estimate the blood alcohol level at the time of the activity). The more generally accepted research-based definitions are also required for what "spending a great deal of time using" might mean, the meaning of "repeatedly," and so on. Perhaps such a research-based manual might suggest the most appropriate wording for face-to-face interviews and an alternate acceptable wording for self-administered questionnaires.

In conclusion, our last speaker, Dr. Regier, offered a nice summary of the questions being addressed as part of the DSM preparation process. Prominent among these items was the need to consider whether DSM-V criteria for the substance use disorders should be dimensional or categorical. On the one hand, clinicians and administrators are likely to prefer relatively simple categories as an optimal approach, while researchers are likely to seek out more detailed and complex definitions to address their questions in greater depth. A compromise that serves both communities is well worth considering. Here, relatively straightforward and clinically useful categorical criteria can be used as the basis for defining conditions in clinical settings. A research-oriented manual could then discuss these criteria in much greater depth, offering suggested interview and questionnaire items to allow researchers to operationalize the components of the substance use disorder criteria in a way that facilitates comparisons across studies.

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