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# Cultural and Social Aspects of Anxiety Disorders

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**R**ecent expanding interest in the anxiety disorders has been driven by advances in our understanding of their psychobiological mediators and interventions. At the same time, however, advances in cross-cultural and social psychiatry may have fundamental implications for a comprehensive understanding of these conditions. The work of Kleinman and his colleagues (Good and Good 1982; Kleinman 1988), for example, has played a major role in the development of a "new cross-cultural psychiatry" (Kleinman 1977; Littlewood 1990). This field focuses not only on psychopathology in non-Western cultures but also on the potentially significant contribution of anthropological theories and methods to the Western clinical setting.

In this chapter, we focus on cultural and social aspects of the anxiety disorders. We begin by considering different ways of approaching the intersection between culture and the anxiety disorders. We then consider each of the anxiety disorders in turn from the perspective of a "clinical anthropological" position. We propose that some anxiety disorders do in fact occur universally but also consider ways in which their experience and expression may differ in crucial ways. In addition, we note that socioeconomic factors may play an important role in mediating the pathogenesis of some anxiety disorders.

## Culture and Psychiatry

Several different approaches to the intersection of culture and medicine have been outlined (Hahn and Kleinman 1983). One way of classifying these approaches is to distinguish between a clinical position, an anthropological position, and a clinical anthropological position. These positions reflect different stances on key debates within philosophy of science and medicine. This section draws extensively on a previous discussion of the strengths and weaknesses of these positions (Stein 1993). It should be emphasized that this division is intended to be a heuristic one and may not reflect the work of any single clinician or anthropologist.

### Clinical Position

The clinical position is occupied by clinicians and anthropologists who are primarily interested in using Western medical and psychiatric nosologies, in post-hoc fashion, for diverse populations. The DSM-IV-TR (American Psychiatric Association 2000) categories and criteria, for example, constructed in a particular (Western) setting, are used to classify psychiatric data obtained in another (non-Western) context. Cross-

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cultural psychiatrists such as Prince and Teheng-Larouche (1987), for example, argued that relatively minor alterations in the DSM system would result in a truly international classification of diseases.

This position has a long tradition in medical and psychiatric nosology. For example, Kraepelin, the father of contemporary psychiatric nosology, applied his system of classifying psychoses in German patients to data collected in Java, Indonesia. Kraepelin's nosology was predicated on a biological hypothesis—that the major psychoses each had a distinctive underlying neuropathogenesis, which accounted for their particular symptomatology and course. Thus, psychotic symptomatology had universal forms, which were biologically determined, but diverse contents, which were colored by cultural factors (Littlewood 1990).

Similarly, proponents of a clinical position might argue that anxiety disorders are simply biomedical disorders, and culture can influence only their content rather than their form. For example, the form of obsessive-compulsive disorder (OCD) necessarily comprises obsessions or compulsions, but the content may vary from obsessions about syphilis in one culture to obsessions about acquired immunodeficiency syndrome (AIDS) in a second culture. Proponents of such a position would argue that OCD has a specific neurobiological basis and that cross-cultural differences in the disorder are therefore likely to be only superficial.

The strength of the clinical approach lies in its willingness to extend a particular theoretical framework to diverse settings. The position highlights the scientific process of constructing nosologies. Indeed, international employment of the DSM system has allowed the work of different clinicians to converge and has contributed to increased knowledge of psychiatric disorders. Furthermore, advances in our understanding of the neurobiology of psychiatric disorders, including the anxiety disorders, would seem to strengthen the arguments of proponents of this position.

Nevertheless, this position has been criticized for committing a “category fallacy”—of reifying the categories and criteria of one ethnocentric classification as universal and natural. Indeed, routinized application of one theoretical framework of disease may prevent the nosologist from recognizing the existence, or appreciating the character, of unfamiliar categories and symptoms. The DSM system, particularly prior to DSM-IV (American Psychiatric Association 1994), gives short shrift to the so-called culture-bound syndromes and pays little attention to the differences in psychopathology among different cultures. Conversely, this ap-

proach downplays the possible contribution that cross-cultural theories and methods make in helping us recognize the particular sociocultural influences on our own nosology.

### Anthropological Position

The anthropological approach states that the form and content of medical disorders are crucially determined by culture; our nosologies are themselves cultural artifacts. Such disorders are inevitably culture-bound (Yap 1951, 1962); they are expressed and experienced in terms of a particular sociocultural context. Thus, clinicians and anthropologists who support this position are interested, for example, in exploring the relation between the construction of DSM-IV and its forerunners and their particular sociocultural setting.

This position also has a long history. Boas, a pioneering figure in American anthropology, wrote that, “If it is our serious purpose to understand the thoughts of a people the whole analysis of experience must be based on their concepts not ours” (Boas 1943, p. 314). Furthermore, Boas (1943) increasingly came to believe that an appreciation of the historical and environmental factors that shaped a culture was required to understand these psychological forms. These ideas also have been applied in medical and psychiatric anthropology, and an extensive literature devoted to the cultural meanings of disease and to the social construction of disease has emerged (Conrad and Schneider 1980; Wright and Treacher 1982).

Critics of the DSM classification of anxiety disorder might, for example, emphasize that this system is itself a social construction. In their review of the anxiety disorders, for example, Good and Kleinman (1985) noted that 1) cross-cultural comparisons that use Western scales of anxiety (Spielberger and Diaz-Guerrero 1990) have several crucial methodological problems; 2) the experience and expression of symptoms of anxiety, as well as the experienced source of anxiety, vary greatly across societies; and 3) anxiety disorders are not only the result of culturally influenced interpretations of an underlying disease but also disorders of the interpretive process. Similarly, Young (1980) emphasized the extent to which the concept of stress and diagnoses such as posttraumatic stress disorder (PTSD) are embedded within our particular Western sociocultural context. In particular, he argued that the focus of DSM on the individual and his or her biology reflects the individualistic, technological aspects of Western society. Conversely, *koro*, or anxiety about penile shrinkage, is not

simply a biomedical entity but rather a disorder constructed within certain non-Western cultures.

The anthropological approach has several strengths. It emphasizes the relation between psychiatric nosology and the social forms in which it is produced. It therefore points to the importance of considering the ways in which cultural factors determine the experience and perception of mental disorder (rather than simply influencing its form). Kleinman (1980), for example, suggested that the emphasis in DSM on the psychological rather than the somatic symptoms of depressive-spectrum disorders makes sense only within Western culture and is not universally applicable. Furthermore, this position points to the importance of thinking through the relation between our nosology and our particular sociocultural setting in a self-reflexive process.

Nevertheless, the anthropological position also falls prey to several criticisms. A view of mental disorder as merely a social construction undermines the existence of mental disorders in DSM as real phenomena that are generated by underlying biopsychological mechanisms. A view of nosology as simply a cultural product undermines the importance of scientific explanation as a component of clinical work. Indeed, important strengths of DSM are its inclusion of advances in contemporary psychiatric science (e.g., recognizing panic disorder as a separate entity with a specific phenomenology and pathophysiology) and its explicit attitude that future editions of DSM will need to change to incorporate new findings. Thus, the anthropological position tends to neglect the reality of the entities and processes of mental disorder and the validity of our explanations of their mechanisms. It tends to downplay commonalities in underlying psychobiology across different cultures.

### Clinical Anthropological Position

A synthetic or clinical anthropological position attempts to reach a compromise between the clinical and the anthropological position. This position conceptualizes biomedical disorders as reflecting the operation of real psychobiological mechanisms but acknowledges that disorders are necessarily expressed and experienced within sociocultural contexts. Classifications such as DSM, which are based on scientific knowledge, may be argued to have both intransitive dimensions (they do allow a knowledge of real entities) and transitive dimensions (they are always produced in social forms) (Bhaskar 1978).

An early Greek classification of infectious diseases, for example, divided these diseases into those that resolve after the "krisis" and those that deteriorate after this turning point. At this point, little was known about the underlying mechanisms of infection, and the classification was primarily informed by a wide-ranging theory, which also pertained to other aspects of social life. As knowledge of infectious entities progressed, classifications incorporated discoveries about different bacteria, viruses, and, more recently, prions. Knowledge about infectious disease continues to be produced in social forms and may, for example, reflect a Western focus on individual susceptibility to infection rather than on social responsibility for disease prevention (Young 1980). Nevertheless, the structure of classifications of infectious diseases is based on knowledge of real entities and processes.

Similarly, certain psychobiological mechanisms may result in the phenomenon of social anxiety; however, in Western culture, body dysmorphic disorder is common, whereas in Eastern cultures, olfactory reference syndrome is seen. Both entities may well involve overlapping serotonergic mechanisms (Stein et al. 1998), but the experience of each disorder also may differ in crucial ways. It is not that the "psychotic" disorders are more biological than the "neurotic" ones (Leff 1990) but rather that all psychiatric disorders are composed of psychopathological phenomena that are generated by underlying neurobiological and psychosocial causal mechanisms.

The strength of the clinical anthropological approach is that it has a place for both scientific knowledge and meaning construction. The reality of disease and its biopsychological underpinnings is emphasized, and the construction of disease within a particular sociocultural context also is incorporated. One way to draw on this approach is by differentiating between disease and illness. We discuss this distinction in the subsequent section.

### Disease Versus Illness

A central theoretical distinction in modern medical anthropology is that between *disease* and *illness* (Fabrega 1987; Good and Good 1982; Kleinman 1977, 1980; Westmeyer 1987). The term *disease* refers to biomedical disorders that are present across cultures (e.g., raised blood pressure, depressed mood), whereas *illness* refers to the subjective perception and experience of such disorders. Medical anthropologists have emphasized a point well known to psychiatry—that the per-

ception of a disorder can itself affect its course and outcome (Stein and Rapoport 1996). Furthermore, medical anthropologists have emphasized that to negotiate clinical interventions with the patient, the physician must understand the illness (rather than simply the disease).

For example, the experience of the medical disorder known as depression in Chinese culture is informed by explanatory models that highlight the relevance of somatic symptoms and that expect that management involves the family. In this context, patients in fact have the illness experience known as neurasthenia, in which somatic symptoms are prominent. To achieve compliance with an appropriate treatment, an understanding of the patient's explanatory model is needed; this then allows an understanding of the patient's illness and a negotiation of a shared model of the disorder and its treatment (Kleinman 1988).

In the next sections, we use the distinction between disease and illness to address the intersection between cultural and social studies and the anxiety disorders. From a clinical anthropological perspective, although there do appear to be universal disease processes, cross-cultural factors result in different manifestations of psychopathological phenomena. Thus, although DSM diagnoses are culture-bound, this appears to be characteristic of all psychiatric disorders. To define a particular psychiatric disorder as culture-bound is to lose sight of the psychosocial factors in all such disorders. Furthermore, although psychiatric nosologies should be applied tentatively, with self-reflexive criticism (Kleinman 1988), this should be a feature of all psychological science.

In general, we argue that the anxiety disorders do not in fact represent a category fallacy. From a theoretical perspective, neuroevolutionary approaches to the anxiety disorders suggest that universal psychobiological mechanisms are important in the pathophysiology of these conditions. Empirical epidemiological and neurobiological data provide some support for this argument, and clinical data confirm that patients can experience onset of anxiety disorders in the absence of exposure to cultural narratives about their symptoms.

Nevertheless, culture may exert important influences on the experience and expression of anxiety disorders (Friedman 1997; Good and Kleinman 1985; Guarnaccia and Kirmayer 1997; Neal and Turner 1991). In particular, culture may influence the course and outcome of these conditions (Stein and Rapoport 1996). Certainly, strong evidence indicates that the adversity and stress associated with low social status play

a causal role in mood and other psychiatric disorders (Dohrenwend et al. 1992; Yu and Williams 1999). Even after controlling for sociodemographic variables, stress from marginal minority status may affect rates of anxiety disorders (Brown et al. 1990).

## Panic Disorder

### Panic Disorder as Disease

A range of evidence indicates that panic disorder is a universal biomedical disorder and that this diagnosis does not represent a category fallacy. First, increasing evidence indicates that specific neuroanatomical circuits and neurochemical systems underpin the symptoms of panic disorder. Second, epidemiological studies suggest that the prevalence of the disorder in different settings is similar (although differences between populations do emerge) (Karno et al. 1989). Third, clinical and epidemiological studies have found that variables such as age at onset, sex ratio, and psychiatric sequelae of panic disorder are similar in a range of different contexts.

A neuroevolutionary account of panic disorder would bolster claims that it is a universal biomedical entity. Klein (1993) has made perhaps the most comprehensive attempt to do just that. He proposed that panic attacks occur when a suffocation monitor erroneously signals a lack of oxygen and maladaptively triggers an evolved suffocation alarm system. This hypothesis relies on the argument that the physiological mechanism for detecting potential suffocation depends on increased partial pressure of CO<sub>2</sub> (pCO<sub>2</sub>) and brain lactate.

The false suffocation alarm theory seems to account for the prominent symptoms of dyspnea during a panic attack (indicating a specific emergency reaction to suffocation) (Anderson et al. 1984) and for the chronic hyperventilation that predicts lactate-induced panic (indicating an attempt to avoid dyspnea by lowering pCO<sub>2</sub>) (Papp et al. 1993). The hypothesis also buttresses the differentiation (that Klein was instrumental in drawing) between episodic spontaneous panic and chronic fear-like anxiety (in which hypothalamic-pituitary-adrenal activation occurs) (Klein 1964). The hypothesis also provides an explanation for the lack of panic in patients with absent suffocation alarms (Ondine's curse) and during pregnancy and delivery (when pCO<sub>2</sub> is lowered) (Pine et al. 1994). Conversely, the hypothesis provides an explanation for increased panic during relaxation and sleep, during the premenstrual period, and in pa-

tients with respiratory insufficiency (in whom  $p\text{CO}_2$  is increased) (Klein 1993).

A possible objection to Klein's hypothesis is the observation that panic attacks have similar features to many other kinds of fear responses. Thus, it might be suggested that panic attacks serve as a common adaptation for situations from which fleeing is an appropriate response (Nesse 1987). Various triggers, including separation anxiety, other kinds of loss, and traumatic suffocation, might then be expected to increase the threshold for this more general danger response. Indeed, Klein (1981) earlier put forward a hypothesis that panic attacks could be understood as homologous to an evolved separation anxiety response.

### Panic Disorder as Illness

If panic disorder is understood as a biomedical disorder involving a false suffocation alarm, then how is this condition perceived and experienced by different persons and in different cultures? As in the case of many other anxiety disorders, relatively few data are available on this issue.

Nevertheless, panic attacks and panic disorder have been documented in a range of different cultures. Of course, these may manifest in somewhat different ways. Simons (1985), for example, provided an example of an Inuit person whose agoraphobic avoidance manifested not in the usual Western avoidance of driving but rather as a fear of kayaking. Liebowitz et al. (1994) noted that "ataque de nervios" in Hispanic Americans can be used to refer to several different patterns of emotional control, including diagnosable anxiety and mood disorders, such as panic disorder. Indeed, of their subjects who met diagnostic criteria for both *ataque de nervios* and panic disorder, 80% seemed to use the term *ataque* to label their panic attacks.

Is it possible that the perception of panic symptoms itself influences course and prognosis? Certainly, panic attacks are commonly misdiagnosed as medical disorders in Western settings. Self-diagnosis of panic attacks as *ataque de nervios* in Hispanic Americans might similarly lead to ineffective interventions; for example, Salman et al. (1997) noted that many such patients take medications only on an as-needed basis. However, in certain cultures, responses that invoke current cognitive-behavioral principles, such as exposure, may be more prevalent. Cultural norms regarding gender roles, for example, have been argued to facilitate decreased rates of agoraphobia in men (Starcevic et al. 1998).

## Social Phobia

### Social Phobia as Disease

Again, some evidence indicates that social phobia is a universal biomedical disorder and that this diagnosis does not represent a category fallacy. Although the neurobiology of social phobia remains in its infancy, some preliminary work has found that serotonergic and dopaminergic mechanisms, as well as particular brain regions, are crucial in mediating the disorder. Second, epidemiological studies indicate that the disorder is highly prevalent in almost all countries studied (Weissman et al. 1996). Third, clinical and epidemiological studies have found that variables such as age at onset, sex ratio, and psychiatric sequelae of social phobia are similar in a range of different countries.

It has been hypothesized that patients with social phobia have a pathological triggering of an appeasement display, often characterized by blushing (Stein and Bouwer 1997). This hypothesis relies on the argument that blushing is a communicative fixed action pattern and that there are similarities between blushing in humans and primate appeasement displays that serve to deflect aggression from conspecifics (Leary and Meadows 1991). Nevertheless, the neurobiology of social phobia, blushing, and appeasement displays is not well understood, so that the false appeasement hypothesis currently lacks empirical support. Nevertheless, a growing literature attempts to understand social phobia in terms of different innate defense systems (Trower and Gilbert 1989).

### Social Phobia as Illness

Again, if social phobia is understood as a biomedical disorder involving a particular kind of false alarm, then how is this condition perceived and experienced by different persons and in different cultures? Perhaps the most relevant body of literature here is that on *taijin-kyofu-sho* (TKS) or anthropophobia, a condition that has been described in Japanese and other Eastern cultures (Kirmayer 1991). This disorder is characterized by "the presence of extraordinary intense anxiety and tension in social settings with others, a fear of being looked down upon by others, making others feel unpleasant, and being disliked by others, so that it leads to withdrawal from or avoidance of social relations" (Kasahara 1975, cited in Tseng et al. 1992, p. 380). Typical fears in TKS include blushing, unpleasant body odor, and stuttering.

TKS overlaps with and differs from social phobia in interesting ways. Both disorders involve social anxiety

and fears of embarrassment. However, whereas patients with social phobia typically worry about embarrassing themselves, patients with TKS often worry about offending or embarrassing others (Kleinknecht et al. 1994). This may reflect important cultural differences between West and East, particularly the value given to the group over the individual in traditional Asian thought. Although there has been relatively little work on the neurobiology of TKS, it is interesting to note that its symptoms, like those of social phobia, may respond to treatment with serotonin reuptake inhibitors (Kizu et al. 1994; Matsunaga et al. 2001).

An argument that TKS and social phobia overlap to an important extent is perhaps strengthened by the appearance of cases in the West, where concerns are precisely those that characterize the offensive subtype of TKS (Clarvit et al. 1996) or where symptoms are those of olfactory reference syndrome (Stein et al. 1998). Such patients may respond to standard treatments used for social phobia (Clarvit et al. 1996; Stein et al. 1998). However, note that not all patients who receive a culture-bound diagnosis will meet criteria for the overlapping DSM category. Simons (1985), for example, noted that patients with TKS occasionally may be best diagnosed as having a psychotic disorder.

## Obsessive-Compulsive Disorder

### Obsessive-Compulsive Disorder as Disease

It seems reasonable to assert that OCD, too, is a biomedical disorder mediated by specific neurobiological mechanisms. Certainly, increasing evidence indicates that specific neuroanatomical circuits and neurochemical systems underpin the symptoms of OCD. Again, epidemiological studies indicate that the prevalence of the disorder in almost all countries so far studied is in the order of 2%–3% of the population (Karno et al. 1988; Weissman et al. 1994). Finally, clinical and epidemiological studies have found that variables such as age at onset, sex ratio, and kinds of obsessions and compulsions are again similar in a range of different countries (Greenberg and Witztum 1994; Weissman et al. 1994).

However, some data indicate that the prevalence and symptomatology of OCD do vary in certain respects from country to country. For example, Okasha et al. (1994) provided data suggesting that religious concerns and contamination issues are more common in Muslim than in Christian patients (in whom orderliness and

aggression concerns may be higher). Nevertheless, Greenberg and Witztum (1994) argued that close examination of religious symptoms shows remarkable overlap with the content of symptoms in nonreligious patients. Thus, religious obsessions and compulsions can be reframed in terms of the contamination symptoms seen in other cultures. Similarly, several authors have suggested that OCD is uncommon in Africa, but this is contradicted by growing clinical reports of such cases (Gangdev et al. 1996).

Some authors have suggested that from an evolutionary perspective, OCD may be considered as involving an alarm that erroneously signals the need to groom or to perform other danger-quelling behaviors (Rapoport et al. 1992; Stein et al. 1992; Swedo 1989). This hypothesis relies on the argument that the basal ganglia, which appear to play a significant role in the pathogenesis of OCD, are a repository of species-specific motoric and cognitive procedural strategies (i.e., learned habits, response sets).

A possible objection to this view of OCD emerges from an early ethological literature that focused on displacement behaviors. Ethologists have, for example, described the elicitation of repetitive, incomplete motoric patterns in response to conflicting triggers (e.g., for attack and flight) (Tinbergen 1953). In this account, grooming in animals and OCD in humans might be conceived as a nonspecific response to stress. It has been suggested that a prepotency for rituals exists at ages 5–8 years (Marks 1987), so that a stressful environment at that time may be important in reinforcing such behaviors. However, this view does not seem able to explain the specificity of the phenomenology and neurobiology of OCD.

### Obsessive-Compulsive Disorder as Illness

The question of how OCD may be experienced and expressed differently in different countries has been considered by Stein and Rapoport (1996), and this subsection draws closely on this work. In certain non-Western cultures, obsessions may be understood in terms of constructs such as intentional witchcraft or ancestor displeasure. Such an understanding would lead the patient to present to a traditional healer. In the African context, for example, Carothers (1953) noted that anxiety was commonly associated with fear of bewitchment and poisoning or fear of having broken some taboo or neglected a ritual. Similarly, Lambo (1962) noted that morbid fear of bewitchment was the commonest cause of an acute anxiety state in Africa. Therefore, African

patients with symptoms revolving around bewitchment and other culturally syntonetic concerns may in fact have had OCD.

More radically, the question that arises is whether certain kinds of disorders represent culture-bound variations of OCD. Are body dysmorphic disorder and anorexia nervosa Western forms of OCD? Is *koro* (concern about penile retraction) an Eastern form of OCD? Overall, there would seem to be too little confirmatory evidence for this. The alternatives are then to classify the cross-cultural category under more than one DSM diagnosis or to consider adding the culture-bound category as a separate diagnosis. Body dysmorphic disorder and *koro*, for example, overlap insofar as a concern with a body defect is present in each (Stein et al. 1991). Nevertheless, *koro* is often accompanied by panic, and the concern with penile retraction is often relatively transient. Perhaps *koro* overlaps with body dysmorphic disorder and/or panic disorder. Alternatively, the constellation of symptoms in *koro* may be sufficiently distinct to warrant a separate diagnosis.

Another question is whether perception of OCD symptoms itself influences course and prognosis. Okasha and colleagues (1994) noted that patients with OCD seen in psychiatric settings in Egypt had high scores on the Yale-Brown Obsessive Compulsive Scale, suggesting that these patients have a high tolerance for symptoms before medical, rather than religious, help is sought. Such explanations also may account for why more men than women with OCD are seen in Egypt. Similarly, in Western cultures, nonmedical belief systems may influence treatment-seeking behavior. Thus, religious patients with scrupulosity are perhaps more likely to seek spiritual advice than medical care. It has been argued that in the United States, certain groups of OCD patients, such as African Americans, do not present as commonly for psychiatric care but are more likely to voice somatic complaints (Hollander and Cohen 1994).

It is noteworthy that empirical investigation of OCD has determined that modification of patients' reactions to obsessions may result in changes in brain activity and in symptom levels (Baxter et al. 1992). Unfortunately, few data are available on the various health-seeking pathways taken by OCD patients in different settings. Further research along these lines is clearly called for, with additional exploration of the beliefs and circumstances that prevent individuals with OCD from seeking medical care. Further work on the course and outcome of OCD in different settings would also be of interest.

## Posttraumatic Stress Disorder

### Posttraumatic Stress Disorder as Disease

In the last few years, it has become clear that PTSD is characterized not by a normal stress response but rather by pathological sensitization of certain neurochemical systems and changes in functional neuroanatomy (Yehuda and McFarlane 1995). Epidemiological studies in a range of different settings show that PTSD is more likely to occur after more severe traumas but that certain individuals appear to be vulnerable to develop the disorder (Yehuda and McFarlane 1995). Also, a good deal of evidence indicates that PTSD symptoms are similar in different historical eras and in different cultures (Marsella et al. 1996).

A neuroevolutionary approach to PTSD has not been well defined, but presumably this disorder involves a dissociation of classical conditioned responses from their cortical control. Preclinical studies showed that thalamo-amygdala pathways play a crucial role in conditioned responses, and clinical studies of PTSD patients found hyperactivity of the amygdala during symptom provocation. Preclinical studies suggested that slow cortico-amygdala studies can override faster thalamo-amygdala pathways; this allows habituation to previously feared stimuli (LeDoux 1996). In patients with PTSD, however, it might be hypothesized that thalamo-amygdala responses, which ordinarily are brought "on-line" only in emergency situations, are continuously recruited.

### Posttraumatic Stress Disorder as Illness

How is PTSD experienced and expressed differently in different societies? One point that may shed light on this is how PTSD is experienced and expressed differently in Western men and women; both similarities and differences have been described between male combat veterans and female survivors of rape and abuse. Similar kinds of differences may be seen across different cultures in the aftermath of trauma. Marsella et al. (1996), for example, suggested that the reexperiencing and hyperarousal symptoms of PTSD are universal, but the avoidant and numbing symptoms are more likely experienced in those ethnocultural settings in which avoiding and numbing behaviors are common expressions of distress. There also may be cross-cultural variation in extent of dissociation and somatization after trauma (Stamm and Friedman, in press). Cultural and social factors may be important determinants of vulnerability to PTSD by shaping concepts of what constitutes a

trauma and by affecting known vulnerability factors such as early childhood experiences, comorbidity (e.g., alcohol abuse), and social resources for responding to trauma.

Once again, however, many of these questions remain open for future rigorous empirical research (Marsella et al. 1996). Nevertheless, a strong theoretical argument can be provided to the effect that particular cultural rituals, performed after exposure to trauma, do play a role in preventing PTSD (Shay 1994). Conversely, it is possible to speculate that repression of trauma narratives in certain cultures exacerbates post-traumatic suffering. An interesting experiment at a national level recently was done in South Africa, where a Truth and Reconciliation Commission encouraged the public acknowledgment of past gross human rights violations (Stein 1998). In the absence of rigorous empirical data, it is not clear whether this exercise had a psychotherapeutic effect; there is, however, a small literature on the therapeutic effect of bearing witness to past human rights violations (Weine et al. 1998).

Given that the psychopathology of PTSD frequently involves not only discrete symptoms but also a broader questioning of the self and of identity, understanding the patient's sociocultural background is particularly important. Several authors have emphasized that inadequate appreciation of the sociocultural context of trauma and of responses to trauma may impede the therapeutic process (Stamm and Friedman, in press). A comprehensive and sensitive assessment of this context may allow appropriate individual and community interventions that promote symptomatic improvement as well as broader healing.

## Generalized Anxiety Disorder

### Generalized Anxiety Disorder as Disease

The question of whether generalized anxiety disorder (GAD) is a universal category is perhaps not as clear as in the case of other anxiety disorders. Good and Kleinman (1985), in fact, concluded that "generalized anxiety disorders exist in nearly all cultures." Nevertheless, the particular overlaps of anxiety, depression, and somatic symptoms may differ substantially from culture to culture. Even when the DSM characterization of GAD is used, there is significant comorbidity with depression and with somatization symptoms. Furthermore, although there have been advances in the neurobiology of GAD, it is unclear whether the underlying mecha-

nisms are specific to this disorder. Finally, relatively few cross-national data are available on the symptoms and epidemiology of GAD.

What has been investigated are various combinations of anxiety, depression, and somatization symptoms in different cultures. Consider, for example, the entity of neurasthenia, which is included in ICD-10 (World Health Organization 1992). Good and Kleinman (1985) noted that in a study of 100 patients with neurasthenia diagnosed with the Schedule for Affective Disorders and Schizophrenia (SADS), 93 had depression, and 69 had anxiety disorders (including 13 with GAD). Most of the patients had major depression along with anxiety disorder, chronic pain, and somatoform disorders. The majority also had a history of significant stressors. Treatment with tricyclic antidepressants of neurasthenia in patients whose symptoms also met diagnostic criteria for depression led to decreased symptoms (although not necessarily to decreased social impairment). These agents are, of course, useful in both depression and GAD.

It is possible, then, to argue that in a range of different cultures, there is an anxiety-depression-somatization disorder that may respond to treatment with antidepressants. Individual vulnerabilities and various stressors are likely to contribute to the pathogenesis of this syndrome. Certainly, there is growing evidence of an inverse and causal relation between socioeconomic status and mental health (Dohrenwend et al. 1992; Yu and Williams 1999). In the National Comorbidity Survey, for example, an anxiety disorder was 2.82 times as common in those who had not completed high school as in those with a college education or more (16 or more years) and was 2.12 times as common in those with a yearly income of less than \$20,000 as in those with a yearly income of more than \$70,000 (Kessler et al. 1994).

### Generalized Anxiety Disorder as Illness

In predominantly Western cultures, this anxiety-depression-somatization disorder may be described and experienced in primarily psychological terms (e.g., the symptoms of major depression, the worries of GAD). However, in other cultures, somatization may be more central. Certainly, the experience of anxiety and depression in Chinese culture is informed by explanatory models that highlight the relevance of somatic symptoms and that expect management to involve the family. In this context, patients may have the illness experience known as neurasthenia. Different kinds of somatic

symptoms of anxiety may be experienced in different cultures; in Nigeria, for example, a core symptom of anxiety appears to be the sensation of an insect crawling through the head or other parts of the body (Awaritefe 1988; Ebigbo 1986).

There are clear clinical implications of such an argument. First, it is important to determine the explanatory model of patients with mixtures of anxiety, depression, and somatic symptoms (Kleinman 1988). A comprehensive clinical interview should include an inquiry into the patient's own causal model of his or her symptoms; this may be significantly different from that of the clinician. Careful negotiation around these models may allow the clinician to justify his or her treatment choices in a way that the patient experiences as empathic and that improves compliance.

Second, additional research is needed that focuses on whether similar psychobiological mechanisms are responsible for the range of anxiety, mood, and somatic symptoms experienced by these patients. The DSM system has encouraged a focus on studies of patients who meet diagnostic criteria for particular disorders. However, even in the West, such a focus causes difficulties with disorders that have high comorbidity. Furthermore, a strong rationale exists for focusing instead on particular symptoms, such as anhedonia, that cut across diagnostic categories and that may be mediated by specific psychobiological mechanisms in all of these categories (Van Praag et al. 1990).

## Conclusion

Important recent advances in the anxiety disorders have included more reliable nosological criteria, increased understanding of neurobiology, and more effective treatments. To some extent, this work has been so successful that it is possible to argue that our concepts of the anxiety disorders are universal and that this work never entails a category fallacy. From this perspective, the importance of sociocultural factors in the anxiety disorders is limited to only a consideration of racial/ethnic and gender differences in pharmacokinetics and pharmacodynamics. Certainly, one of the astonishing things about working in the anxiety disorders field is how media educational campaigns result in an "uncovery" of these conditions; patients often have symptoms for years, with no awareness that others have similar symptoms or that specific medical treatments exist.

However, these important advances also run the risk of failing to address cultural and social contexts. Al-

though DSM-IV-TR has highlighted cultural issues in psychiatric diagnosis, the DSM system arguably remains a Western cultural product that does not entirely come to grips with anxiety entities such as TKS and neurasthenia. Such entities deserve increased phenomenological and neurobiological study. Arguably, a more comprehensive approach to anxiety disorders in different cultures and social groups will ultimately result in a more comprehensive understanding of their pathogenesis and management.

Even for disorders for which we can posit universal underlying mechanisms, it is crucial to consider the effect of culture and society on their diagnosis and treatment, expression, and experience. The literature on misdiagnosis of psychiatric disorders in American minority groups should be extended to the anxiety disorders. Ethnicity and gender affect important aspects of pharmacological management (ranging from patient compliance to pharmacogenetic variation), psychotherapeutic treatment, and broader interventions (such as the national media campaigns to improve the recognition and treatment of anxiety disorders).

Women are at greater risk for developing anxiety disorders than men are; the psychobiological and sociocultural mechanisms underlying this predisposition require much further analysis. Data from the National Comorbidity Survey provide strong evidence for an association between low education or income and the diagnosis of an anxiety disorder; investigation of the possible mechanisms whereby low socioeconomic status may play a role in the pathogenesis of anxiety disorders may ultimately lead to new avenues of prevention and management. It is increasingly recognized that specific psychosocial interventions may lead to particular brain changes; it is therefore not implausible that sociocultural variations result in different courses of anxiety disorder. Social phobia, for example, may be experienced somewhat differently in the West and East. Similarly, different reactions to severe trauma may result in changes in the experience and expression of PTSD. Much additional research in this area is required.

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