

Cultural Variations in the Clinical Presentation of Depression and Anxiety: Implications for Diagnosis and Treatment

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This article reviews cultural variations in the clinical presentation of depression and anxiety. Culture-specific symptoms may lead to underrecognition or misidentification of psychological distress. Contrary to the claim that non-Westerners are prone to somatize their distress, recent research confirms that somatization is ubiquitous. Somatic symptoms serve as cultural idioms of distress in many ethnocultural groups and, if misinterpreted by the clinician, may lead to unnecessary diagnostic procedures or inappropriate treatment. Clinicians must learn to decode the meaning of somatic and dissociative symptoms, which are not simply indices of disease or disorder but part of a language of distress with interpersonal and wider social meanings. Implications of these findings for the recognition and treatment of depressive disorders among culturally diverse populations in primary care and mental health settings are discussed. *(J Clin Psychiatry 2001;62[suppl 13]:22-28)*

Although cross-national epidemiologic research has confirmed that major depression and anxiety disorders occur worldwide,^{1,2} the symptomatic expression, interpretation, and social response to these syndromes vary widely.^{3,4} This article will review some of what is known about cultural variations in the clinical presentation of depression and anxiety to identify issues relevant for clinical practice.

The term *culture* is a grand abstraction that covers a very broad territory.⁵ Older notions of cultures as self-contained systems (implicit in the concept of culture-bound syndromes) have given way to a view of cultural worlds as temporary, ever-changing constructions that emerge from interactions between individuals, communities, and larger ideologies and institutional practices.^{6,7} Individuals use the resources available in the social world to construct durable and socially valued selves.

Discussions of culture in psychiatry tend to focus on the minority patient who is presumed to be culturally distinct

in some way. However, psychiatry itself is a cultural institution. Medical anthropology has shown how many aspects of psychiatric theory and practice are based on specific cultural concepts of the person.⁸⁻¹⁰ One implication of the broader perspective on culture advanced here is that "culture" is not simply a characteristic of patients. The perspective of clinicians is also a function of their own ethnocultural background, their professional training, and the context in which they work. Hence, it is best to frame issues of cultural difference not simply in terms of the characteristics of patients or communities, but in terms of differences in the perspectives of patient and clinician in what is always, to some degree, an intercultural encounter.

Much of what is known about the role of culture in psychopathology comes from qualitative ethnographic research both in clinical settings and in the community.^{3,8} Conventional psychiatric research is ill-suited to explore the cultural meaning of distress because it tends to reduce the complexity of illness narratives to a checklist of symptoms and signs of disorder. However, there is a growing body of epidemiologic research informed by ethnography that goes beyond parochial assumptions to identify clinically important cultural variation.¹¹ This article considers the impact of culture on the symptomatic expression and clinical presentation of depression and anxiety.

CULTURAL VARIATIONS IN THE REGULATION AND EXPRESSION OF EMOTION

While there may be a small set of universal emotions, more complex sentiments and feelings refer to stretches of social interaction and specific contexts that vary cross-

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The International Consensus Group on Depression and Anxiety held the meeting "Focus on Transcultural Issues in Depression and Anxiety," October 5-6, 2000, in Kyoto, Japan. The Consensus Meeting was supported by an unrestricted educational grant from SmithKline Beecham Pharmaceuticals.

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culturally.¹² These variations may influence the experience and expression of the forms of dysphoria termed *depression* and *anxiety*. While these English terms may point to universal experiences, they also have culture-specific connotations that reflect the history of emotions in Western countries. From the perspective of evolutionary psychiatry, depression is related to the response to the loss of significant interpersonal relationships, social status, or incentives, while anxiety is related to the anticipation of threats to safety or integrity of body or self. However, the emotions attached to these basic predicaments are elaborated in distinctive ways in each social and cultural context.^{13,14}

Culture has effects on the neural systems, psychological representations, and interactional patterns that constitute affect throughout the life-span.¹⁵ Cultural ideologies, institutions, and practices provide the context and rules for interactional processes that underlie complex emotions. Cultural variations in the composition of the family, maternal-infant interaction, and child-rearing practices all prime and shape affect systems. Emotion “display rules” and body practices regulate socially acceptable and deviant patterns of emotional expression. Culture provides categories and a lexicon for emotional experience, making some feelings salient and others more difficult to articulate. Culture sets limits of tolerance for specific emotions and strong affect; it also provides lay theories and strategies for managing dysphoria. Culture influences the sources of distress, the form of illness experience, symptomatology, the interpretation of symptoms, modes of coping with distress, help-seeking, and the social response to distress and disability. Each of these ways in which culture may influence the regulation of emotion has potential implications for the expression of dysphoric affect in clinical settings.

In many cultures, disturbances of mood, affect, and anxiety are not viewed as mental health problems but as social or moral problems.³ In Latvia, for example, the grieving person is enjoined to “bury his suffering under a stone and step over it singing” (V. Skultans, Ph.D., oral communication, February 9, 2001). Even in North America, depression carries connotations of a loss or lack of personal strength and fortitude that contribute to stigmatization. These connotations contribute to the tendency among some cultural groups to deny or minimize the affective components of their distress in favor of more socially acceptable somatic symptoms. Such cultural ideologies of emotion also govern developmental experiences as well as coping strategies that may influence the course of affective and anxiety disorders.

The culturally distinctive form of social phobia termed *Taijin kyofusho* (TKS) in Japan provides an instructive example of cultural influences on anxiety. Although TKS shares many symptoms with social anxiety as described in DSM-IV, it differs in 2 important respects. First, it is associated with concerns about upsetting others rather than

simply with one’s own embarrassment. Thus, awkward social behavior, especially an inappropriately placed or timed gaze, is viewed as harming others. This fits with Japanese emphasis on the regulation of social interaction through deference and attentiveness to one’s position within a complex status hierarchy. Second, a wide range of types and severity of social anxiety, including apparently delusional forms, are grouped together by many Japanese psychiatrists as forms of TKS that may be responsive to similar cognitive interventions. Although not yet established through clinical trials, if true, this grouping would suggest that the delusional forms of TKS differ markedly from other delusional disorders.

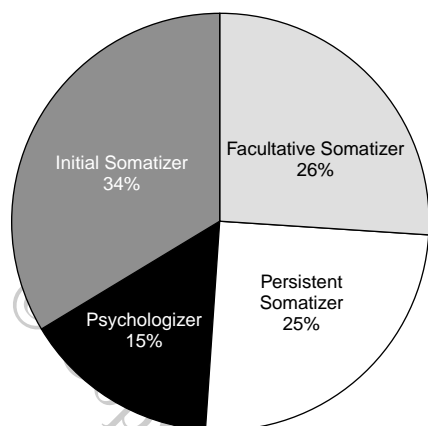
The salience of interpersonal anxiety in Japan led to its early recognition as a serious mental health problem and to the development of culture-related treatments of its more severe forms.¹⁶ The greater social acceptability of anxiety compared with depression may also account for the low levels of clinical diagnosis and treatment of depression in Japan until recently. The majority of patients with symptoms of depression in Japan are still treated by internists primarily with benzodiazepines, although with the recent introduction of selective serotonin reuptake inhibitors, antidepressant use is increasing.

SOMATIZATION IN PRIMARY CARE

There has been a long-standing impression that “non-Western” patients are prone to somatize their distress. We should be suspicious about any such sweeping generalization that includes most of the world’s myriad cultures under the rubric “non-Western.” Indeed, if there is any validity to this generalization, it can only be because Westerners (who themselves comprise extremely diverse and divergent cultural groups) share some distinctive values or practices that contribute to the obverse of somatization, which has been termed *psychologization*.¹⁷

The United States is distinctive in the great emphasis given to the open expression of interpersonal conflict and confrontation in everyday life.¹⁸ Daytime television offers many models of people speaking directly about intimate events in their lives. Nor is this simply a form of entertainment that contravenes ordinary rules: the same directness and explicit talk about conflict is common in many different social strata or subcultures within American society. In contrast, many other cultures view nonconfrontation and social harmony as paramount and consequently value the suppression or containment of both interpersonal and internal conflict.¹⁹ As a result, individuals in these cultures are less likely to open up to health care providers and to provide details of their emotional state and social problems. As well, people in most parts of the world do not view emotional problems as appropriate issues for health care per se. Instead, emotional difficulties, including depression and anxiety, are often understood as sociomoral

Figure 1. Styles of Clinical Presentation of Primary Care Patients With Depression and Anxiety^a



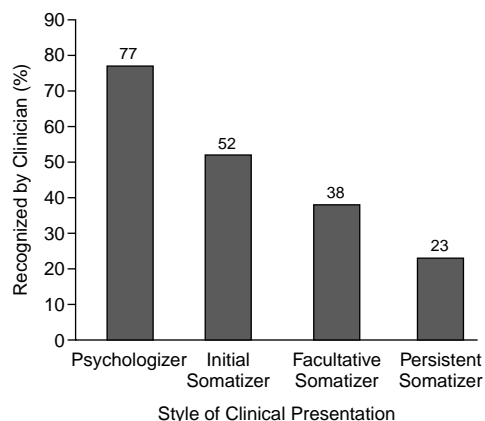
^aData from Kirmayer et al.²³

problems more appropriate to bring to a family member, elder, spiritual or community leader, or someone else who is familiar with the complex web of social ties, past and present, that define a relational self.

The impression that Asians, Africans, and others are more prone to somatize than North Americans has been based largely on anecdotal observation or on research that compares people in very different health care systems.²⁰ Thus, early work on somatization in Taiwan and China compared patients in the community, seen by healers or primary care providers, with patients in the United States seen in mental health clinics.^{21,22} It is not surprising that the latter were seen to be more open about the emotional aspects of their distress.

We conducted a series of studies in Montreal, Quebec, Canada, to examine somatization in similar social settings. For example, in a study of 700 patients who attended family medicine clinics on a self-initiated visit, we found that the vast majority of patients, whatever their background, made exclusively somatic presentations to their physicians.²³ As seen in Figure 1, only 15% of patients with current major depression or panic disorder (diagnosable with the Diagnostic Interview Schedule) presented any psychosocial complaint. However, when the somatic presenters were asked what caused their somatic symptom (which was usually some form of bodily pain or fatigue), half reported a potential psychosocial cause (e.g., stress, troubles at work or at home, emotional distress). Of those who did not report a psychosocial cause, half again agreed, when prompted, that nerves or worries could have something to do with causing their symptoms. The style of clinical presentation had an important effect on rates of recognition of distress by clinicians. As seen in Figure 2, the more persistently a patient rejected any link to psychosocial factors, the less likely the clinician was to recognize and treat a psychiatric disorder.

Figure 2. Rates of Primary Care Recognition of Depression and Anxiety by Style of Clinical Presentation^a



^aData from Kirmayer et al.²³

This study,²³ which has been replicated in several countries,²⁴⁻²⁶ suggests that somatization of depression and anxiety is ubiquitous and not characteristic of some specific ethnocultural group. However, the majority of primary care patients will acknowledge a psychosocial dimension to their distress when asked; only about 20% are persistent “somatizers” who reject any connection between their somatic symptoms and their depression or anxiety disorder. These individuals may have somewhat milder conditions and better prognosis than those who acknowledge the psychiatric nature of their problem. This finding suggests caution in converting patients to a psychological view of their condition.

The most common somatic symptoms of depression and anxiety are musculoskeletal pain and fatigue. This finding is similar in primary care settings around the world.²⁶ These somatized presentations probably represent what has been called “ticket behavior” in the family medicine literature: a somatic complaint is an appropriate and nonstigmatized reason to seek help from a biomedical practitioner.²⁷ This is so even if the individual recognizes that there are social and psychological causes or contributors to the illness.

In a later study, we examined a community sample of Canadian immigrants from 3 different ethnocultural groups: Afro-Caribbean (mainly from Jamaica and Trinidad), Vietnamese, and Filipino.²⁸ All were living in the same urban neighborhood and had similar access to primary care. The immigrant groups were much less likely to use or to be referred to mental health care. Although there were differences between the groups in the prevalence of emotional distress (linked to their different pre-migration experiences), when level of distress was controlled, there was some evidence for higher levels of somatic symptom reporting among Vietnamese men. This finding suggests that there may be cultural and gender dif-

Table 1. Cultural Idioms of Distress Related to Anxiety and Depression

Agoraphobia ^{30,31}
Ataques de nervios ^{32,33}
Cardiophobia ³⁴
Koro ³⁵⁻³⁷
Kyol goeu ("wind overload") ³⁸
Semen loss (dhat, jiryan, sukra praneha, shen-k'uei) ^{39,40}
Taijin kyofusho ⁴¹⁻⁴³

ferences in the expression of distress that are pertinent to the recognition of major depression and anxiety disorders in primary care.

CULTURE-BOUND SYNDROMES AND IDIOMS OF DISTRESS

The culturally distinctive elements of the clinical presentation of patients with depression and anxiety may reflect culture-specific symptoms or syndromes, cultural idioms of distress, or explanatory models that link bodily distress with social and psychological factors. These conceptually different aspects of illness experience generally coexist but require somewhat different diagnostic strategies to untangle and call for different therapeutic responses.

There are many common somatic symptoms that are nonspecific manifestations of depression, anxiety, and other forms of distress. DSM-IV includes an appendix with several culture-related syndromes that may coexist with or be otherwise related to depression and anxiety disorders.²⁹ Table 1 lists some of the well-described syndromes that may co-occur with depression or anxiety disorders.³⁰⁻⁴³

These clusters of symptoms probably reflect the interaction of bodily processes and cognitive schemata based on ethnopsychologic and ethnopsychological notions. Some somatic symptoms may seem bizarre when encountered outside their usual cultural context and may lead clinicians to mistakenly diagnose them as delusional or psychotic disorders. For example, sensations of "heat" or "peppery feeling" in the head are common in equatorial regions of Africa.⁴⁴

Several of the classic culture-bound syndromes are, in fact, not really syndromes at all (that is, co-occurring sets of symptoms) but causal explanations or illness attributions.⁴⁵ For example, *susto*, or fright-illness, is a common explanation in Central America for a wide range of illnesses, including infectious disease and congenital malformations. The importance in eliciting patients' causal models in order to diagnose and negotiate treatment has been recognized since the seminal work of Kleinman and Good.^{22,46,47} Although sometimes described as analogous to medical theories of disease causation, course, and outcome, explanatory models are often fragmentary,

Table 2. Somatic Idioms of Distress and Folk Illness Attributions

"Nerves," nervios, nevra ⁴⁹
Brain fog, ^{50,51} ode-ori ⁵²
Calor ⁵³
Falling out, indisposition, low blood ⁵⁴⁻⁵⁶
Heart distress ⁵⁷⁻⁵⁹
Hwa-byung ^{60, 61}
Neurasthenia, ^{62,63} shenjing shuairuo, ⁶⁴ shinkeisuijaku ⁶⁵
Susto ⁶⁶

internally inconsistent, and heavily influenced by experiences with salient prototypes and sequences of events in the individual's life.⁴⁸ Thus, it is important to elicit patients' prototypical experiences of similar symptoms or problems to identify the clinical significance of the current symptoms.

Many culture-specific terms refer to "idioms of distress"—culturally patterned ways of talking about distress (Table 2).⁴⁹⁻⁶⁶ Most of these idioms, although they may refer to bodily distress, also imply social and interactional problems. For example, *hwa-byung*, a Korean term meaning "fire-illness," refers not only to symptoms of epigastric burning and other forms of somatic distress but also to anger due to interpersonal conflict and a wider sense of collectively experienced injustice.^{60,61,67} For the clinician knowledgeable about cultural meanings, the somatic symptoms of patients who label their distress *hwa-byung* point to psychological and interpersonal issues. The implication of this cultural shaping of illness experience is that symptoms cannot simply be interpreted as indices of disorder or disease but must, instead, be understood as interpersonal communications by the clinician and also, often, by the patient's support group.

IMPLICATIONS FOR CLINICAL INTERVENTION

In most parts of the world, people with symptoms related to depression and anxiety do not view their problems as psychiatric and may reject psychological or psychiatric treatments couched in culturally unfamiliar or dissonant terms. Assuming that psychiatry does have something to offer such patients (this is not certain, but is at least worth testing), the clinician's task involves acquiring sufficient understanding of the patients' point of view and preferences to negotiate a diagnostic interpretation and treatment strategy that will be acceptable and effective.

There is considerable evidence that conventional psychiatric approaches are not effective for many patients because of the failure to undertake or accomplish this clinical negotiation. One indication of this failure is the generally low rate of patient "compliance" with treatment.⁶⁸ Studies in general health care suggest that from 10% to 75% of patients are noncompliant with medication.⁶⁹ Rates of noncompliance are much higher in intercultural settings,

because of both cultural differences in expectations for treatment and inadequate communication. For example, in a study from a specialized clinic, 61% of depressed Southeast Asians receiving antidepressants had no detectable blood drug level.⁷⁰ Etiquette and a desire to be a “good patient” may hide fundamental differences in perspective as shown in a later study that found that 53% of Southeast Asian patients with depression or posttraumatic stress disorder who claimed to be taking medication as directed had no detectable blood level and only 16% had blood levels in the therapeutic range.⁷¹ Reasons for these low rates may include patients’ reluctance to take medication perceived as excessively strong, increased physiologic or psychological sensitivity to side effects, or the social stigma associated with any psychiatric treatment.⁷² Cultural attitudes toward authority may lead patients to maintain the appearance of compliance with treatment in an effort not to offend the clinician.

The metaphor of compliance is unfortunate in many respects because it implies that the patient’s task is to conform, acquiesce, or yield to the clinician’s directives. In Euro-American culture, such acquiescence generally has quite negative connotations and implies weakness or subservience. Behind the notion of compliance lies a more general “conduit” metaphor of communication that views the clinician as simply passing along instructions to the patient in a neat package, which must simply be unpacked and followed.⁷³ From this point of view, the active ingredients of the treatment are to be found in the doctor’s guidance and the medication, not the patient’s own efforts at control.

In contrast to these connotations of the metaphor of compliance, we can understand patients as actively engaged in understanding their illness and seeking out forms of treatment that make sense to them and fit with salient cultural expectations and social constraints in their lives.⁷⁴ Communication is not simply a matter of passing along packets of information from one person to another but of using meaningful language and gestures to evoke or elicit from patients their own relevant models and metaphors. Hence some awareness of patients’ background knowledge is essential to make oneself understood.

The unequal power of doctor and patient tends to work to silence patients.⁷⁵ At times, this silencing may suit both clinician and patient, as when the patient comes from a cultural background that values reticence and restraint or views competent clinicians as necessarily authoritarian. More perniciously, patients from ethnocultural groups or regions that were dominated and marginalized by European or American powers during periods of colonization or that have experienced racism will find it difficult or dangerous to articulate their own point of view when it conflicts with or contradicts the clinician’s framework.

All of this suggests the importance of thinking about the clinical encounter in terms of alternatives to compli-

ance, through metaphors that emphasize negotiation, collaboration, and a patient- or family-centered approach. To do this, it is crucial to elicit patients’ own understandings of symptoms and illness to appreciate their concerns and priorities. The clinician must clearly indicate his or her willingness to take the time to understand the patient’s point of view. This willingness allows the clinician to understand specific symptoms and behavioral problems in sufficient detail to map them onto existing psychiatric nomenclature, but it also may point toward issues that, while they are not core symptoms of a recognized disorder, nevertheless rank high on the patient’s own list of concerns that require attention and may play a key role in disability and outcome. In parallel with this effort, the clinician needs to explore the patient’s attitudes toward medical authority and psychiatric treatment to identify potential barriers related to fear of labeling and stigmatization.

The outline for a cultural formulation in DSM-IV provides a useful checklist of basic categories of information pertinent to understanding symptoms and illness in social and cultural context.²⁹ The cultural formulation includes 4 main domains: (1) the ethnocultural identity of the patient, (2) patients’ explanations of illness, (3) culturally distinctive dimensions of the psychosocial environment and levels of functioning, and (4) the relationship between individual and clinician. As it stands, however, the cultural formulation does not sufficiently emphasize or make explicit issues of social class, socioeconomic disparity, power, and racism that are crucial considerations in intercultural encounters.

In the United States, certain ethnocultural groups are large enough that they can fairly expect to receive treatment from clinicians who share their cultural and linguistic background. It is worth noting, however, that the mere fact that a clinician and patient share some background may not guarantee culturally appropriate care both because of important individual, family, subcultural, and social class differences and because in the course of professional training some clinicians may distance themselves from or devalue the tacit cultural knowledge they once had.

For many smaller migrant groups, and in settings of extreme cultural diversity, such ethnic matching is not feasible because clinicians with the requisite linguistic and cultural background are not available. In this context, it is essential for clinicians to develop generic cultural competence. The basis of any general ability to work with people from diverse cultural backgrounds begins with the clinician’s knowledge of their own ethnocultural identity and the implicit biases this brings. A second step involves careful consideration of the cultural bases and biases of contemporary psychiatric practice. A third skill concerns working with interpreters and culture-brokers able to provide the missing social and cultural context. Finally, the clinician must consider his or her own position in the health care system, as well as that of the clinical or institu-

Table 3. Elements of Cultural Competence in Clinical Formulation

Approach each case as unique but with a focus on the social and cultural context of the behavior and experience of the identified patient and his or her family.
Emphasize knowledge of culture, language, and etiquette as modes of inquiry rather than as a priori answers to the dilemmas of a specific case.
Move beyond the individual focus of psychiatric nosology to consider social context and culturally meaningful developmental tasks and issues of power and identity.
Understand the range of variation in a cultural group and its significance for individuals and the group.
Employ culture-brokers and consultants to identify specific social and historical dimensions of the case. In this way, recognize when culture is camouflage for problems at other levels and when it is constitutive of, or contributory to, the health problem.
Formulate social and cultural dynamics as part of a comprehensive model of the interactional processes underlying psychopathology.
Consider the impact of racism, power, and cultural assumptions of the clinician and the health care system on the patient and the problem.
Negotiate a problem definition and therapeutic strategy meaningful and acceptable to patient, family, and clinician.
Mobilize personal, family, and community resources to address the problems identified by patient and clinician.
Design culturally consonant interventions to address the most flexible or accessible levels of the individual, family, or social system.
Continue to listen to patient, family, and community, and renegotiate problem definition and interventions in response to their needs and concerns.

tional setting, vis-à-vis the specific ethnocultural community to consider problems of power, racism, and accessibility that may impede forming a therapeutic alliance and negotiating effective care.

The basic strategy of generic cultural competence is to adopt an open, interested, respectful attitude toward the patient's environment which may teach the clinician the essentials needed to understand the individual's illness and biography against the larger social and cultural backdrop. Table 3 summarizes some principles of generic cultural competence.

CONCLUSION: SOCIOSOMATICS IN CLINICAL PRACTICE

In this era of mass migration and globalization, the colonialist dichotomy of Western and non-Western is becoming impossible to maintain. Contemporary cultural psychiatry is moving away from these misleading stereotypes to consider the dynamics of individuals' hybrid identities, which are in constant transaction and transformation across boundaries of race, culture, class, and nation.⁶ In this context, it is important to recognize that psychiatry itself is part of an international subculture that imposes certain categories on the world that may not fit equally well everywhere and that never completely capture the illness experience and concerns of patients.⁷⁶

The partition of distress into categories of affective, anxiety, somatoform, and dissociative disorders in contem-

porary nosology does not reflect the natural covariation of symptoms and syndromes. As a result, clinical presentations of disorders that are related to major depression or anxiety disorders may differ substantially from the descriptions in DSM-IV. Somatic symptoms are a prominent part of the clinical presentation of most patients with depression and anxiety. Dissociative symptoms may further complicate the picture, giving the impression of a psychotic disorder where none is, in fact, present.

The clinical presentation of depression and anxiety is a function not only of patients' ethnocultural backgrounds, but of the structure of the health care system they find themselves in and the diagnostic categories and concepts they encounter in mass media and in dialogue with family, friends, and clinicians. Bodily idioms of distress are very common in many cultures. In place of psychosomatic theories that emphasize individuals' inner conflict, many traditions of medicine have sociosomatic theories that link bodily and emotional distress to problems in the social world.⁷⁷ This linking provides a rich language for articulating distress and seeking help. Clinicians who learn to work collaboratively with their patients, as well as with culture-brokers and colleagues from other cultural communities, not only will be better able to identify their patients' problems, but also will uncover cultural resources that can complement and, at times, supplant conventional psychiatric treatment.

REFERENCES

1. Weissman MM, Bland RC, Canino GJ, et al. Cross-national epidemiology of major depression and bipolar disorder. *JAMA* 1996;276:293-299
2. Weissman MM, Bland RC, Canino GJ, et al. The cross-national epidemiology of panic disorder. *Arch Gen Psychiatry* 1997;54:305-309
3. Kirmayer LJ. Cultural variations in the response to psychiatric disorders and emotional distress. *Soc Sci Med* 1989;29:327-339
4. Kirmayer LJ, Young A, Hayton BC. The cultural context of anxiety disorders. *Psychiatr Clin North Am* 1995;18:503-521
5. Eagleton T. *The Idea of Culture*. Oxford, England: Blackwell; 2000
6. Bibeau G. Cultural psychiatry in a creolizing world: questions for a new research agenda. *Transcultural Psychiatry* 1997;34:9-41
7. Kirmayer LJ. Sapir's vision of culture and personality. *Psychiatry* 2001;64:23-30
8. Kleinman A. *Rethinking Psychiatry*. New York, NY: Free Press; 1988
9. Gaines A. *Ethnopsychiatry: The Cultural Construction of Professional and Folk Psychiatries*. Albany, NY: State University of New York Press; 1992
10. Young A. *The Harmony of Illusions: Inventing Posttraumatic Stress Disorder*. Princeton, NJ: Princeton University Press; 1995
11. Guarnaccia PJ, Canino G, Rubio-Stipec M, et al. The prevalence of ataques de nervios in the Puerto Rico disaster study: the role of culture in psychiatric epidemiology. *J Nerv Ment Dis* 1993;181:157-165
12. Wierzbicka A. *Emotions Across Languages and Cultures: Diversity and Universals*. Cambridge, UK: Cambridge University Press; 1999
13. Kitayama S, Markus H. *Emotion and Culture: Empirical Studies of Mutual Influence*. Washington, DC: American Psychological Association; 1994
14. Shweder RA, Haidt J. The cultural psychology of the emotions: ancient and new. In: Lewis M, Haviland-Jones JM, eds. *Handbook of Emotions*. New York, NY: Guilford Press; 2000:397-414
15. Harré R, Parrott WG. *The Emotions: Social, Cultural and Biological Dimensions*. London, England: Sage Publications; 1996
16. Morita S. *Morita Therapy and the True Nature of Anxiety-Based Disorders (Shinkeishitsu)*. Albany, NY: State University of New York; 1998
17. White GM. The role of cultural explanations in "somatization" and "psychologization." *Soc Sci Med* 1982;16:1519-1530

18. Bellah RN, Madsen R, Sullivan WM, et al. *Habits of the Heart: Individualism and Commitment in American Life*. Berkeley, Calif: University of California Press; 1985
19. Wellenkamp J. Cultural similarities and differences regarding emotion disclosure: some examples from Indonesia and the Pacific. In: Pennebaker JW, ed. *Emotion, Disclosure, and Health*. Washington, DC: American Psychological Association; 1995:293–309
20. Kawanishi Y. Somatization of Asians: an artifact of Western medicalization? *Transcultural Psychiatr Res Rev* 1992;29:5–36
21. Kleinman AM. Depression, somatization and the “new cross-cultural psychiatry.” *Soc Sci Med* 1977;11:3–10
22. Kleinman AM. *Patients and Healers in the Context of Culture*. Berkeley, Calif: University of California Press; 1980
23. Kirmayer LJ, Robbins JM, Dworkind M, et al. Somatization and the recognition of depression and anxiety in primary care. *Am J Psychiatry* 1993; 150:734–741
24. García-Campayo J, Lobo A, Pérez-Echeverría MJ, et al. Three forms of somatization presenting in primary care settings in Spain. *J Nerv Ment Dis* 1998;186:554–560
25. Kroenke K, Jackson JL, Chamberlin J. Depressive and anxiety disorders in patients presenting with physical complaints: clinical predictors and outcome. *Am J Med* 1997;103:339–347
26. Simon GE, VonKorff M, Piccinelli M, et al. An international study of the relation between somatic symptoms and depression. *N Engl J Med* 1999; 341:1329–1336
27. Epstein RM, Quill TE, McWhinney IR. Somatization reconsidered: incorporating the patient’s experience of illness. *Arch Intern Med* 1999;159: 215–222
28. Kirmayer LJ, Young A. Culture and somatization: clinical, epidemiological and ethnographic perspectives. *Psychosom Med* 1998;60:420–430
29. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition*. Washington, DC: American Psychiatric Association; 1994
30. Amering M, Katschnig H, Berger P, et al. Embarrassment about the first panic attack predicts agoraphobia in panic disorder patients. *Behav Res Ther* 1997;35:517–521
31. Capps L, Ochs E. *Constructing Panic: The Discourse of Agoraphobia*. Cambridge, Mass: Harvard University Press; 1995
32. Guarnaccia PJ, Rivera M, Franco F, et al. The experiences of ataques de nervios: towards an anthropology of emotions in Puerto Rico. *Cult Med Psychiatry* 1996;20:343–367
33. Lewis-Fernandez R. Diagnosis and treatment of nervios and ataques in a female Puerto Rican migrant. *Cult Med Psychiatry* 1996;20:155–163
34. Eifert G. Cardiophobia: a paradigmatic behavioural model of heart-focused anxiety and non-anginal chest pain. *Behav Res Ther* 1991;30:329–345
35. Bernstein RL, Gaw AC. Koro: proposed classification for DSM-IV. *Am J Psychiatry* 1990;147:1670–1674
36. Tseng W-S, Kan-Ming M, Li-Shuen L, et al. Koro epidemics in Guangdong China: a questionnaire survey. *J Nerv Ment Dis* 1992;180:117–123
37. Bartholomew RE. The medicalization of exotic deviance: a sociological perspective on epidemic koro. *Transcultural Psychiatry* 1998;35:5–38
38. Hinton D. Kyol goeu, “wind overload”: a culture specific form of panic disorder in Cambodian refugees. *Transcultural Psychiatry*. In press
39. Bhatia MS, Malik SC. Dhat syndrome: a useful diagnostic entity in Indian culture. *Br J Psychiatry* 1991;159:691–695
40. Mumford DB. The “Dhat syndrome”: a culturally determined symptom of depression? *Acta Psychiatr Scand* 1996;94:163–167
41. Kleinknecht RA, Dinnel DL, Kleinknecht EE, et al. Cultural factors in social anxiety: a comparison of social phobia symptoms and *Taijin kyofusho*. *J Anxiety Dis* 1997;11:157–177
42. Kirmayer LJ. The place of culture in psychiatric nosology: *Taijin kyofusho* and DSM-III-R. *J Nerv Ment Dis* 1991;179:19–28
43. Yamashita I. *Taijin-Kyofu or Delusional Social Phobia*. Sapporo, Japan: Hokkaido University Press; 1993
44. Ifabumuyi OI. The dynamics of central heat in depression. *Psychopathologie Africaine* 1981;17:127–133
45. Prince R, Tchong-Laroche F. Culture-bound syndromes and international disease classification. *Cult Med Psychiatry* 1987;11:3–20
46. Kleinman A, Eisenberg L, Good B. Culture, illness, and care: clinical lessons from anthropologic and cross-cultural research. *Ann Intern Med* 1978;88:251–258
47. Good B, Good MJD. The meaning of symptoms: a cultural hermeneutic model for clinical practice. In: Eisenberg L, Kleinman A, eds. *The Relevance of Social Science for Medicine*. Dordrecht, the Netherlands: D Reidel; 1980:165–196
48. Kirmayer LJ, Young A, Robbins JM. Symptom attribution in cultural perspective. *Can J Psychiatry* 1994;39:584–595
49. Low S. Embodied metaphors: nerves as lived experience. In: Csordas T, ed. *Embodiment and Experience: The Existential Ground of Culture and Self*. Cambridge, Mass: Cambridge University Press; 1994:139–162
50. Guinness EA. Profile and prevalence of the brain fog syndrome: psychiatric morbidity in school populations in Africa. *Br J Psychiatry* 1992;160:42–52
51. Prince R. The brain fog syndrome in Nigerian students. *J Ment Sci* 1960; 106:559–570
52. Makanjuola ROA. “Ode Ori”: a culture-bound disorder with prominent somatic features in Yoruba Nigerian patients. *Acta Psychiatr Scand* 1987; 75:231–236
53. Jenkins JH. The state construction of affect: political ethos and mental health among Salvadorean refugees. *Cult Med Psychiatry* 1991;15: 139–165
54. Lefley HP. Prevalence of potential falling-out cases among the black, Latin and non-Latin white populations of the city of Miami. *Soc Sci Med* 1979; 13B:113–114
55. Philippe J, Romain JB. Indisposition in Haiti. *Soc Sci Med* 1979;13B: 129–133
56. Weidman HH. Falling-out: a diagnostic and treatment problem viewed from a transcultural perspective. *Soc Sci Med* 1979;13B:95–112
57. Krause B. The sinking heart: a Punjabi communication of distress. *Soc Sci Med* 1989;29:563–575
58. Good BJ. The heart of what’s the matter: the semantics of illness in Iran. *Cult Med Psychiatry* 1977;1:25–58
59. Youngmann R, Minuchin-Itzigsohn S, Barasch M. Manifestations of emotional distress among Ethiopian immigrants in Israel: patient and clinician perspectives. *Transcultural Psychiatry* 1999;36:45–63
60. Lin K-M, Lau JKC, Yamamoto J, et al. Hwa-byung: a community study of Korean Americans. *J Nerv Ment Dis* 1992;180:386–391
61. Pang KYC. Hwabyung: the construction of a Korean popular illness among Korean elderly immigrant women in the United States. *Cult Med Psychiatry* 1990;14:495–512
62. Wessely S. Neurasthenia and chronic fatigue: theory and practice in Britain and America. *Transcultural Psychiatr Res Rev* 1994;31:173–209
63. Cathebras P. Neurasthenia, spasmophilia and chronic fatigue syndromes in France. *Transcultural Psychiatr Res Rev* 1994;31:259–270
64. Lee S. Estranged bodies, simulated harmony, and misplaced cultures: neurasthenia in contemporary Chinese society. *Psychosom Med* 1998;60: 448–457
65. Kitanishi K, Kondo K. The rise and fall of neurasthenia in Japanese psychiatry. *Transcultural Psychiatr Res Rev* 1994;31:137–152
66. Rubel AJ, O’Neill CW, Collado-Ardón R. *Susto: A Folk Illness*. Berkeley, Calif: University of California Press; 1984
67. Lin K-M. Hwa-byung: a Korean culture-bound syndrome? *Am J Psychiatry* 1983;140:105–107
68. Fawcett J. Compliance: definitions and key issues. *J Clin Psychiatry* 1995;56(suppl 1):4–10
69. Sackett DL, Haynes RB. *Compliance With Therapeutic Regimens*. Baltimore, Md: Johns Hopkins University Press; 1976
70. Kinzie JD, Leung P, Boehnlein JK, et al. Antidepressant blood levels in Southeast Asians: clinical and cultural implications. *J Nerv Ment Dis* 1987; 175:480–485
71. Kroll J, Linde P, Habenicht M, et al. Medication compliance, antidepressant blood levels, and side effects in Southeast Asian patients. *J Clin Psychopharmacol* 1990;10:279–283
72. Lin K-M, Poland RE, Anderson D. Psychopharmacology, ethnicity and culture. *Transcultural Psychiatr Res Rev* 1995;32:3–40
73. Reddy M. The conduit metaphor: a case of frame conflict in our language about language. In: Ortony A, ed. *Metaphor and Thought*. Cambridge, Mass: Cambridge University Press; 1979:284–324
74. Hunt LM, Jordan B, Irwin S, et al. Compliance and the patient’s perspective: controlling symptoms in everyday life. *Cult Med Psychiatry* 1989;13: 315–334
75. Mishler EG. *The Discourse of Medicine*. Norwood, New Jersey: Ablex Publishing Corporation; 1984:211
76. Kirmayer LJ, Minas IH. The future of cultural psychiatry: an international perspective. *Can J Psychiatry* 2000;45:438–446
77. Kleinman A, Becker AE. Sociosomatics: the contribution of anthropology to psychosomatics. *Psychosom Med* 1998;60:389–393