American Handbook of Psychiatry

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CHAPTER 32

THE NOSOLOGY OF PSYCHIATRY

Robert J. Campbell

Nosology (from *nosos,* "disease") is the study of diseases from the point of view of their grouping, ordering, and relationship to one another; it includes the classification of diseases as well as the formulation of principles for differentiating one disease from another.

Diagnosis (from *dia,* "through, dividing into parts," and *gnosis,* "knowledge, recognition") is the process of distinguishing or recognizing the whole from its manifestations, of detecting the presence of disease from its symptoms. The process of diagnosis affirms that a disease is present; it defines the nature or character of that disease at the greatest level of specificity possible; and it provides a summary statement of what was discovered. Diagnosis is therefore both a process and a statement of the conclusion to which that process leads.

Nomenclature (from *nomen,* "name," and *calare,* "to call") is the agreed-upon label or wording that is used to communicate the results of the diagnostic process. Nomenclature is the shorthand name for the disease that

has been identified, but in addition it implies that there is some reason for preferring one name to another.

Classification is the grouping of diseases into classes or orders, a logical scheme for organizing and categorizing so that different types of diseases can be distinguished and assigned their proper places.

All four terms—diagnosis, nomenclature, classification, and nosology—refer to various aspects of the conceptualization of disease. Because they are overlapping and interdependent, rather than mutually exclusive, it is not surprising that usage has tended to blur the distinctions between them. In itself, that is of little matter; what is unfortunate is that the vagueness and uncertainty that surround their use have spread as well over the assumptions on which they are based. Often lost sight of is that each of them reflects current speculation and hypotheses about the conditions to which they are applied and not only "hard" knowledge or scientific "fact." Expanding knowledge dispels far fewer hypotheses than it generates, and the diagnostic process and classificatory scheme must accommodate themselves both to facts as they are established and to the speculative models and innovative guesses that guide the research of the day. General paresis, for example, was well described as a clinical entity, or syndrome, by Haslan in 1798, by Bayle in 1822, and again by Esquirol in 1826. Its relationship to syphilis was suggested by Esmarch and Jessen in 1857 and again by Krafft-Ebing later in the century.

But it was not until the discovery of the spirochete by Schaudinn and Hoffmann in 1905, the development of the Bordet-Wassermann reaction over the period 1901 to 1907, and Noguchi's demonstration in 1911 of spirochetes in the brain that it became possible to identify positively as syphilitic many conditions whose etiology previously had been merely speculative.

Psychiatric nosology, like all medical nosology, is thus ever changing, not only to correct the demonstrable errors and misconceptions of the past but also to provide a proper place for the discoveries that current technology promises.

Thomas Sydenham (1624-1689) is credited with the founding of nosology. He differentiated between symptom, syndrome, and disease and defined a disease syndrome as a group of symptoms, intercorrelated and not each a separate illness, differentiable from other syndromes, and with a characteristic pattern over time. In psychiatry, the greatest systematist was Emil Kraepelin (1856-1926). He introduced the prognostic approach into the classification of psychiatric disorders and thereby separated the endogenous psychoses with good prognosis (manic-depressive psychosis) from those with poor prognosis (dementia praecox, the group that Bleuler would later call the schizophrenias). Perhaps more than any other classification scheme proposed since Kraepelin's, the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders* 3rd ed. (DSM-III) reaffirms the

Kraepelin and Sydenham position that nosology includes both a phenomenologic description of disorders and also a prediction of their outcome. Because the etiology and pathophysiology of most psychiatric disorders are unknown, they are not readily identifiable or separable on the basis of causative agent. Yet some of them disappear or abate while others do not, and a system that groups them according to what their response to time or treatment will be provides an invaluable tool to the clinician.

Change always provokes some degree of resistance, and the architects of DSM-III have had to contend with a substantial number of objections to their proposals. Those objections were met head on, and they often resulted in major changes in the classification. They also pointed up the difficulties that should be recognized by any who would construct their own or discard another's system of classification.

What Is Illness?

As already noted, an essential part of the diagnostic process is saying that there is or is not a disease. But what is a disease? Often it is defined as any deviation from normal form and function, but, particularly in the area of human behavior and emotional reactions, such a definition is likely to be unsatisfactory. Who defines what is normal, and by what standards? Normality is often defined on the basis of statistical criteria, but how is the

dividing line determined? One standard is that 95 percent of the population measured fall in the normal range. Yet any number of variants whose incidence is less than 5 percent of the population can be cited, and despite their rarity, they would hardly be considered disorders. How, for example, should one regard the basketball star? He is seven feet tall, far outside the normal range, and has cardiac hypertrophy, also a statistical abnormality. It is well known that cardiac hypertrophy is a significant factor in many types of heart disease. It is also well known that athletes' hearts respond to the demands of repetitive strenuous activity by enlarging. Cardiac hypertrophy in athletes is thus considered an appropriate, desirable, and even necessary response to the functional demand.

Functioning, then, and not mere counting or measuring, may be the answer to the question of what is disorder or disease. So long as a person functions well and is able to meet the ordinary stresses of life, he is to be considered healthy or normal and free from disorder. Such a definition, while it may be an improvement over a purely statistical approach to disease, has three major failings: it ignores latent disorders and conditions that may manifest themselves only under special conditions or after a period of development; it gives little due to the subjective or complaint aspect of disorder; and it avoids the issue of how a judgment of adequate functioning will be reached.

Think for a moment of the light-complexioned person in the days before chemical sun screens were invented. As long as he lived in a northern clime, worked mainly indoors, and moved about outside only briefly or after dark, no measures would detect deviation from the norm. Yet if forced to work under an equatorial sun, he would in a matter of hours be acutely ill. His "disease" could not accurately be described only in terms of overexposure to the sun, for its development depended at least as much on his inherent susceptibility or sensitivity. At what point does that person have an illness—only when the burn appears, at the first moment of exposure, or when his potentiality for developing the reaction is recognized?

As will be seen, the situation is relevant to the controversy surrounding the diagnostic criteria for schizophrenia. For any chronic progressive condition, the possibility that it might be prevented completely, or that its downhill course might be halted, would favor broad and over-inclusive criteria so that the disorder could be recognized early enough to permit application of preventive efforts while there is still a chance they might be effective. On the other hand, if a syndrome is a final common pathway for the symptomatic expression of a group of diverse disorders, no completely rational approach to their prevention can be derived until they are identified and separated into homogenous entities. In order to do that it is necessary to apply rigidly exclusive criteria in order to prevent extraneous factors from contaminating the sample.

Another problem in defining disorder is that disease and illness are not the same. The sun-sensitive person described previously may carry his "pigment disorder" for years without knowing it, but when he is exposed to the sun becomes acutely aware of the fact that he is ill. The diabetic has a disease, to be sure, but so long as it is well-controlled by insulin, he is no more ill than the sun-sensitive person who screens out the harmful rays with para-aminobenzoic acid.

Diabetes illustrates many of the problems of defining disease. It consists of a cluster of symptoms, including polyuria, polydipsia, bulimia, weight loss, weakness, malaise, dehydration, and coma. It also includes various somatic and biochemical abnormalities, including glycosuria, hyperglycemia, abnormal glucose tolerance curve, and abnormal plasma insulin response. In a few cases, a clear cause can be identified, but not in most, although there is reason to believe that in a significant proportion of those in whom the cause cannot be identified the disease is a manifestation of genetic defect. In those cases, the disease must, of course, be present from the moment of conception, yet it will not become clinically apparent for many years. In the *latent* phase, it is not even possible to detect a biochemical abnormality by the techniques currently available. In the *preclinical* phase, biochemical abnormalities can be demonstrated, but the affected person remains symptom free and has no clinically apparent disorder of carbohydrate metabolism. It is only when the patient enters the *clinical* phase that signs and symptoms develop.

When is the diagnosis of “diabetes” justified? All would agree that by the time the patient is ill with symptoms the diagnosis is warranted. Its typical symptoms were clearly described by the first century. Sweetness of diabetics’ urine was described by the fifth century, and by the late eighteenth century it was known that the sweetness was due to sugar in the urine. Would it have been correct to include all persons with glycosuria under the term “diabetes,” even though they had not developed all the symptoms of the syndrome? With the development of the glucose tolerance test and, more recently, the plasma insulin response, it became possible to detect many “chemical” diabetics— some of whom would not develop clinical manifestations for many years, others never would except, perhaps, under special conditions. It is to be expected that future research will make it possible to devise tests of biochemical action that are even closer to the gene level than are plasma insulin levels— that is, within ten years it is likely that more “potential” or “chemical” diabetics will be uncovered. At what point along that inadequately charted course from genetic defect to biochemical abnormalities to early symptom formation to full syndrome development does one apply the diagnostic label?

Another level of difficulty is posed by a group of disorders due to a deficiency of the enzyme hypoxanthine-guanine phosphoribosyltransferase (HGPRT). When the enzyme is present at only a 0.005 percent level of normal activity, the affected subject develops a severe neuromuscular disorder with

involuntary choreoathetoid movements, mental retardation, biting of the lips and fingertips, and a severe gouty arthritis because of high uric acid levels. To that cluster of symptoms the name “Lesch-Nyhan syndrome” has been given. In some members of the families of patients with Lesch-Nyhan syndrome, the enzyme is deficient, but not to the same degree. In those where the activity level is between 0.01 percent and 5 percent of normal, spinocerebellar syndromes of variable severity will develop; but if the enzyme level is as high as 1.0 percent of normal, the resultant syndrome is gout. All three syndromes, as well as the group of conditions termed diabetes, underscore the fact that categorization of disease, even though it changes, is not wholly arbitrary; rather, it reflects developing knowledge, at increasingly discrete levels, of the process of pathogenesis.

It should be clear then that one can be diseased, even for many years, without being ill. Is it also possible that one can have an illness and not have a disease? To some extent, the question invites circular semantic debates, but at the same time it emphasizes the significance of the symptom or complaint level that any classificatory scheme must take into account. At what point, for example, does “obesity” become the appropriate designation for a subject’s body weight? Supposing that a physician and patient can agree on the latter’s ideal body weight, how many pounds need be added before the doctor is justified in prescribing a weight-loss regimen? The number might be very different for a middle-aged factory foreman and a twenty-year-old starlet or

cover girl, for whom five extra pounds of weight might constitute a disastrous illness. A tiny pimple beneath the hairline on the base of the neck may be of no consequence; yet the same sized pimple on the eyelid can be an excruciatingly painful illness as well as a significant disease.

A related difficulty in nosology is illustrated by Baker's example of cultural/national/racial influences on the designation of disease. The axillary sweat of whites and blacks is "smelly" and offensive by Japanese standards. But about 10 percent of the Japanese people (mainly those of Ainu ancestry) also have "smelly" armpits. Their condition (osmidrosis axillae) is recognized as a disorder of enough significance to warrant exemption from military service, and there exist in Japan physicians who specialize in its treatment. In the United States and Europe, by contrast, if it is admitted at all that axillary odor is offensive, it is combated by an array of antiperspirants and deodorants that are consigned to the realm of the cosmetologist. It seems highly unlikely that it will be given disease status in the United States classificatory system, or that its management will be transferred to the dermatologist, the pathologist, or the psychiatrist.

It can be seen that, even outside the nebulous realm of psychiatry, the determination of what is disease is not an easy one. The definition is often man made, based on cultural or philosophic biases rather than objective phenomena, and reflective of personal and idiosyncratic value judgments

rather than scientific data. It is probably useless, then, to try to differentiate between disease, disorder, derangement, ailment, malady, sickness, and illness. It might be better to accept Feinstein's dictum, ". . . that the only workable definition of disease is that it represents whatever the doctors of a particular era have defined as disease."

Classification and Nomenclature

Classification is a systematic arrangement, in this case, of disorders into classes so that different orders or levels can be distinguished from each other. Taxonomy is the theory of how classificatory systems should be structured and formalized, but even so abstract a level of operation cannot be divorced from the conceptualization of what it is that is being classified.

Every classification reflects the purpose(s) for which it was constructed in the first place. If the main purpose is to provide access to information that is not readily at one's fingertips, an index might be the most appropriate system, that is, a classification based on an alphabetical listing of names that are likely to be recognized by the user. Thus a "Directory of Mental Health Services" might list clinic, community mental health center, electroconvulsive treatment, hospitalization, insurance coverage, outpatient department, payment mechanisms, pharmacotherapy, psychotherapy, somatic treatments, and so forth without regard for where each might fall within a hierarchical

ranking and without concern for the fact that the system is over inclusive and duplicative. Similarly, an "Index of Diagnostic Terms" might list in alphabetical order every name within the nomenclature, including names that are obsolete or not preferred (for example, "Mongolian idiocy") as well as the more acceptable terms ("Down's syndrome" or "trisomy 21") and class names as well as genus and species names ("developmental disorder," "childhood onset pervasive developmental disorder"). The clinician who uses such an index, however, would expect that the page to which he is referred will place the disorder named within some logical frame and will indicate that language disorder is a specific developmental disorder of childhood. If it were only a so-called *key classification* that used "language disorder" as the single characteristic that would divide one subject from all others, the clinician would find himself in a hodgepodge of aged aphasics with cerebrovascular disease, alcohol or barbiturate abusers whose dysarthria betokens cerebellar involvement, bright children who stutter, anencephalics with no language whatever, catatonic patients with verbigeration, and a host of others.

Most biological classifications have progressed to a *natural classification,* grouping together forms that seem to share fundamental and significant characteristics. Such a classification provides not only conciseness, by reducing the number of separate elements that have to be examined, but also the prospect of efficient storage of the information obtained. In addition, it provides some degree of predictability, in that the new "case" with some of

the characteristics of the group is likely to share other characteristics even though they are not as yet obvious. At the same time it must be recognized that how the grouping is made in the first place depends on the state of the art or science that decreed such and such characteristics to be fundamental and significant. Most natural classifications describe groups in somewhat exaggerated terms of what is believed to be significant, the prototypical case. Ignored are the innumerable factors that are believed to be insignificant or secondary. Particularly when one is dealing with clusters of symptoms (syndromes) rather than with well-defined diseases and when those symptoms are expressed in thoughts, feelings, or social relationships, rather than as more discrete and localized variations in a well-defined organ system, what may seem to be unimportant or irrelevant, or what is not seen at all because no technique has evolved to measure it, may in the long run turn out to be the most essential feature of a group. The schizophreniform episodes of acute intermittent porphyria, for example, appeared "naturally" to fall within the schizophrenic group. It was not until the Watson-Schwartz and glycine loading tests were devised that it was possible to demonstrate that such episodes were accompanied by increased excretion of 6—aminolevulinic acid and porphobilinogen in the urine. Only then could such patients be grouped correctly, within disorders of porphyrin metabolism.

Behavior is a final common pathway for many disparate processes, which converge upon the only outlet available. Such *functional convergence,* as

it is now commonly termed, has profound implications for both treatment and research. If altered behavior (be it hallucinations, melancholia, avoidance, aggressiveness, or withdrawal) were the only basis for defining a disease category, all "patients" with the same behavior would be given the same treatment. But the "schizophrenia" of one patient may be due to an inborn metabolic error, while the "schizophrenia" of another may reflect intrafamilial conflict, and it is unlikely that the same treatment will be optimal for both. Similarly in research, if behavior alone were used to make the groupings, the truly discriminant abnormalities (such as porphyrinuria) would be ignored because they would appear to be statistically insignificant within a large heterogeneous group. Many studies of schizophrenic populations have found that when defined behaviorally, the group showed no consistent abnormalities in any number of physiologic and biologic measurements. The comment was often made that greater variability was the only characteristic, when in fact the extremes had been averaged out by researchers, blotting out the differences between the distinct subpopulations with abnormally high and abnormally low scores.

Once the inadequacies of a single level approach were generally recognized, classification moved toward a polythetic approach. Variations in behavior (including thinking, feeling, and interpersonal relationships) were no longer the sole determinants of classificatory groupings; they were to be supplemented by as many measurements as possible, from as many levels as

possible— physiologic, metabolic, previous history, course of illness, response to treatment, family history, and so forth. Syndromes could then be described in terms of clusters of measurements from all levels, rather than clusters only of symptoms. *Numerical taxonomy* provides a computerized system for quantifying the various measures, subjecting them to multivariate analysis, and thereby deriving objective, operational classification schemes.

Yet even a computer classification is not without its pitfalls. The decision as to what is a disorder or what is undesirable is not the computer's, it is the investigator's. The decision, accordingly, will reflect the investigator's bias (or that of his culture) as to what is diseased, what should be changed, and what should be abolished. The decision as to which measures are relevant, which measure the same function (thus artificially exaggerating its importance by counting it over and over again in the clustering process), and which will give the broadest possible range of information also remains with the investigator. In order to gain maximal usefulness from any set of measures, Corning and Steffy recommend the following criteria for their selection:

1. Use standardized procedures with known standard errors of measurement within population groupings;

2. Use tests with high construct validity, that is, tests whose items measure what they are intended to measure and not some subordinate or related function; a test of arithmetic ability, for example, should test a broad range of arithmetic tasks,

and each item of the test should measure only arithmetic and not reading ability;

3. Select tests that have already demonstrated their sensitivity to psychopathology;

4. Give preference to indicators of vulnerability or outcome, to tests that measure deficits over a period of time rather than to cross-sectional assessments of acute episodes of decompensation;

5.Use tests that are known to highlight or elicit distinctive abnormalities in the group(s) under study.

The final test of any new groupings thus obtained, of course, is their applicability to the patients the clinician sees, and particularly their predictive value relative to outcome. It is to be hoped that increasingly homogeneous diagnostic groups can be differentiated until the ideal is finally reached: each group identified has a common etiology, pathogenesis, and epidemiology. While we are far from that ideal now, present-day research promises to provide increasing refinement of the classificatory system with its insistence on a multi-axial, polythetic description: clinical characteristics, physical and neurologic factors, familial distribution of psychiatric illness, natural history, and biological indices (such as rapid eye movement latency, dexamethasone suppression, pharmacological responsiveness, and so forth). Throughout the United States, there is growing emphasis on pragmatic, operational criteria

for diagnosis, as free as possible of theoretical speculations about etiologic and pathogenetic mechanisms. Indeed, in the introduction to their book on psychiatric diagnosis, the St. Louis group states: "There are few explanations in this book. This is because for most psychiatric conditions there are no explanations."

ICD-9, ICD-9-CM, and DSM-III

The *International Classification of Diseases* (ICD) is a product of the World Health Organization (WHO) and was designed originally for the classification of morbidity and mortality information for statistical purposes. Later its use was extended to include the indexing of hospital records by disease and operation for data storage and retrieval. Because the original classification was used to indicate causes of death, mental disorders were not included in the ICD until the fifth revision (1938), when they were included in the section on "Diseases of the Nervous System and Sense Organs." The sixth revision (1948) had a separate section for mental disorders, but many psychiatrists throughout the world felt that the classification did not reflect satisfactorily the expanding amount of knowledge within the field. WHO subsequently revised the classification of mental disorders, and when the eighth revision was adopted in 1965, it included a "Glossary of Mental Disorders" as a guide to more uniform usage of the principal diagnostic terms. In preparing the section on mental disorders for the ninth revision (ICD-9,

1977), WHO convened a series of international seminars devoted to a consideration of recognized problem areas in psychiatric diagnosis. Those deliberations, by psychiatrists from more than forty countries, led to a recasting of the classification of many disorders in ICD-9 as well as the introduction of several new categories. The section on mental disorders again includes a glossary, this time as an integral part of the text. The glossary provides a common frame of reference for diagnoses that are ordinarily based upon descriptions of behavior and feelings rather than on independent, confirmatory, laboratory data, and for terms that otherwise might be used with markedly different meanings by different clinicians or statisticians.

ICD-9-CM, the Clinical Modification of ICD-9, was adopted for use in the United States to provide greater specificity than was possible with ICD-9. ICD-9 is a three-digit system; thus, the numbers from 001 through 999 must contain all recognized diseases. They are subdivided into seventeen major groups (for example, infectious diseases, diseases of the circulatory system and so forth), and each is allocated a specific set of numbers. Mental disorders have been allocated thirty numbers, from 290 through 319; that is, every recognized mental disorder must in some way be incorporated within that span of numbers, and the only greater specificity possible in ICD-g is a maximum of ten sub-types for each number, provided by adding a fourth digit after the decimal point. ICD-9-CM, striving for more precise clinical groupings rather than mere statistical groupings or trend analysis, adds a fifth digit and

thereby makes possible a refinement ten times greater than can be achieved with ICD-g.

Example

In ICD-9, the number 290 identifies "Senile and Presenile Organic Psychotic Conditions"; Subtypes within that group are

290.0	Senile Dementia, simple type
290.1	Presenile Dementia
290.2	Senile Dementia, depressed or paranoid type
2903	Senile Dementia with acute confusional state
290.4	Arteriosclerotic Dementia
290.8	Other
2909	Unspecified

ICD-9-CM, while remaining compatible with the parent system, nonetheless provides much greater specificity with the addition of a fifth digit. The same number 290 can be further subdivided into

290.0	Senile Dementia, uncomplicated
290.1	Presenile Dementia
290.10	Presenile Dementia, uncomplicated
290.11	Presenile Dementia with delirium
290.12	Presenile Dementia with delusional features
290.13	Presenile Dementia with depressive features
290.2	Senile Dementia with delusional or depressive features
290.20	Senile Dementia with delusional features
290.21	Senile Dementia with depressive features
290.3	Senile Dementia with delirium

290.4	Arteriosclerotic Dementia
290.40	Arteriosclerotic Dementia, uncomplicated
290.41	Arteriosclerotic Dementia with delirium
290.42	Arteriosclerotic Dementia with delusional features
290.43	Arteriosclerotic Dementia with depressive features
290.8	Other specified senile psychotic conditions
290.9	Unspecified senile psychotic condition.

While ICD-9-CM was being prepared, the American Psychiatric Association's Task Force on Nomenclature and Statistics was working on the third (1980) edition of the Diagnostic and Statistical Manual of Mental Disorders, (DSM-III). Among several features new to DSM-III as compared with DSM-I (1952) and DSM-II (1968) were the addition of some categories, the deletion of others, the coinage of names for new categories, and, on occasion, for older categories whose names seemed inappropriate or misleading. All the terms in DSM-III are included in ICD-9-CM as recommended terms or as inclusion terms (that is, acceptable as alternatives to the recommended terms). For example, ICD-9-CM, under 290.4 "Arteriosclerotic Dementia," lists as an inclusion term the DSM-III name, "Multi-infarct Dementia or Psychosis." Thus DSM-III and ICD-9-CM are compatible in that the latter contains the diagnostic terms of DSM-III; the reverse, however does not hold, for many ICD-9-CM codes and terms do not appear in DSM-III.

DSM-III represents an attempt to reflect the current state of knowledge

about mental disorders. In some instances, the name of a disorder, or its placement within the classificatory scheme, or indication of what should be excluded from or included within the boundaries of the disorder appear to be a radical departure from earlier classifications. The clinician familiar with any of those other systems may not at first be comfortable with the innovations of DSM-III, but the elaborate field testing that the manual has already undergone suggests that it will quickly be recognized as coming closer to clinical reality than many other systems which were based more on theory than on fact—and that by and large the advantages of the new approach far outweigh the disadvantages.

The major innovations of DSM-III are the following:

1. The descriptive approach used eschews theory in favor of reporting objective clinical data—behavior, symptoms, signs, test results, and so forth. Assumptions about how those manifestations came into being— that is, assumptions about etiology, pathophysiology, or psychopathologic mechanisms —are avoided. Different disorders are grouped according to the degree to which they share such objective clinical features, and not according to a theory of what kind of hypothesized conversion, displacement, or substitution mechanism might be operating unconsciously. Disorders that were in the class of "Neuroses" in DSM-II, for example, are scattered throughout several classes in DSM-III. "Dysthymic Disorder" ("Depressive

Neurosis" of old) is a "Specific Affective Disorder"; "Obsessive Compulsive Neurosis" is a type of "Anxiety State," along with "Panic Disorder" and "Generalized Anxiety Disorder." All those "Anxiety States," together with "Post-traumatic Stress Disorder" and "Phobic Disorders," make up the major group of "Anxiety Disorders." The conversion type of hysterical neurosis is a "Somatoform Disorder," while the dissociative type constitutes the group of "Dissociative Disorders."

2. Operational criteria are given for each diagnostic category—*inclusion criteria* for the clinical features that support or warrant the diagnosis, and *exclusion criteria* for features that are incompatible with the diagnosis. The development of such guidelines is an outgrowth of the work of the St. Louis group, whose original description of diagnostic criteria for fifteen conditions was later expanded for a group of twenty-three disorders by Spitzer and his colleagues into the *Research Diagnostic Criteria* (RDC). The operational criteria for DSM-III categories were developed by fourteen advisory committees and numerous consultants in the various subgroups of the clinical field.

3. As already mentioned, field trials of the system were made during its development. The field trials provided continuing feedback about the applicability of the criteria, their clinical relevance, and the degree of reliability that characterized their use. Not only did the trials lead to many

modifications of the original drafts of DSM-III, but they also presented evidence that more than 800 clinicians were able to use DSM-III in diverse settings with relative ease.

4. Explicit principles of classification, including a definition of mental disorder are provided. While the definition does not claim to draw a sharp line between "normal" and "disordered," it nonetheless faces squarely the issue of mislabeling social deviance by classifying it as a disorder. The definition emphasizes that disorder occurs within the individual; that is, it does not aim to make a group or social diagnosis. It consists of behavioral or psychologic manifestations that are clinically significant, typically because they include either a distressing symptom or some degree of impairment in one or more important areas of functioning. Finally, it is presumed that the disturbance reflects some biologic, behavioral, or psychologic dysfunction and is not only a disturbance in the relationship between the individual and society. Spitzer and associates point out that such a definition clarifies the position assigned homosexuality in DSM-III. Clinicians can agree that sexual functioning is an "important" area of functioning; there is disagreement, though, as to whether the function must be exercised only in heterosexuality. DSM-III takes the position that it is the patient's decision as to whether or not an inability to function heterosexually is a significant impairment. Consequently, homosexual activity is not a mental disorder—no matter how society may view it—unless the person who engages in such activity is

persistently distressed by it or by the fact that while heterosexual arousal is desired, it cannot be attained. In that case, the diagnosis of "Ego-Dystonic Homosexuality" is warranted.

DSM-III recognizes three levels of conceptualization of disorders: (1) symptom or sign, without reference to the context within which it occurs, such as "sadness" or "forgetfulness"; (2) syndrome, a distinctive clinical picture produced by a clustering or grouping of signs or symptoms, such as sadness expressed as feelings of painful dejection with loss of self-esteem, psychomotor retardation, and difficulty in thinking (the syndrome of clinical depression)—or forgetfulness expressed as marked impairment of immediate and recent memory, impaired judgment, concretistic thinking, difficulty in abstract conceptualization, dressing apraxia, and nominal aphasia (the syndrome of dementia); and (3) disease, wherein a specific etiology or pathophysiology is known to account for the distinctive picture, such as dementia in a sixty-seven-year-old hypertensive man with a history of intellectual deterioration that occurred in irregular spurts over the preceding four years, eventually complicated by dysarthria, small-step gait, and funduscopic changes suggestive of arteriosclerosis ("Multi-infarct Dementia"). Disorders are grouped on the basis of the symptoms or signs they have in common and, in general, are arranged in a hierarchy with those at the top having the wider range of symptoms. Disorders high on the list, in other words, may have symptoms that disorders below them also have, but the

lower groups do not have the additional symptoms that are found in diseases listed above them. Such an arrangement allows the branching of a series of decision "trees" for differential diagnosis in major symptom areas.

5. Extensive descriptions of each disorder are given—essential and associated features, age at onset, usual course, degree of impairment, complications, predisposing factors, prevalence, sex ratio, family pattern, and differential diagnosis—to the extent that such factors are known at the present time.

6. A system of multiaxial evaluation includes five axes for recording information. Axis I includes all the mental disorders except for specific developmental disorders in children and personality disorders in adults, which fall into Axis II. The reason for the separation into two axes is to focus attention on an underlying personality disorder, for example, which is of significance in treatment planning and prediction of outcome but is often overlooked when the Axis I disorder occupies the foreground of the clinical picture. Axis I also provides for coding of conditions that are a focus of clinical attention even though they may not constitute a mental disorder (for example, marital problem, academic problem, antisocial behavior). Axis III records concomitant physical disorders of significance to the overall management of the patient, whether etiologic (such as hypothyroidism in a patient with "myxedema madness") or otherwise relevant (such as glaucoma

in a patient whose depression would ordinarily be treated with a tricyclic antidepressant). Axes I, II, and III are necessary for the full diagnostic assessment, and multiple diagnoses can be recorded on each of them. Axes IV and V are supplemental recordings for use in research and other special settings. Axis IV notes the severity of any psychosocial stressor that has been identified as contributory to the development of the present illness (coded as none, minimal, mild, moderate, severe, extreme, or catastrophic). Axis V is used to indicate the highest level of adaptive functioning maintained for at least a few months during the past year. As defined in DSM-III, adaptation is a composite of functioning in three areas—social relations, occupation, and use of leisure time.

The Major Changes in Current Classifications

In ICD-8, "Psychoses" occupied categories 290 through 299. In ICD-9, "Organic Psychotic Conditions" are 290-294; "Other Psychoses" are 295-299, but 299 is used for a new category, "Psychoses with Origin Specific to Childhood."

In ICD-8, "Neuroses, Personality Disorders, and Other Nonpsychotic Mental Disorders" were 300-309; in ICD-9, that group is expanded (300-316) by the addition of several new categories: "Nondependent Abuse of Drugs"; "Acute Reaction to Stress"; and "Adjustment Reaction" (replacing the single

category previously called “Transient Situational Disturbances”); “Depressive Disorder,” not elsewhere classified; “Disturbance of Conduct,” not elsewhere classified, “Disturbance of Emotions Specific to Childhood and Adolescence,” “Hyperkinetic Syndrome of Childhood,” and “Specific Delays in Development” (all four replacing the single previous category of “Behavior Disorders of Childhood”); and “Psychic Factors Associated with Diseases Classified Elsewhere.”

In ICD-g, “Mental Retardation” has been reduced from six to three categories: “Mild Mental Retardation” (317), “Other Specified Mental Retardation” (318), and “Unspecified Mental Retardation” (319).

ICD-9-CM is compatible with ICD-9. The contents and the sequence of the three-digit categories are retained, with the exception of “Affective Psychoses” (296), and further specificity is gained through the addition of a fifth digit. DSM-III is compatible with ICD-9-CM to the extent that the latter contains all the terms of the former and that DSM-III keeps the same *numbers* for diagnoses as ICD-9-CM. The arrangement within groups is different, however, so that the numbers in DSM-III do not always follow in sequential order. The DSM-III group, “Somatoform Disorders,” for example, does not occur as such in ICD-9-CM, and the members of the group occur in different categories of ICD-9-CM.[1]

ICD-9-CM begins with "Organic Psychotic Conditions." In contrast, DSM-III begins with "Disorders Usually First Evident in Infancy, Childhood or Adolescence," subdivided into five groups on the basis of the area of predominant disturbance:

I. Intellectual—Mental Retardation (317-319)

The fifth digit in these categories is used to indicate that other behavioral symptoms are present that require clinical attention (such as aggressive behavior that is not part of another codable disorder). In both DSM-III and ICD-9-CM, 318.1 signifies "Severe Mental Retardation"; in DSM-III the fifth digit provides more clinical specificity. Thus 318.11 indicates that the severely retarded child has other significant behavioral symptoms; 318.10 indicates that the retardation is not complicated by such symptoms.

II. Overt Behavior

Attention Deficit Disorder
with Hyperactivity (314.01)
without Hyperactivity (314.00)

Conduct Disorders (312.00)

DSM-III subdivides "Conduct Disorders" into four types, depending upon whether behavior is predominantly aggressive or nonaggressive, *and* socialized or under-socialized (referring to the ability or inability to establish

adequate social bonds, empathy, affection for others, and so forth). Included herein are the DSM-II categories of "Runaway Reaction," "Unsocialized Aggressive Reaction," and "Group Delinquent Reaction." ICD-9-CM, incidentally, includes within "Conduct Disorders" various disorders of impulse control; these appear much later in DSM-III because they are disorders of adulthood rather than of infancy or childhood.

Table 32-1 Somatoform Disorders

DSM-III LISTING	CODE	ICD-9-CM LISTING
Somatization Disorder	300.81	Other Neurotic Disorders, Somatization Disorder
Conversion Disorder	300.11	Hysteria, Conversion Disorder
Psychogenic Pain Disorder	307.80	Special Symptom—Psychalgia-Psychogenic pain, site unspecified
Hypochondriasis	300.70	Neurotic Disorder, Hypochondriasis
Atypical Somatoform Disorder	300.70	Neurotic Disorder, Hypochondriasis

III. Emotions

Anxiety Disorders
- Separation Anxiety Disorder (309.21)
- Avoidant Disorder (313.21)
- Overanxious Disorder (313.00)

Other Disorders of Infancy, Childhood or Adolescence
- Reactive Attachment Disorder (313.89)
- Schizoid Disorder (313.22)
- Elective Mutism (313.23)
- Oppositional Disorder (313.81)

Identity Disorder (313.82)

The order of listing in this section once again highlights the emphasis of DSM-III upon overt and objective clinical manifestations. ICD-9-CM places "Separation Anxiety Disorder" under "Adjustment Reactions"; DSM-III places it with "Avoidant Disorder" and "Overanxious Disorder" under "Anxiety Disorders of Childhood or Adolescence" because anxiety is the predominant clinical feature of all of them. The distinction between "Avoidant Disorder" and "Schizoid Disorder of Childhood or Adolescence" reflects the clinical judgment that the child who is afraid of strangers but at the same time wants to make contact with them is probably very different from the child who has no desire or capacity for emotional involvement.

IV. Physical (307.00)

Eating Disorders (including anorexia nervosa, bulimia, pica, rumination disorder)

Stereotyped Movement Disorders (including transient and chronic motor tic disorders, Tourette's disorder)

Other (stuttering, functional enuresis, functional encopresis, sleepwalking disorder, sleep terror disorder)

In ICD-9-CM, all of the preceding fall within the category of "Special Symptoms" or "Syndromes, not elsewhere classified." DSM-III subdivides them into specific disorders when that is warranted by different clinical features, course, and treatment implications. Also included as a "Special

Symptom" in ICD-9-CM is "Psychalgia," which is grouped within "Somatoform Disorders" in DSM-III.

V. Developmental

Pervasive Developmental Disorders
Infantile Autism (299.0x)
Childhood Onset (299.9x)

Within this group, the fifth digit is used to indicate whether the full syndrome is present (x = o), or whether the full syndrome was present in the past but that only residual symptoms are currently evident (x = 1). In ICD-9-CM, category 299, "Psychoses with Origin Specific to Childhood" contains a disorder termed "Disintegrative Psychosis." It is not included in DSM-III because of the evidence that it is a nonspecific organic brain syndrome, which belongs more properly among the dementias.

"Specific Developmental Disorders" (315) includes reading, arithmetic, language, and articulation disorders. All of these are coded on Axis II, inviting full attention to the developmental disorder(s) as well as to any other disorder(s) that may coexist.

The next major group in DSM-III is "Organic Mental Disorders." This section is subdivided into two sections—those organic mental disorders in which the etiology or pathophysiology is known (specifically, disorders

related either to aging of the brain or to drug/substance intake), and a group of organic brain syndromes whose etiology is either unknown or related to a disease that is coded outside the mental disorders section (and noted on Axis III). The organic syndromes are differentiated on the basis of clinical symptoms alone; unlike many other classifications, DSM-III does not subdivide on the basis of acute versus chronic, or psychotic versus nonpsychotic, or reversible versus irreversible. Each is described as are the other disorders in DSM-III, and the description of clinical features, course, and complications is followed by operational diagnostic criteria.

The nine organic brain syndromes are grouped into six categories:

1. "Delirium" and "Dementia," with relatively global cognitive impairment;

2. "Amnestic Syndrome" and "Organic (or Drug) Hallucinosis," with relatively selective cognitive impairment;

3. "Organic Delusional Syndrome" and "Organic Affective Syndrome," with features that mimic schizophrenic or affective disorders;

4. "Organic Personality Syndrome," with changes in attitudes, traits, and the general style of relating to the environment;

5. "Intoxication" and "Withdrawal," related to intake of or abstinence from a substance, when the symptoms do not meet the

criteria for inclusion in any of the foregoing syndromes;

6. Atypical or mixed.

Within the "Organic Mental Disorders" are dementias related to aging and substance-induced disorders. The former include "Primary Degenerative Dementia" of senile or presenile onset, and "Multi-Infarct Dementia" (formerly called cerebral arteriosclerosis and, renamed because of evidence that the dementia is due to repeated infarcts rather than to arteriosclerosis per se). The fifth digit is used to indicate if the dementia is uncomplicated, or if delirium, delusional features, or clinical depression complicate the picture.

Terminology and the sequence of codes in the DSM-III categories of substance-induced "Organic Mental Disorders" often vary considerably from ICD-9-CM. In DSM-III, intoxication is recognized as a specific syndrome due to the direct effect of the substance in question on the central nervous system. Except for those substances in which no such syndrome occurs (hallucinogens and tobacco), intoxication is always listed first among the brain syndromes induced by the substance. In ICD-9-CM, in contrast, intoxication is subsumed under nondependent abuse of drugs rather than under the organic mental disorders.

In the interest of more accurate description, some of the alcohol-related disorders have been renamed. "Delirium Tremens" becomes "Alcohol

Withdrawal Delirium"; "Pathologic Intoxication" becomes "Alcohol Idiosyncratic Intoxication"; "Korsakoff's Psychosis" becomes "Alcohol Amnestic Disorder"; and "Alcoholic Deterioration" or "Alcoholic Dementia" is termed "Dementia Associated With Alcoholism," in view of the doubt that alcohol is the etiologic agent in such cases. In this last category, the severity of dementia is indicated in the fifth digit. The "Alcohol Paranoid State" in DSM-II has been eliminated, as has been the "Alcoholic Jealousy" in ICD-9-CM, because there is no convincing evidence that either exists as a distinct entity. "Alcohol Withdrawal" is separated from "Alcohol Withdrawal Delirium," giving the clinician the opportunity to specify the condition he is ordinarily treating when he places a patient on an alcohol detoxification regimen. In both DSM-II and ICD-9-CM, the clinician was forced to label such a patient either "Acute Intoxication" (even though it was absence of the "poison" rather than too much of it that produced the condition), or "Delirium Tremens" (even though that was the condition that treatment aimed to prevent).

For the other substances in this section, DSM-III also offers greater specificity than was possible in previous classifications. Nine classes of drugs are specified—the ones that, in addition to alcohol, are most commonly used non-medically to alter mood or behavior. Within each class, the specific brain syndromes known to be produced by the drugs are listed. In ICD-9-CM, code numbers are assigned to conform to the less discriminant classification, but an additional coding is available to reflect the unique specificity of DSM-III.

This was made possible by using a number assigned to but not currently used by the section on "Diseases of the Nervous System" (327) for substance-induced mental disorders other than alcohol. The fourth digit is used to indicate the class of drugs (for example, barbiturate, opioid, hallucinogen) and the fifth digit to indicate the syndrome (for example, intoxication, withdrawal, delusional disorder). Thus "Barbiturate Amnestic Disorder" is coded 327 04 (o = barbiturate; 4 = amnestic disorder), while "Amphetamine Delusional Disorder" is 327.35 (3 = amphetamine; 5 = delusional disorder).

Syndromes induced by barbiturates (and similar sedatives and hypnotics) include intoxication, withdrawal, withdrawal delirium, and amnestic disorder. Under opioids, intoxication and withdrawal are specified, but under cocaine only intoxication is specified, since no withdrawal syndrome has been consistently described. Syndromes produced by amphetamines (and similarly acting sympathomimetics) are intoxication, delirium, delusional disorder, and withdrawal. Phencyclidine (PCP) and similarly acting arylcyclohexylamines produce intoxication, delirium, and mixed organic mental disorder. In addition to hallucinosis, hallucinogens may also produce delusional disorder and affective disorder. Cannabis syndromes include intoxication and delusional disorder, although some doubt that the latter is a separate entity since it disappears by the time symptoms of ordinary cannabis intoxication abate. "Tobacco Withdrawal" is recognized as an entity, as is "Caffeine Intoxication" (caffeinism).

"Substance Use Disorders" are the next section in DSM-III, so placed because many patients who fall into this category will at times also develop intoxication, withdrawal or some other organic mental disorder induced by the substance they are abusing. For most substances, there are two major patterns of pathologic use—abuse and dependence—both of which are differentiated from non-pathologic use for recreational or medicinal purposes. It should be noted that three of the substance classes—cocaine, phencyclidine, and hallucinogen—are not known to be associated with a pattern of physiologic dependence in that there is no evidence of tolerance or withdrawal; thus only the "abuse" pattern is coded for them. Also unusual is tobacco, for which only a pattern of "dependence" is clinically significant, appearing as an inability to stop and/or development of "Tobacco Withdrawal" (327.71), an "Organic Mental Disorder." For all the "Substance Use Disorders," the fifth digit is used to indicate course (that is, continuous, episodic, in remission, or unspecified).

Mention has already been made of the likelihood that any classification will tend either to be overly exclusive or overly inclusive, and the reasons for erring in either direction were discussed. The "Schizophrenic Disorders" section of DSM-III will seem overly exclusive to many clinicians in the United States whose aim has been to identify these disorders as early as possible in the hope that early intervention might halt or retard their progression. The approach of DSM-III is to narrow this group considerably in an attempt to

achieve more homogeneous subgroupings and greater reliability of diagnoses made by clinicians in widely different settings. DSM-III attaches the label of schizophrenia only if there has been a period of active psychosis (for example, delusions, hallucinations, loosening of associations, or other disturbances of the form of thought, altered psychomotor behavior, changes in affect and/or relationships to the external world, disturbance in goal-directed activity), deterioration from a previous level of functioning, onset before the age of forty-five years, and duration of at least six months. Such requirements eliminate the older category of "Acute Schizophrenic Episode" (which would now be termed "Schizophreniform Disorder"), as well as the many categories that included illnesses without psychotic manifestations, such as the latent, borderline, pseudoneurotic, and even the classic simple forms (most of which would fall into the "Personality Disorders," coded on Axis II). The schizoaffective type has also been eliminated; many so diagnosed in the past would now be placed within the "Affective Disorders," while a few would be labeled "Schizoaffective Disorder" within the new group, "Psychotic Disorders Not Elsewhere Classified."

What remain are five subtypes: disorganized (the hebephrenic of other classifications), catatonic, paranoid, undifferentiated, and residual (with previous episode of schizophrenia but currently without prominent psychotic symptoms). ICD-9-CM retains the simple, latent, and schizoaffective subtypes, as well as acute schizophrenic episode, so the clinician who wishes to use

those non-DSM-III diagnoses may continue to do so. Because their identifying fourth digits do not appear in DSM-III, they should not be any source of difficulty for researchers or record room librarians. The serious drawback to their use is that it will perpetuate the uncertainties of the older systems and simultaneously prolong the time needed for adequate testing of the new one.

There is general agreement that since the time of Kraepelin efforts to refine the classification of psychiatric disorders have not been notably successful. In the case of the schizophrenic group, efforts have proceeded in two directions. Eugen Bleuler broadened Kraepelin's concept of dementia praecox at the expense of the manic-depressive group. His diagnostic criteria leaned heavily on clinical judgment rather than on empirically derived factors, with a high degree of interrater reliability. At least in parts of the United States, his concepts were extended to the degree that even a "trace" of schizophrenia was enough to establish the presence of the disorder, no matter what the intensity or number of accompanying affective symptoms.

Kraepelin's successor, Kurt Schneider, took a different direction. Like Bleuler, he employed a broader concept of schizophrenia than Kraepelin, but he paid less attention to the course of the disorders and focused to a greater extent on symptoms. Finally, he developed his set of "first-rank symptoms," whose presence or absence could be established with relative ease. According to the standards held by many American clinicians, the Schneiderian criteria

were too heavily weighted in the direction of nuclear, process, poor-prognosis, or far-advanced schizophrenia. Yet the criteria espoused by those clinicians were notoriously unreliable and to many they seemed so vague and impressionistic as to be almost mystical. The growth of computer technology and the possibility of its application to the masses of data generated by the psychiatric interview seemed to offer a way back to a more solid, objective and pragmatic science. The operational criteria set out in DSM-III for the diagnosis of schizophrenic disorders are a contemporary reaffirmation of the Schneiderian approach and a refinement by numerical taxonomy and other statistical methods that ensure maximal reliability.

Field trials have already demonstrated that the reliability achieved with the DSM-III operational criteria probably surpasses that of any other classificatory system in wide use. To achieve that reliability within the schizophrenic group, however, a great deal of what was previously admissible to the group is now excluded. Reliability alone does not secure validity, nor does lack of reliability mean nonexistence. An overemphasis on reliability deifies counting and measuring, but counting the trees may not be the best way to appreciate the intricacies of the forest. Perhaps DSM-III has reduced schizophrenia to its proper size, but where will the unreliable rejects be placed?

There is a growing tendency to put all those with any degree of affect

disturbance into the manic-depressive or affective disorders. It can only be hoped that this swing of the pendulum will not finally so adulterate the affective group that the next generation of classifiers will find them as hopelessly heterogeneous and over-inclusive as they regard the schizophrenic group now. The other rejects from the schizophrenic categories—mainly the acute and episodic psychoses in which affect disturbance does not predominate—end up in a no-man's land of uncertain, atypical, or unclassified disorders. While this is bound to be discomfiting to the clinician, the declaration of uncertainty should in the long run be preferable to unwarranted assignment to a specific category of affective disorder. It will remain for future studies—ideally broad enough to include qualitative parameters along with measurements and scales—to establish the validity of DSM-III's proposed groupings as well as to point the way for classification of the now uncertain and atypical cases.

"Paranoid Disorders" follow the schizophrenic group and include "Paranoia," "Shared Paranoid Disorder" *("folie a deux" or* "Psychosis of Association" in other classifications), and "Acute Paranoid Disorder." The difficulty in differentiating these disorders from severe "Paranoid Personality Disorder" and the paranoid type of schizophrenia are acknowledged, but the operational criteria provide some guidelines in this regard. Involutional paranoid state and Paraphrenia are not described as separate entities.

The next section, “Psychotic Disorders Not Elsewhere Classified,” is to some extent the “wastebasket” category that every system of classification needs. Unlike other systems, however, in DSM-III this category is likely to contain a significant proportion of the entire group of mental disorders because of the exclusionary provisions of diagnostic criteria. By “psychotic” is meant behavior indicative of gross impairment in reality testing, such as delusions, hallucinations, or marked disorganization of speech or other activity. The specific categories included are “Schizophreniform Disorder” (where most previously diagnosed “Acute Schizophrenia” will fall), “Brief Reactive Psychosis” (of less than two weeks, following an identifiable psychosocial stressor), “Schizoaffective Disorder” (to be used when the clinician cannot make a differential diagnosis between “Schizophrenia” and “Affective Disorder”), and “Atypical Psychosis” (for all other unclassifiable psychoses).

“Affective Disorders” in DSM-III include entities that fall into the “Affect Psychoses,” “Neuroses,” and “Personality Disorders” of other classifications. They are grouped on the basis of the degree of expression of an affective syndrome, rather than in terms of psychotic versus neurotic, endogenous versus reactive, and so forth. The terminology follows that suggested by Leonhard, who divided affective disorders into bipolar (with episodes of both mania and depression) and monopolar types. “Unipolar” has since replaced “monopolar” on etymologic grounds, and on the basis of clinical evidence it

has come to be limited to cases manifesting only depressive episodes. Mania thus is the deciding factor in this particular dichotomy; cases with a full manic syndrome, whether or not depression has also been manifested, are bipolar. Affective syndromes without mania are unipolar depressions; in DSM-III these are termed "Major Depressive Disorders," to emphasize that a full affective syndrome is required for grouping within the category of "Major Affective Disorders."

ICD-9-CM departs markedly from ICD-9 in its classification of "Affective Psychoses," and while it moves in the direction of DSM-III, it is not totally consistent with that classification either, as table 32-2 indicates.

The fifth digit in DSM-III is used for further subdivision according to clinical features. For depressive episodes, 6 = in remission; 4 = with psychotic features (if not specified, it is assumed that such features are mood-congruent and consistent with the themes of inadequacy, unworthiness, death, or need for expiation; mood-incongruity should be specified and may be indicated by using 7 instead of 4 for the fifth digit); 3 = with melancholia ("vegetative signs" in others' terminology); 2 = without melancholia; and 0 = unspecified.

For manic episodes, in the fifth digit 6 = in remission; 4 = with psychotic features (as with depressive episodes, to be specified as to whether such features are congruent or incongruent with the mood); 2 = without psychotic

features; and 0 = unspecified.

"Other Specific Affective Disorders" are those in which only a partial affective syndrome develops; to be included here however, the disturbance must be present for at least two years. "Cyclothymic Disorder" corresponds to the "Cyclothymic Personality" in DSM-II, and "Dysthymic Disorder" includes both the "Depressive Neurosis" and "Depressive (or Asthenic) Personality" of other classifications. Affective disorders that cannot be placed in either "Major Affective Disorders" or "Other Specific Affective Disorders" are classified as "Atypical."

As already indicated, one effect of shrinking the group of schizophrenias may be to transfer uncertain or doubtful cases into the "Affective Disorders." DSM-III strives for the same level of certainty within the affective group as with the schizophrenic group by using exclusion and inclusion criteria for diagnosis. But even at this early date, reports in the literature suggest that more and more clinical material will come within the affective sweep. Indeed, if the mere presence of an affective syndrome is significant enough to call into question a large number of patients previously considered clinically to be schizophrenic, will it not cast equal doubt on a diagnosis of personality disorder?

Despite the many recent contributions to our understanding of the

genetic, developmental, Neurohormonal, biochemical, and cognitive factors that may contribute to depressive disorders, in the final analysis they remain as heterogeneous a group as the schizophrenias. The thrust of many investigations is to define more homogeneous subgroups, and to that end Dunner, Fleiss, and Fieve, for example, suggest that bipolars be subdivided into Type I (the patient has been hospitalized for mania) and Type II (the patient has been hospitalized for depression but not for mania, even though a history of manic symptoms removes him from the unipolar category). Akiskal and associates propose a subtyping of Type II bipolar disorders into (1) recurrent clinical depressions with occasional hypomanic periods; (2) unipolars who develop mania only when treated with antidepressant agents; and (3) cyclothymics who develop a clinical depression (on the basis of data supporting consideration of cyclothymia as a phenotypical variant of full-blown bipolar affective psychosis).

Table 32-2. Affect Disorders—Classification (Affective Psychoses)

ICD-9		ICD-9-CM		DSM-III	
296.0	Manic-depressive psychosis, manic	296.0	Manic Disorder, single episode	Major Affective Disorders	
296.1	Manic-depressive psychosis, depressed	296.1	Manic Disorder, recurrent episode	Bipolar Disorder	
296.3	Manic-depressive psychosis, circular; currently depressive	296.2	Major Depressive Disorder, single episode	296.6x	mixed
296.4	Manic-depressive psychosis, circular; currently mixed	296.3	Major Depressive Disorder, recurrent episode	296.4x	manic
296.5	Manic-depressive	296.4	Bipolar Affective	296.5x	depressed

	psychosis, circular; unspecified		Disorder, manic		
296.6	Manic-depressive psychosis, other and unspecified	296.5	Bipolar Affective Disorder, depressed	Major Depression	
296.8	Other	296.6	Bipolar Affective Disorder, mixed	296.2x	single episode
296.9	Unspecified	296.7	Bipolar Affective Disorder, unspecified	296.3x	recurrent
		296.8	Manic-depressive psychosis, other and unspecified	Other Specific Affective Disorders	
		296.9	Other and unspecified Affective Psychoses	301.13	Cyclothymic Disorder
				300.40	Dysthymic Disorder (or depressive neurosis)
				Atypical Affective Disorders	
				296.70	Atypical Bipolar Disorder
				296.82	Atypical Depression

The major depressive disorders also remain troublesome for the classifier. Does a subdivision only into single episode and recurrent types do justice to the large group? Should the dichotomies of other systems be applied as a means of subgrouping major depressions? If one does accept a division into primary and secondary types, would it be reasonable to keep all the secondary depressions together? Or would it be more reasonable to sub-

classify them on the basis of their antecedent conditions and separate depressions arising in obsessive-compulsive patients, for example, from those in antisocial personalities and from depressions that are complications of alcoholism?

There is no general agreement on the answers to these questions, nor is there unanimity of opinion as to the subtyping of primary unipolar depressions. Some differentiate "pure depressive disease" (PPD), which has neither mania nor alcoholism in the family of the index case, from "depressive spectrum disease," familial in that a first degree relative is alcoholic and there may also be a relative with depression. But examination of the pre-depression history revealed that many of both types were in fact secondary depressions, with significant antecedent psychopathology. In contrast, only a small number of "sporadic (nonfamilial) depressions" were secondary. So it could be argued that "sporadic depression" is a purer disease than familial "pure depressive disease" and may even be a distinctly separate entity. Attempts to define more clearly the validity of these clinical groupings with the use of biologic or pharmacologic measures—such as urinary 3-methoxy-4-hydroxy-phenylglycol assays, dexamethasone suppression test, response to monoamine oxidase inhibitors or tricyclic antidepressants, or electroconvulsive treatment—have verified only that not all depressions are the same. The subgroupings elicited by any one method are not wholly consistent with those generated by other approaches, and it will remain for

future investigations to tell how far off the mark DSM-III is, whether it should be supplanted, or how it should be refined. It may well be that strict attention to the fifth digit subdivisions of DSM-III will be as clinically useful a typology of depression as any other; only consistent use of its diagnostic criteria over time can establish its true worth.

Not to be lost sight of is a fundamental axiom of classification theory—the first step in defining a clinical syndrome is to demonstrate that it is a recognizable entity that can be discriminated from other disorders. Only when that is done can one begin to worry about what larger class it may be a part of. It has been suggested, for example, that the "Borderline Syndrome" and "Hysteroid Dysphoria," and perhaps other mixed states fit more properly into the affective group than elsewhere. Just as with the typology of the major depressive disorders, it is essential to gain more clinical experience to establish the validity of such arguments. To push every entity into the affective stream because it has a trace of dysphoria would merely churn further the already muddied water. Such an approach, indeed, would be to regress to a key classification, likely to compound rather than resolve the existing confusion.

The next major group in DSM-III is "Anxiety Disorders." While this group includes many of the neuroses of other classifications, not all are placed here. Directly experienced anxiety is the essential inclusion factor in this group,

which is subdivided into “Phobic Disorders” (or “Phobic Neuroses”), “Anxiety States” (or “Anxiety Neuroses”), and “Post-traumatic Stress Disorder.” Three types of “Phobic Disorders” are differentiated, on the basis of differences in response to treatment as well as in the clinical picture—“Agoraphobia” (with or without panic attacks), “Social Phobia” (fear of situations in which one might be scrutinized by others and in which one might behave in a way that would be humiliating or embarrassing), and “Simple Phobia” (all other types).

Within the “Anxiety States” are “Panic Disorder,” “Generalized Anxiety Disorder,” and “Obsessive Compulsive Disorder.” As with other groupings in DSM-III, designation of subtypes reflects current knowledge, which suggests that “Panic Disorder” is a discrete entity when treatment response is considered as one of the descriptive parameters. “Obsessive Compulsive Disorder” is considered a type of “Anxiety State” because if the obsession or compulsion is resisted, anxiety is experienced directly.

Two forms of “Post-traumatic Stress Disorder” are distinguished, because evidence suggests that they differ in outcome. The acute form is manifested within six months of the trauma, and the symptoms last no more than six months. The chronic or delayed form has a more malignant course; onset may be months or even years after the trauma, and symptoms persist for a long time.

"Somatoform Disorders" are characterized by physical symptoms that mimic organic or physical disorders and an absence of organic findings or physiologic abnormalities that might explain them. Included are several forms that are recognizable as parts of the formerly referred to conversion hysteria: "Somatization Disorder" (in other systems, "Hysteria" or "Briquet's Syndrome"); "Conversion Disorder" (or "Hysterical Neurosis, Conversion Type"); and "Psychogenic Pain

Disorder." A fourth type of "Somatoform Disorder" is "Hypochondriasis" (hypochondriacal neurosis). The suggested guidelines for assignment to the residual category within this group, called "Atypical Somatoform Disorder," illustrate the reliance that DSM-III places on objective and verifiable data. "Dysmorphophobia," a symptom (or syndrome) that some clinicians would consider a delusion and/or schizophrenic-like impairment in reality testing, consists of preoccupation with some imagined defect in physical appearance. If dysmorphophobia is the only symptomatic expression of disorder, it would be labeled "Atypical Somatoform Disorder" in DSM-III because it fulfills the inclusion criteria: physical complaint not explicable by demonstrable organic findings and apparently related to psychologic factors.

"Dissociative Disorders (Hysterical Neuroses, Dissociative Type)" is a separate category, subdivided on the basis of different clinical manifestations, predisposing factors, and course. Included are "Psychogenic Amnesia,"

"Psychogenic Fugue," "Multiple Personality," and "Depersonalization Disorder" (or "Depersonalization Neurosis"). "Sleepwalking Disorder" is classified within the group of "Childhood Disorders" because of its usual time of onset; otherwise, on symptomatic grounds, it would belong here.

Another major category is "Psychosexual Disorders," greatly expanded in comparison to previous classifications and ICD-g to reflect major advances in knowledge about human sexuality. Not only are more subtypes differentiated with the use of the fourth and fifth digits, but the ordering of the categories indicates how DSM-III is based on a higher level conceptualization of disorder than mere counting of variations from an assumed "normal" (table 32-3).

The fifth digit in the code for "Transsexualism" is used to indicate the predominant prior sexual history: 1 = asexual; 2 = homosexual; 3 = heterosexual; 0 = unspecified.

"Factitious Disorders," the next major group, are disorders in which the production of symptoms appears to be under the person's voluntary control; unlike malingering, where the goal of seeming to be sick is clearly related to conscious wishes, "Factitious Disorders" reflect no such needs but appear instead to be related to intrapsychic needs that are understandable only in terms of the subject's psychologic makeup. "Factitious Disorder with

Psychological Symptoms" includes what has been called the "Ganser Syndrome," "Pseudo-psychosis," or "Pseudo-dementia." "Chronic Factitious Disorder with Physical Symptoms" corresponds to the "Munchhausen syndrome." Most people with any of the factitious disorders also have a personality disorder of significant dimensions; that disorder is coded on Axis II.

Table 32-3 Classification of Psychosexual Disorders in ICD-9 and DSM-III

ICD-9	DSM-III
302 SEXUAL DEVIATIONS AND DISORDERS	*Gender Identity Disorders*
.0 Homosexuality	302.5x Transsexualism
.1 Bestiality	302.60 Gender Identity Disorder of Childhood
.2 Pedophilia	302.85 Atypical Gender Identity Disorder
.3 Transvestism	
.4 Exhibitionism	*Paraphilias*
.5 Transsexualism	302.81 Fetishism
.6 Disorders of psychosexual identity	302.30 Transvestism
.7 Frigidity and impotence	302.10 Zoophilia
.8 Other	302.20 Pedophilia
.9 Unspecified	302.40 Exhibitionism
	302.82 Voyeurism
	302.83 Sexual Masochism
	302.84 Sexual Sadism
	302.90 Atypical Paraphilia
	Psychosexual Dysfunctions
	302.71 Inhibited Sexual Desire
	302.72 Inhibited Sexual Excitement

302.73 Inhibited Female Orgasm

302.74 Inhibited Male Orgasm

302.75 Premature Ejaculation

302.76 Functional Dyspareunia

306.51 Functional Vaginismus

302.70 Atypical Psychosexual Dysfunction

Other Psychosexual Disorders

302.00 Ego-dystonic Homosexuality

302.89 Psychosexual Disorder not elsewhere classified

"Disorders of Impulse Control Not Elsewhere Classified" include "Pathological Gambling," "Kleptomania," "Pyromania," "Intermittent Explosive Disorder," and "Isolated Explosive Disorder."

"Adjustment Disorder" replaces "Transient Situational Disorder" of DSM-II, and it is subdivided on the basis of predominant symptoms rather than on the age at which these symptoms appeared. The diagnosis is made only for reactions to identifiable stressors that develop within three months of the stressful event; disturbances of psychotic proportion are excluded.

"Psychological Factors Affecting Physical Condition" is another major category. Although the name is cumbersome, it avoids the mind /body dualism of the "psychosomatic" and "psychophysiologic" terms it replaced. Further, it requires that the physical disorder be coded on Axis III, the Axis I diagnosis being used to emphasize the role of psychologic factors in

exacerbating, precipitating, or maintaining the underlying physical disorder.

The final diagnostic category consists of the "Personality Disorders," which are coded on Axis II. As noted previously, they will often coexist with disorders that will be coded on Axis I. In addition, it is possible to give more than a single coding of personality disorder to the same subject, a welcome relief for the clinician whom other classifications forced into an uncomfortable choice that could only inadequately suggest the condition of the patient. The personality disorders are clustered to conform with the way they generally present themselves to an outside observer: (1) the person affected often seems eccentric or odd, as in the paranoid, schizoid, and schizotypal personality disorders; (2) the person is erratic, overemotional, or dramatic, as in the histrionic, narcissistic, antisocial, and borderline personality disorders; and (3) the person is generally anxious or fearful, as in the avoidant, dependent, compulsive, and passive-aggressive personality disorders.

It should be noted that the "Cyclothymic Personality" of DSM-II has been placed within the "Affective Disorders" of DSM-III, that "Asthenic Personality" is subsumed under "Dysthymic Disorder" (depressive neurosis), and that "Explosive Personality" does not appear as a personality disorder since by definition it is not a part of the characteristic, typical, and usual behavior of the subject. "Schizoid Personality" remains, but more careful delineation of

clinical features has expanded the DSM-II concept into three forms —"Schizoid," "Schizotypal," and "Avoidant Personality Disorders." New to the grouping in DSM-III are "Borderline Personality Disorder" and "Narcissistic Personality Disorder."

Finally, DSM-III provides a set of V codes, for conditions that are the focus of clinical attention even though they are not attributable to a mental disorder.

Summary

No classification of human disorders is perfect, and no classification can anticipate the multiple uses to which it will be put nor the countless theories it will be strained to encompass. Some of the difficulties in classification have been outlined, and DSM-III has been reviewed with those difficulties in mind. Some potential pitfalls in its use have been identified, not as a way of saying, "Do not use," but rather to caution, "Learn to use correctly." No matter what defects of DSM-III may turn out to be, it represents the most serious attempt in this century to provide a classification of mental disorders that is based on a minimum of theory and a maximum of established knowledge. It admits of gaps in that knowledge, it warns the user when it has been forced to make an educated guess because objective data were lacking, and it invites continuing validation of its applicability. The classifiers who will use it as a base for the

next edition of the *Diagnostic and Statistical Manual of Mental Disorders* could ask no more.

Bibliography

Akiskal, H. S., ed. "Affective Disorders: Special Clinical Forms," *Psychiatric Clinics of North America,* vol. 2, no. 3. Philadelphia: W.B. Saunders, 1979.

Akiskal, H. S., Khani, M. K., and Scott-Strauss, A. "Cyclothymic Temperamental Disorders," in Akiskal, H. S. ed., "Affective Disorders: Special Clinical Forms," *Psychiatric Clinics of North America,* vol. 2, no. 3. Philadelphia: W.B. Saunders, 1979, pp. 57-554.

American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders,* 1st ed. (DSM-I). Washington, D.C.: American Psychiatric Association, 1952.

American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders,* 2nd ed. (DSM-II). Washington, D.C.: American Psychiatric Association, 1968.

American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders,* 3rd ed. (DSM-III). Washington, D.C.: American Psychiatric Association, 1980.

Andreasen, N. C., and Winokur, G. "Secondary Depression: Familial, Clinical, and Research Perspectives," *American Journal of Psychiatry,* 136 (1979): 62-66.

Carpenter, W. T., and Strauss, J. S. "Diagnostic Issues in Schizophrenia," in Beliak, L. ed., *Disorders of the Schizophrenic Syndrome.* New York: Basic Books, 1979, PP-291-319.

Commission on Professional and Hospital Activities. *International Classification of Diseases, 9th Revision, Clinical Modification,* (ICD-9-CM). Ann Arbor: Commission on Professional and Hospital Activities, 1978.

Corning, W. C., and Steffy, R. A. "Taximetric Strategies Applied to Psychiatric Classification," *Schizophrenia Bulletin,* 5 (1979): 294-305.

Dunner, D. L., Fleiss, J. L., and Fieve, R. R. "The Course of Development of Mania in Patients with Recurrent Depression," *American Journal of Psychiatry,* 133 (1976): 905-908.

Feighner, J. P., et al. "Diagnostic Criteria for Use in Psychiatric Research," *Archives of General Psychiatry,* 26 (1972): 57-63.

Feinstein, A. R. "A Critical Overview of Diagnosis in Psychiatry," in Rakoff, V. M., Stancer, H. C., and Kedward, H. B., eds., *Psychiatric Diagnosis,* New York: Brunner/ Mazel, 1977, pp. 189-206.

John, E. R., et al. "Neurometrics," *Science,* 196 (1977): 1393-1410.

Kroll, J. "Philosophical Foundations of French and U.S. Nosology," *American Journal of Psychiatry,* 136 (1979): 1135-1138.

Leonhard, K. *Aufteilung der endogenen Psychosen.* Berlin: Akademie Verlag, 1959.

Liebowitz, M. R., and Klein, D. F. "Hysteroid Dysphoria," in Akiskal, H. S., ed., "Affective Disorders: Special Clinical Forms," *Psychiatric Clinics of North America,* vol. 2, no. 3. Philadelphia: W.B. Saunders, 1979, pp. 555-575.

Mcglashan, T. H., and Carpenter, W. T. Jr. "Affective Symptoms and the Diagnosis of Schizophrenia," *Schizophrenia Bulletin,* 5 (1979): 547-553.

Melby, J. C., and Watson, C. J. "Disorders of Porphyrin Metabolism," *Medical Science,* (i960): 821-837.

Overall, J. E., and Hollister, L. E. "Comparative Evaluation of Research Diagnostic Criteria for Schizophrenia," *Archives of General Psychiatry,* 36 (1979): 1198-1205.

Richards, F., and Brinton, D. "Glycine Loading Test," *Brain,* 85 (1962): 657.

Shields, J., Heston, L. L., and Gottesman, I. I. "Schizophrenia and the Schizoid: The Problem for Genetic Analysis," in Fieve, R. R., Rosenthal, D., and Brill, H., eds., *Genetic Research in Psychiatry.* Baltimore: Johns Hopkins University Press, 1975, pp. 167-197.

Sneath, P., and Sokol, R. R. *Numerical Taxonomy.* San Francisco: W.H. Freeman, 1973.

Spitzer, R. L., Endicott, J., and Robbins, "Clinical Criteria for Psychiatric Diagnosis and DSM-III," *American Journal of Psychiatry,* 132 (1975): 1187-1192.

Spitzer, R. L., Williams, J. B. W., and Skodol, A. E. "DSM-III: The Major 28. Achievements and an Overview," *American Journal of Psychiatry,* 137 (1980): 151-164.

Stone, M. H. "Contemporary Shift of the Borderline Concept from a Sub-schizophrenic Disorder to a Sub-affective Disorder," in Akiskal, H. S. ed., *Affective Disorders: Special Clinical Forms.* Psychiatric Clinics of North America, vol. 2, no. 3, Philadelphia: W.B. Saunders, 1979, pp. 577-594.

Wing, J. K. "The Limits of Standardization," in Rakoff, V. M., Stancer, H. C., and Kedward, H. B., eds., *Psychiatric Diagnosis,* New York: Brunner/Mazel, 1977, pp. 84-108.

Woodruff, R., Goodwin, D., and Guze, S. *Psychiatric Diagnosis.* New York: Oxford University Press, 1974.

World Health Organization. *Manual of the International Classification of Diseases, Injuries, and Causes of Death.* Geneva, Switzerland: World Health Organization, 1977.

Notes

1This table is not presented as a reproduction of the DSM-III classification, but rather to indicate the ways in which DSM-III differs from ICD-g-CM even while retaining compatibility with it.