

## International Diagnostic Systems and Latin-American Contributions and Issues

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The complex socio-cultural features of Latin peoples throughout the Americas represent a potent challenge to health care planning. Attempting to meet this challenge requires consideration of the suitability of diagnostic systems as key clinical and public health tools, as well as exploration of promising ways for improving them.

Firstly, crucial elements of a diagnostic system will be examined in order to identify structural points where change and improvement can take place. Then, both salient Ibero-American contributions to psychiatric nosology and diagnosis, and current Latin issues relevant to diagnostic systems will be reviewed. Next, pertinent aspects of the history of the International Classification of Diseases as well as of the current ICD-9 (World Health Organization, 1978) and DSM-III (American Psychiatric Association, 1980) will be considered. Also, developments represented by the revision of DSM-III and the preparation of ICD-10 will be outlined. Finally, prospects for incorporating Latin-American concerns in the design and implementation of standard diagnostic systems will be considered.

### **Key structural features of a diagnostic system**

A concept of diagnostic systems, useful for this analysis, is that they are models of reality, figments of our imagination, attempting to represent clinical conditions through brief summary statements. They are expected to be reasonably accurate, thorough, and codified, as well as being aimed at enhancing professional communication, treatment decisions, prognosis, public health planning, and theoretical understanding. Building on this notion, two broad structural issues will be examined: How to classify psychiatric syndromes and how to organise a full diagnostic formulation.

### **Organising a taxonomy of psychiatric disorders**

The first question here refers to the classificatory principles that run through the overall classification. One such principle is aetiology, both biological and psychosocial, as reflected in the inclusion in most taxonomies of organic brain syndromes and

adjustment disorders, respectively. Another principle, increasing in importance in recent times, is descriptive psychopathology. Competing in this regard are, on the one hand, higher order concepts, such as psychosis and neurosis, which played major roles in psychopathological classifications, and, on the other, sets of more discrete and presumably less inferential symptom constellations, such as schizophrenic, mood, anxiety, somatoform, psychosexual, and impulse-control syndromes, which are attracting much interest in current nosological thinking.

A second question corresponds to levels of hierarchical organisation, i.e. what are the major classes of psychiatric disorders and the types and subtypes of each one of them. A related issue is the level of detail used for reporting and retrieving diagnostic information. It would be desirable that the top levels of the diagnostic hierarchy be as meaningful and informative as possible, which is particularly important when there are logistical limitations in data gathering, reporting, and analysis.

A third question is the specificity of diagnostic categories. On the one hand, definitional clarity requires that most of the categories in the classification be conceptually explicit (e.g. paranoid schizophrenia), so that the results of the classification are as comprehensive and interpretable as possible in covering the psychopathological domain. On the other hand, it would be advisable to include some non-specific categories (e.g. psychotic disorder, not elsewhere classified) which may allow flexibility for incorporating syndromes not previously identified as well as those of only local or regional importance, later in the classification. As to how the diagnostic categories are actually defined, there are issues both of form and content. With respect to the former, the degree of explicitness or operationalisation has to be considered first; at one extreme, informal and connotative, and at the other, explicit and denotative. However, the categorisation model that is used is also important: the classical, which assumes homogeneous diagnostic groups with distinct boundaries and defined by singly necessary and jointly sufficient features, or the prototypic approach, which assumes heterogeneous group membership, overlapping boundaries, and descriptive features that are

correlated with, but not all required, for group membership (Cantor *et al.*, 1980). In regard to definitional content, the predominant elements are symptoms, but other descriptors such as age and course of disorder are sometimes considered. A related critical issue is the use of exclusionary criteria in the definition (e.g. a diagnosis of depressive disorder pre-empting a diagnosis of anxiety disorder if both refer to the same behavioural episode).

### The architecture of a diagnostic formulation

In addition to considering whether single or multiple diagnoses of psychiatric disorder should be allowed or encouraged, the major issue here is the dilemma between uni-axial and multi-axial approaches. The former involves making a single diagnostic statement which is typically categorical and portends to encapsulate most of what is important in a clinical condition. The latter is analytical and comprehensive (in the sense of separately assessing the various key aspects of the clinical condition, such as psychiatric syndromes, biological and psychosocial contributory factors, adaptive functioning, etc.) Furthermore, the multi-axial model is structurally flexible, as it may include both categorical scales (typically focused on pathological conditions) and dimensional or quantitative ones (which allow consideration of the health-illness spectrum) (Mezzich, 1985).

The multi-axial approach represents an attempt to articulate and systematise a holistic approach to the understanding and formulation of mental health and illness. In this sense, it constitutes an opportunity for the convergence of the rational-idealistic tradition in nosological thinking (primarily striving for order and clarity) and the realistic and experiential tradition (concerned with the particularities of each individual patient, and the historical and cross-sectional context of his condition). Furthermore, it may facilitate the preparation of comprehensive patient care plans and public health policies by ensuring that critical informational elements are regularly gathered. In fact, the principal bases for the usefulness of multi-axial systems, as perceived by an international panel of experts participating in a study sponsored by the World Psychiatric Association (Mezzich *et al.*, 1985), appears to be that it furnishes a thorough evaluative formulation and facilitates the planning and management of treatment.

### Ibero-American contributions to nosology

It should be useful to mention, in an enumerative fashion, contributions made by distinguished Latin Americans to psychiatric classification and diagnosis,

not only to recognise their role in universal thinking, but also to identify themes and emphases that represent Latin concerns. This is intended to be an illustrative and certainly non-exhaustive listing.

Regarding the systematisation of psychopathological description, Delgado (1953) formulated elegant statements on nosological organisation and diagnostic distinctions, based on critical thinking and rigorous clinical observations. Horwitz & Marconi (1966) made an articulate plea for diagnostic definitions formulated in objective and operational terms.

In the area of comprehensive diagnostic models, the contribution of Leme Lópes (1954) from Brazil must be noted; he pioneered, along with Essen-Möller & Wohlfahrt from Sweden (1947), the development of specific multi-axial systems. His tri-axial proposal included psychiatric syndromes, pre-morbid personality and aetiological constellation.

The interface between epidemiology and nosology has been the subject of substantial Latin-American efforts. Illustrative of these is the work of Leon, who surveyed the attitudes of Latin-American psychiatrists towards existing diagnostic systems (1970) and participated prominently in WHO's International Pilot Study of Schizophrenia (1976).

Folk and transcultural psychiatry has had some of its most important bases in Latin America. Notable here are the works of Seguí (1979), Bustamente (1961), and Perales (1985). Of related significance have been the descriptions of syndromes induced by native drugs of abuse such as cocaine and its *pasta básica* (Jeri, 1978; Nizama, 1979).

Some of the most fundamental and promising contributions to the conceptualisation of illness have been those made by Seguí (1946), who emphasised the role of stress, Fabrega (1975) who set the bases for an ethno-medical approach to illness, and Mariátegui (1985), who presented a penetrating analysis of the ethno-historical context of alcoholism.

Finally, there have been two important Latin-American contributions to the International Classification of Diseases. One was the development of the Segundo Glosario Cubano de la Clasificación Internacional de Enfermedades Psiquiátricas (GC-2) – a substantial adaptation of ICD-9 to a given national reality (Acosta-Nodal *et al.*, 1983). The other was the conspicuous participation of psychiatric associations from Argentina, Brazil, Colombia, Mexico, Peru, and Venezuela in the international consultation on ICD-10 proposals, recently conducted by the World Psychiatric Association (1987). The points emphasised by these Latin-American associations were the need for sensitivity to cultural aspects, the value of multi-axial systems, and the importance of effective international collaboration.

### Critical Latin-American issues relevant to diagnosis

Building on the above list of Latin-American contributions to nosology, it should be useful to consider some important cultural issues relevant to diagnosis. Many of these have been identified and investigated by Latin-American professionals working in the USA.

Cuellar (1982) analysed, with particular regard to schizophrenia, the various phases of the traditional diagnostic process where socio-cultural factors may play a role, and pointed out the importance of symptomatological assessment, the organisation of symptoms into syndromes, and the examination of aetiological or contributory factors. He concluded that failure to consider the whole patient, including his cultural background, could substantially confuse diagnosis and treatment. More generally, across psycho-pathological conditions, Cuellar & Roberts (1984) found that cultural influences on form and content of symptoms may misguide the diagnostic process. They noted, for example, that the number of specific symptoms, number of problems, and severity of disorder were greater for Chicanos than for Anglo Americans. Reflecting on the suitability of DSM-III for Latin-American populations, Alarcón (1983) pointed out the limited transcultural appropriateness of its diagnostic criteria for personality disorders.

Cultural factors may deeply influence not only psychopathological manifestations, but also the development of specific syndromes. Alarcón (1983) and Seguí (1979) have called attention to the presence in Latin-American populations of syndromes such as *susto* and *daño*, which have been termed 'culture-bound' by many (Yap, 1967). It should be kept in mind, however, that culture-bound syndromes are not just exotic conditions that happen south of the Equator. Fabrega (1988) has noted that much of what is included in standard diagnostic systems such as ICD-9 and DSM-III are indeed culture-bound syndromes, but in this case, bound to Western culture.

Beyond psychopathological manifestations and syndromes, socio-cultural stressors constitute an area of high relevance to Hispanic mental health and illness. Among these stressors are low income, unemployment, under-employment, under-education, poor housing, prejudice and discrimination, and cultural-linguistic barriers, as pointed out by Parron (1982) for US minorities. Elaborating on this theme, Becerra *et al* (1982) accorded great significance to the vulnerability of Hispanics or Latins, as a group, to the stresses of acculturation and migration.

Support systems are posited by many investigators as protectors against psychosocial stressors. Alvarado (1985) found empirically in South America not only that low support systems appear to increase vulnerability to adjustment disorders, but that the quality of support systems tends to improve the outcome of such disorders. The direction and extent to which social network patterns among Latins may influence mental health and illness are, however, uncertain (Escobar & Randolph, 1982). On the one hand, the family network of Latin Americans in the United States represents a frequent source of considerable support, and on the other, there are noticeable limitations in the access of this ethnic group to the resources of the community-at-large.

Last but not least, is the issue of language. Spanish continues to be a fundamental aspect of Latin-American culture (Parron, 1982). It is a factor that underlies most of the issues noted above, as it epitomises the minority barriers faced by Latin Americans in the USA. It must be seriously considered in relation to both the expression of psychopathological experiences and the professional interpretation of such expressions (Cuellar & Roberts, 1984).

### Standard diagnostic systems

The International Classification of Diseases originated as the International Classification of Causes of Death, issued by the International Statistical Institute in Paris in 1893. Since then, it has been revised at approximately ten-year intervals, and its scope has extended beyond the accounting of mortality to include also morbidity. However, its purposes have remained primarily statistical, i.e. obtaining internationally comparable figures, with the ultimate goal of enhancing public health.

Mental disorders were assigned only one three-digit category in the Fifth Revision of the International Classification (ICD-5) (1938), which included as subtypes mental deficiency, schizophrenia (dementia praecox), manic-depressive psychosis and other mental disorders. With the Sixth Revision (World Health Organization, 1948), which was the first one to cover formally diseases and injuries in addition to causes of death, the mental disorders section grew to 26 three-digit categories. These were arranged in three broad classes: psychoses, psychoneurotic disorders, and disorders of character, behaviour, and intelligence. The international use of this Sixth Revision was surveyed by Stengel (1959), which resulted in a powerful indictment of the existing classification of psychiatric disorders, on both taxonomic and world-wide communication grounds.

The Ninth Revision (ICD-9), (WHO, 1978) is the currently official classification system. It consists of 17 main chapters, subdivided into a total of 1000 three-digit categories, according to topographical and aetiological considerations. The fifth chapter corresponds to psychiatric disorders, and includes 30 three-digit categories. These are organised into four subsections: (1) organic psychotic conditions, (2) other psychoses, (3) neurotic, personality, and other non-psychotic mental disorders, and (4) mental retardation.

One of the basic structural characteristics of the psychiatric classification in ICD-9 is its uni-axial approach, although the use of multiple diagnoses is permissible. Also important is the prominence of organicity and psychosis as basic classificatory principles. It offers, for the first time in ICD history, a glossary of psychiatric disorders, the definitions of which are relatively informal and connotative.

In 1980, the American Psychiatric Association issued the third edition of its *Diagnostic and Statistical Manual of Mental Disorders* (DSM-III). This system, in contrast with the first two editions of the DSM, departed substantially from the official International Classification. The following represent its major innovations (Spitzer *et al*, 1980). (a) Use of a multi-axial approach (I. Psychiatric syndromes, II. Personality and specific developmental disorders, III. Physical disorders, IV. Overall psychosocial stressor severity, and V. Highest level of adaptive functioning in the past year). (b) Organisation of psychiatric syndromes on the basis of minimally-inferential symptomatological constellations, rather than higher-order concepts such as psychoses and neuroses (although aetiological considerations have a significant role in areas such as organic mental and adjustment disorders). (c) Use of specific or explicit diagnostic criteria, containing both inclusionary and exclusionary rules for the definition of psychiatric disorders.

A comparison of the international usage and perceived usefulness of ICD-9 and DSM-III was obtained through the 1983 survey sponsored by the World Psychiatric Association: 175 expert diagnosticians, representing 52 countries, participated in the survey. As Table I shows, 77% of the total panel reported using ICD-9, while 72% reported using DSM-III; high usefulness was ascribed to ICD-9 by 29% of the panel, and to DSM-III by 46%. The Latin-American subpanel reported somewhat more favourable impressions of both systems than the total panel, also perceiving DSM-III as more useful than ICD-9. Furthermore, the group of 28 Latin-American psychiatrists, *vis-à-vis* the total panel, expressed higher interest and respect for international systems,

TABLE I  
*Use and perceived usefulness of ICD-9 and DSM-III according to a World Psychiatric Association survey*

Use and usefulness	ICD-9		DSM-III	
	World Panel (n = 175) %	Latin American Subpanel (n = 28) %	World Panel (n = 175) %	Latin American Subpanel (n = 28) %
Users	77	85	72	70
usefulness:				
low	20	13	21	16
medium	51	43	33	26
high	29	43	46	58

and accorded greater importance to the use of multi-axial approaches, with relatively stronger emphasis on axes dealing with specific psychosocial stressors and adaptive functioning.

Recently, the American Psychiatric Association (1987) issued DSM-III-R. This revision of the 1980 diagnostic manual was aimed at clarifying ambiguities in the list of psychiatric disorders and making changes in the criteria and text on the basis of new data, while maintaining compatibility with ICD-9-CM (US National Center for Health Statistics, 1978). Structural modifications appear in various aspects of the revised system (Spitzer & Williams, 1988).

The basic themes of the five DSM-III axes have been maintained in DSM-III-R, but several of them have been modified. In Axes I and II, categories have been rearranged to consolidate a developmental theme for Axis II. This now includes mental retardation, borderline intellectual functioning, and pervasive developmental disorders, in addition to personality and specific developmental disorders. Axis IV has been moved one step towards specification of stressors (in addition to rating their overall severity), by requesting clinicians to classify the set of stressors identified in a patient as predominantly acute (less than 6 months) or predominantly enduring (more than 6 months). Axis V has been made more complex in two ways: one by expanding the functioning domain to include not only occupational and interpersonal performance but also symptomatological status, and the other by requiring ratings in two time-frames: current functioning and highest level in the past year.

Other wide-ranging changes for the diagnosis of psychiatric disorders (Axes I and II) include the recommendation for clinicians to rate the severity of each psychiatric syndrome as - mild, moderate, severe, in partial remission, or complete remission.

Also, the 'atypical' denomination used in DSM-III for residual categories has been changed to "not otherwise specified".

A final point in this outline of key standard diagnostic systems is the Tenth Revision of the International Classification of Diseases, currently being completed under the aegis of the World Health Organization. One of the most innovative sections of the overall classification corresponds to psychiatric disorders: its basic orientation has been expanded to serve not only traditional statistical and public health needs, but also clinical care and research (Cooper, 1988; Jablensky, 1988).

The core classification of psychiatric disorders would be uni-axial, but a complementary multi-axial schema is being planned (Mezzich, 1988). This would consist of axes on general psychiatric syndromes, developmental conditions, physical illnesses, abnormal psychosocial situations, and disabilities. Furthermore, a family of documents would be developed to allow adaptations and extensions to attend special-purpose and regional needs. (See also Cooper, this supplement.)

#### **Incorporating Latin-American concerns in prospective diagnostic systems**

In this final section, convergence will be explored between the two main lines of thought running through the preceding pages: the Latin-American agenda and the development of diagnostic and classification methodology. More specifically, possibilities will be enunciated for accommodating Latin-American themes and issues into the structure of psychiatric diagnosis and nosological systems.

#### **Development of culture-sensitive models for understanding psychopathology**

This refers to theoretical work on conceptual relationships that may set the stage and open paths for the development of specific diagnostic constructs and tools. A powerful example is Mariátegui's (1985) far-reaching analysis of the uses and abuses of alcohol within the ethno-historic and socio-cultural framework of the Inca Empire. Another example, on the same psychopathological topic, is the cogent argument made by Santisteban & Szapocznik (1982) on the need for a bicultural approach to understand acculturation and the development of substance abuse among Hispanics in the United States. Fabrega's (1975) proposal of an ethnomedical science for a more valid conceptualisation of illness in psychiatry and medicine at large is also noteworthy.

#### **Inclusion in standard diagnostic systems of special diagnostic categories of relevance to certain cultural groups**

Systematic consideration of 'psychocultural' syndromes have been proposed by Wig (1985) (acute transient psychoses in the Third World) and Rubel (1964) (*susto* in Latin America). Syndromes of regional interest might be incorporated in standard diagnostic systems by coding them as subtypes of 'other' or 'not elsewhere classified' categories. Through further epidemiological studies, some of these syndromes may prove of wide international relevance, and therefore attain full coding status along with what Fabrega (1988) has called Western-culture-bound syndromes.

#### **Modification of diagnostic definitions to accommodate culture-specific manifestations**

The importance of somatic symptoms for the characterisation of many syndromes in the Third World (Wig, 1985), and more specifically, of depression in Latin America (Mezzich & Raab, 1980; Escobar *et al*, 1983) has been well documented. National and regional adaptations of a standard diagnostic system may be able to incorporate these particular characterisations within the corresponding diagnostic criteria.

#### **Development of multi-axial systems sensitive to cultural needs**

Most existing multi-axial systems include one or two axes dealing with socio-cultural factors, and in this way are responsive to this issue. However, the selection of axes for a widely accepted international diagnostic system should be based on well documented perceptions of their high informational value across the world. Furthermore, the scales used for assessing the axes should be culturally relevant, as pointed out by Alarcón (1983) in the case of personality disorders, psychosocial stressors, and adaptive functioning in DSM-III. An axis on specific psychosocial stressors or abnormal psychosocial situations may be able to allow the identification of the various stressors that Latin Americans experience with particular frequency (Becerra *et al*, 1982; Parron, 1982; Cuellar & Roberts, 1984).

#### **Development of simpler classifications for the use of primary health workers**

The importance of elementary, management-orientated classifications of psychiatric disorders for

primary health care has been compellingly argued by Wig (1985). Such classifications should be informationally compatible with standard diagnostic systems. They may constitute valuable elements of the family of adaptations and extensions being anticipated for ICD-10.

### Development of better evaluation instruments

The need for checklists to appraise psychological distress and role performance and for standardised interviews to conduct diagnostic evaluations among Latin Americans has been pointed out by Parron (1982) and by Cuellar & Roberts (1984). A standardised and fully scheduled interview (DIS), which has a Spanish version (Karno, *et al*, 1983), has been developed and used with several Latin populations. However, the validity of this approach in both its English and Spanish versions has been questioned (Anthony *et al*, 1985; Burnam *et al*, 1983; Ganguli & Saul, 1982). For clinical use, fully scheduled interviews have the additional problem of not readily accommodating multiple sources of information. This indicates the need for semi-structured instruments (standardised in that the areas and items to be investigated are pre-defined, but not fully scheduled for the process of data-gathering). An example of this semi-structured approach is the Initial Evaluation Form (Mezzich *et al*, 1981), which has been translated to Spanish and adapted for use at the Peruvian National Institute of Mental Health (López-Merino, *et al*, 1985).

### Training of mental health workers and attention to language issues

The success of a diagnostic system, including its cultural validity, does not depend only on its design, but also on its proper introduction to clinical users. In this regard, consideration of language *vis-à-vis* the expression and assessment of psychopathology is crucial (Parron, 1982; Cuellar & Roberts, 1984).

### Research on the relationship between cultural factors, personality disposition and acute syndromes

The investigational activity involving the multi-perspective use of data gathered with adequate diagnostic tools (Cuellar & Roberts, 1984), represents the closure of the circle initiated in Item 1. The empirical study of the interplay between psychopathology and cultural factors may lead to the development of diagnostic systems that describe better the condition of the Latin-American patient

and facilitate the use of intervention strategies helpful for this patient, his family, and his community.

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