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Anxiety Disorder Presentations in Asian Populations: A Review

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This article reviews typical anxiety presentations in Asia, and among Asian refugees. In Asia, there are multiple functional somatic syndromes that are common anxiety presentations. These distress syndromes often produce catastrophic cognitions about anxiety-type somatic and psychological symptoms. These functional somatic syndromes should be understood, and specifically assessed and addressed, in order to optimize the evaluation and treatment of anxiety disorders among Asian individuals.

Introduction

How a patient evaluates and reacts to an anxiety-type sensation—whether blushing in a social situation or palpitations upon climbing stairs—will depend on that individual's sensation schemata, disease labels, and illness representations, that is, ideas about the nature of that illness to which the anxiety-symptoms are attributed [1]. If a Japanese patient interprets blushing as indicating taijin kyofusho, or if a Chinese individual considers palpitations to indicate a "weak heart" (xin xu), these attributions will cause the patient to imagine a specific physiology generating those symptoms, to expect certain symptoms, to anticipate a certain degree of danger, to imagine a certain illness course and prognosis, and to seek out specific types of treatment. In addition, once a symptom is attributed to a particular syndrome, fears of having the syndrome will increase that symptom (and other syndrome-related symptoms) by means of increased arousal and attention amplification (Fig. 1).

Distress syndromes vary by historical period and cultural group. A distress syndrome may be diagnosable as multiple DSM-IV disorders, or it may correspond highly to one DSM-IV diagnosis. Researchers often use the term

"functional somatic syndromes" to describe distress syndromes [2,3]. Such functional somatic syndromes as fibromyalgia, chronic fatigue syndrome, multiple chemical sensitivity, and Gulf War syndrome may be diagnosable as any one of a number of DSM-IV diagnoses. These disorders clearly result in large part from syndrome-related fears and expectations interacting with the biology of anxiety: if a person considers joint pain to be a key pathognomic sign of a disorder (e.g., fibromyalgia), and that the disorder is dangerous, the person will be hypervigilant to those sensations; and if that person notes joint discomfort, the resulting fear will worsen joint pain by increasing muscular tension and attention amplification.

Catastrophic cognitions constitute a key aspect of anxiety disorders. Catastrophic cognitions about the bodily and mental consequences of worry, and about the danger posed by worry-induced somatic and psychological symptoms, (1) may worsen—even produce—generalized anxiety disorder, and (2) may cause worry episodes to escalate to panic [4, p. 160]. Catastrophic cognitions about anxiety-related somatic and psychological symptoms worsen panic disorder, and generate panic attacks [5,6]. Catastrophic cognitions about posttraumatic stress disorder (PTSD)-related symptoms worsen PTSD and lead

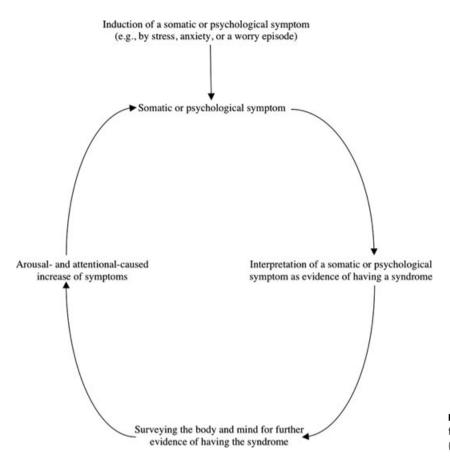


Figure 1 A model of the generation of a functional somatic syndrome 207×268 mm $(150 \times 150 \text{ DPI})$.

to chronicity [7–9]. How do these catastrophic cognitions arise? Beliefs about functional somatic symptoms are one source of catastrophic cognitions about anxiety symptoms. If anxiety symptoms are interpreted as indicative of the presence of a culturally specific distress syndrome, multiple catastrophic cognitions may result.

In this article, we will review distress syndromes in Asia—and among Asian refugees—that are common anxiety presentations (Table 1). These might be called *anxiety-related functional somatic syndromes*, or *anxiety-type distress syndromes*. We illustrate how these syndromes generate hypervigilance to somatic and psychological symptoms, and catastrophic cognitions about the significance of such symptoms (Table 1). A treater must be aware of these syndromes, and the catastrophic cognitions they generate, in order to recognize anxiety complaints among and to design effective treatments (e.g., to modify catastrophic cognitions) for affected individuals.

East Asia

China

Studies suggest that dizziness is more prominent during states of distress among Chinese populations (and Asians

more generally [10, p. 10, 26]). For example, one study revealed dizziness to be an extremely common presenting complaint among Chinese patients with panic disorder [11]. The reasons for the dizziness prominence among Asian populations is still unknown, though several theories have been advanced, ranging from the frequency of dizziness-related idioms of distress to the prominence of functional somatic syndromes centering on dizziness to a biologically based predisposition to motion sickness [11].

In China, owing to the influence of traditional Chinese medicine, anxiety states are often attributed to organ dysfunction, especially to a "weak kidney" (*shen xu*) or a "weak heart" (*xin xu*) [11]. Depending on the organ to which panic is attributed, certain catastrophic cognitions, and hypervigilance for certain somatic symptoms, will result. The kidney is thought to nurture the brain by producing marrow; if a patient attributes a panic episode to a "weak kidney," the patient will expect the depleted brain to result in dizziness, blurry vision, and tinnitus, and that the depleted marrow and kidney will cause back pain. If a patient attributes a panic episode to a "weak heart," the patient will be especially hypervigilant to cardiac symptoms.

Table 1 Anxiety-related distress syndromes in Asia: Associated catastrophic cognitions, DSM-IV diagnosis, and panic attack subtype

Country	Anxiety-related syndrome	Usual DSM-IV anxiety diagnosis	Syndrome-generated catastrophic cognitions	Related panic-attack subtype
China	Neurasthenia	GAD, PD	Dangerous weakening	Worry-induced
	"Weak heart"	GAD, PD	Heart arrest	Heart-focused
	"Weak kidney"	GAD, PD	Brain depletion	Semen-loss-induced (e.g., in urine)
Japan	Neurasthenia	GAD, PD	Dangerous weakening	Worry-induced
	Orthostatic	PD, SP (social	Weakened nervous system,	Orthostasis-induced,
	dysregulation	phobia)	fainting	social-context-induced
	Taijin kyofusho	SP	Offending others	Social-context-induced
Korea	Hwa byung	GAD, PD	Asphyxia, cardiac arrest	Anger-induced
South Asia				
India	Semen loss	GAD, PD	Death from depletion	Semen-loss-induced (e.g., in urine)
Southeast Asia				
Cambodia	"Weakness"	GAD, PD, PTSD	Dangerous weakening	Worry-induced
	"Weak heart"	GAD, PD, PTSD	Heart arrest	Heart-focused
	"Wind attack"	GAD, PD, PTSD	Syncope, vomiting	Dizziness-focused
	"Limb blockage"	GAD, PD, PTSD	Limb death, upward surge of wind	Limb-focused
	"Sore neck"	GAD, PD, PTSD	Neck-vessel rupture	Neck-focused panic
	"Abdominal wind"	GAD, PD, PTSD	Heart arrest, asphyxia	Abdomen-focused
	"Wind overload"	GAD, PD, PTSD	Syncope	Orthostasis-induced
Northeastern Thailand	"Weak heart"	GAD, PD, PTSD	Heart arrest	Heart-focused
	"Abdominal wind"	GAD, PD, PTSD	Heart arrest, asphyxia	Abdomen-focused
Vietnam	"Weakness"	GAD, PD, PTSD	Dangerous weakening	Worry-induced
	"Weak heart"	GAD, PD, PTSD	Heart arrest	Heart-focused
	"Weak kidney"	GAD, PD, PTSD	Brain depletion	Semen-loss-induced (e.g., in urine)
	"Orthostatic dizziness"	GAD, PD, PTSD	Syncope	Orthostasis-induced
	"Nerve fiber ripping"	GAD, PD, PTSD	Loss of mental power	Headache-focused
	"Hit by the wind"	GAD, PD, PTSD	Total bodily collapse	Exterior-wind-induced

In China, psychologically distressed patients often present complaining of "neurasthenia," or "weak nerves" [12]; the Chinese term for this disorder ("shenjing shuairuo") literally means "weak nerves." (The Western diagnosis of "neurasthenia" was adopted in China at the beginning of the 20th century.) It is a professional category used by Chinese health professionals, and a term that is well known by laypersons. Key features of shenjing shuairuo include excessive worry, headache, and fatigue; the patient is concerned that worry is draining the mind and body, and that the act of thinking itself may result in further fatigue, in damage to the psyche and soma [13]. The neurasthenia construct produces catastrophic cognitions about the effects of worry, and would be expected to be a common manifestation of—and to contribute to the severity and frequency of-generalized anxiety disorder as well as panic disorder. In one study, Kleinman [13] used DSM-III criteria to assess 100 patients that Chinese psychiatrists diagnosed as having neurasthenia: 13% met criteria for generalized anxiety disorder and 35% for panic disorder [also see, 14].

In one of the few studies assessing the relationship of PTSD to a cultural syndrome, Lai et al. [15,16] sur-

veyed the survivors of an earthquake in rural Taiwan using ICD-10 criteria for neurasthenia. To meet ICD criteria for neurasthenia, the person must have (1) persistent complaints of increased fatigue or exhaustion after either mental or physical effort; and (2) at least two of the following complaints: muscular aches and pains; dizziness; tension headaches; sleep disturbance; inability to relax; irritability; or dyspepsia. Lai et al. [15,16] reported that among patients meeting criteria for full PTSD, 42.3% had neurasthenia, among partial PTSD patients, 39.6%, and among non-PTSD patients, 13.5%. (Note that this study, as well as others [e.g., 13,14], has surveyed patients diagnosed as having neurasthenia either by Chinese psychiatrists or by ICD-10 criteria; future research needs to assess the anxiety diagnoses of patients who self-label themselves as having neurasthenia.)

Japan

In Japan, as in China, "neurasthenia" is a common anxiety disorder presentation [17,18]. It is a term used as a catch-all diagnosis for a variety of disorders ranging from social phobia to schizophrenia. In Japan, a treatment for

neurasthenia was developed in the early 20th century called Morita therapy, which has striking similarities to current models of cognitive-behavior therapy for panic disorder [19].

Not only was "neurasthenia" adopted into Japan from the West, but also, at a later date, "neurocirculatory asthenia" [20]. (In the West during the first half of the 20th century, anxiety states were often diagnosed as "neurocirculatory asthenia"; typical symptoms included palpitations, easily induced fatigue, and orthostatically induced dizziness [for a review, see 20].) The diagnosis of neurocirculatory asthenia was adopted in Japan, but with orthostatic dizziness as the central focus, and a new name given: orthostatic dysregulation [21-26]. It is a category used by Japanese health professionals and is well known by laypersons. To be diagnosed as having "orthostatic dysregulation" [24,27], the patient has (1) a poor orthostatic responses (viz., dizziness upon standing and an impaired systolic blood-pressure response), which is thought to indicate a weakened nervous system, and (2) various other symptoms also thought to indicate a weakened nervous system: fatigue, headache, motion sickness, palpitations, poor appetite, and difficulty in getting out of bed in the morning owing to a feeling of low energy. The syndrome of "orthostatic dysregulation" appears to be a common manifestation of panic disorder, with the sufferer having orthostasis-induced panic, and appears to be highly associated with various phobias, particularly social phobia.

In Japan, social phobia often presents as *taijin kyofusho*, or literally, "fear of people" (*taijin* meaning "fear," *kyofusho*, "people" [28]). A sufferer of *taijin kyofusho* avoids social relationships and social settings because of fears of blushing, staring inappropriately, emitting offensive odors, and making improper facial expressions (for a review, see [29,30]). *Taijin kyofusho* differs somewhat from social phobia in that there is greater emphasis on fears of offending others, rather then on embarrassing oneself. *Taijin kyofusho* has been shown to improve with treatment by pharmacotherapy [31].

Korea

Hwa byung, literally, "fire sickness," is a syndrome common in Korea [32], and has also been reported among Koreans in the United States [33]. An individual with hwa byung believes that as a result of negative emotions, particularly anger, an abdominal mass has formed, and that the mass causes indigestion and abdominal discomfort. A sufferer worries that the mass may rise upwards to cause shortness of breath, and possibly asphyxia; palpitations, and possibly heart arrest; and choking, and possibly deadly strangulation [33]. Other hwa byung symptoms in-

clude tired eyes and a feeling of heat in the head [34]. In the Korean context, there are "hwa byung"-caused catastrophic cognitions about the danger of negative emotions, and about various somatic symptoms; hwa byung produces hypervigilance towards certain somatic symptoms. Lin [1983] presents a case of panic disorder presenting as hwa byung, and others have remarked that it may result in panic attacks [33]. Hwa byung may also be a presentation of generalized anxiety disorder [11,33,34,35,36].

South Asia

India

In India, the "semen-loss syndrome" is a well-known and common presentation of distress [37,38]. According to traditional Indian belief, food is transformed into blood, blood into flesh, flesh to marrow, and marrow into semen; and it requires 40 drops of food to make one drop of blood. 40 drops of blood to make one drop of flesh. and so on [38]. The semen-loss sufferer attributes multiple somatic (weakness, palpitations, aches, and pains) and psychological symptoms to an excessive loss of semen through urination, nocturnal emissions, or excessive masturbation. (A similar disorder existed in previous time periods in the West [38].) And if the sufferer is weakened, sperm may be lost in the urine, the leakiness resulting from bodily weakening, which accelerates the cycle of decline. Semen-loss anxiety centers on fears of dangerous bodily depletion.

Southeast Asia

Cambodia

Cambodians have several functional somatic syndromes that overlap with—and generate—anxiety.

In Cambodia, "weakness" is a common complaint during anxiety states. As in China and Japan, the Western diagnostic category of neurasthenia was adopted into Cambodia [39], a French colony. Among Cambodians, self-perceived energy is a key domain of well-being assessment, even more so than in Western populations [40,41]. According to Cambodian belief, the body may be weakened by such processes as worry, poor sleep, and poor appetite, and weakness may result in various anxiety-type symptoms: worry, frequent fear, tinnitus, shortness of breath, a feeling of lightness in the body. Patients also fear that if depleted, analogous to a car without gasoline, the body may suddenly stop functioning, resulting in death. In particular, Cambodians worry that bodily energy depletion will lead to a "weak heart."

In Cambodia, it was not just the general notion of neurasthenia that was adopted from French colonial medicine, but also "cardiac neurasthenia" [39]. In Cambodia, there is great fear of "heart weakness" [39]. Among Cambodian refugees, the "weak heart" syndrome is a common presentation of generalized anxiety disorder, panic disorder, and PTSD. Anxiety symptoms such as palpitations, orthostatic dizziness, cold extremities, and even shortness of breath, are ascribed to a "weak heart"; and it is feared that a "weak heart" may lead to heart arrest, syncope, loss of limb function owing to poor perfusion, and asphyxia. In addition, such PTSD symptoms as startle are ascribed to "heart weakness." (There are interesting parallels to Western war syndromes such as DaCosta's syndrome and "soldier's heart" [42].)

"Khyâl attacks" (kaeut khyâl), that is, "wind attacks," represent a common anxiety presentation among Cambodian refugees. Cambodians believe that khyâl, a windlike substance, moves throughout the body, particularly inside blood vessels alongside blood [43]. Cambodians usually construe anxiety symptoms as being generated by the disruption of "wind" (khyâl) and blood flow in the body [44–48]; they interpret multiple somatic symptoms of anxiety in terms of the pathomechanics of "wind," as a "wind attack" that may bring about various bodily disasters, including syncope. According to the Cambodian understanding of bodily physiology, any dysregulation of "wind" flow—indicated by such symptoms as palpitations and cold extremities—causes "wind" to rise into the head where it produces dizziness and nausea; this is called a "wind attack." Just as a Westerner is hypervigilant to chest sensations, the key indicator of a heart attack, a Cambodian is hypervigilant to dizziness and nausea, the key indicators of the onset of a "wind attack."

Cambodians have multiple anxiety-related syndromes that are based on fears of disturbed "wind" flow. One of these is the "limb blockage" syndrome (slap day slap ceung). Cambodians consider that tightness and soreness in the legs—especially at the knee and elbows—results from blockage of the "tubes" (sâsai) that carry "wind" and blood, and that coldness in the feet and hands indicates poor blood perfusion [44,45]. As a result of this blockage of "wind" and blood flow, the following may result: (1) the "death" of the limb, owing to the lack of blood flow (what a Westerner would call a "stroke") and (2) the ascent of "wind" and blood, first, into the trunk of the body, possibly causing asphyxia and cardiac arrest, second, into the neck, possibly causing rupture of the vessels, and third, into the cranium, possibly causing multiple adverse events such syncope, blindness, or death.

Anxious Cambodians frequently complain of neck soreness; it is a common presentation of generalized anxiety disorder, panic disorder, and PTSD [49]. Sore-neck-

associated catastrophic cognitions and trauma associations often lead to panic attacks, that is, to neck-focused panic attacks. In a neck-focused panic attack [44,49], a Cambodian fears death from rupture of the neck vessels, with prominent symptoms including a sore neck (rooy kâ), head symptoms (e.g., headache, tinnitus, blurry vision, and dizziness), and general symptoms of autonomic arousal (e.g., cold extremities, palpitations, and shortness of breath). Cambodians attribute neck soreness to excessive "wind" and blood pressure at the neck that may rupture vessels at that location—and the other symptoms present in a "sore neck" episode (e.g., tinnitus and blurry vision) to an upward rising of "wind" and blood. And many Cambodians have prominent trauma associations to neck soreness, resulting in neck-sorenesstriggered flashbacks. These may center on a slave labor experience during the Pol Pot regime (i.e., the time period during which the Khmer Rouge ruled Cambodia: 1975-1979): Cambodians, though starving and even ill, were forced to carry dirt-filled buckets suspended at either end of a pole balanced across a shoulder, resulting in extreme neck and shoulder discomfort [46,49].

Cambodians also have an "abdominal wind" syndrome [47,50]. The syndrome is a common presentation of generalized anxiety disorder, panic disorder, and PTSD. Gastrointestinal (GI)-associated catastrophic cognitions and trauma associations often lead to panic attacks, that is, to GI-focused panic attacks. In a GI-focused panic attack, Cambodians worry that "wind" will move upward into the body and cause various bodily disasters. Whereas North Americans often complain of "butterflies in the stomach" or of a "sinking sensation in the stomach" when anxious [51,52], Cambodians worry that abdominal sensations indicate the occurrence of an "upward hitting wind" (khyâl theau laeung leu). As noted previously, the rising "wind" is believed to potentially cause catastrophic consequences (e.g., syncope, cardiac arrest, or bursting of the neck vessels), with these "wind"-ascent fears being heightened if symptoms indicative of increased "wind" pressure also occur (e.g., tinnitus, dizziness, or a sore neck). Also, Cambodians have prominent trauma associations to GI sensations, and GI sensations trigger flashbacks. These may center on starvation-related experiences during the Pol Pot regime: starving and reduced to a skeletal-like state, Cambodians often had bouts of hunger-induced peristalsis that caused severe abdominal pain, and fears of imminent death.

Cambodians also have great fears of "wind overload" (*khyâl ko*); this is a syndrome that produces great fear of any sensations—for example, dizziness, palpitations, cold extremities—felt upon standing, and results in orthostatic panic, that is, panic upon rising from lying or sitting to standing. The syndrome is a common presentation of

panic disorder and PTSD [44,45,47,53]. "Wind overload"generated catastrophic cognitions conjoined with trauma associations to orthostatically induced symptoms often cause a panic attack among Cambodian refugees. Among Cambodian refugees, dizziness upon standing is especially feared; it is thought that a surge of "wind" and blood upward in the body toward the head may occur upon standing, a condition called "wind overload." For this reason, upon standing, Cambodians anxiously assess the bodily state for symptoms that would indicate a pressurized rise of "wind" and blood toward and into the head: a sore neck (from "wind" and blood distending the neck vessels), dizziness (from excessive "wind" and blood entering the head), blurry vision (from "wind" exiting the eyes), or tinnitus (from "wind" escaping from the auditory canals, analogous to the sound made by steam exiting the spout of a tea kettle). Also, orthostasis-induced dizziness may trigger flashbacks: syncopal and near-syncopal episodes during the Pol Pot regime—as a result of overwork and starvation, Cambodians often experienced dizziness upon standing, and not uncommonly fainted.

Thailand

In northeastern Thailand (where most of the population is Laotian speaking), the complaint of having a "weak heart" is a common presentation of anxiety, especially panic disorder and PTSD [54]. Also, among northeastern Thais, an "abdominal wind" syndrome is a frequent anxiety presentation [54]. Similar to Cambodians, Laotians believe that "wind" can rise upward from the stomach to cause asphyxia, palpitations, and other symptoms. Northeastern Thais believe that the heart dangles in the chest like a mango, and that "wind" hitting up from the stomach can cause the heart to swing to the point that the stem snaps, causing death [50]. Clearly, Cambodians and northeastern Thais have ethnophysiologycaused catastrophic cognitions that lead to hypervigilance towards somatic symptoms, particularly cardiac and gastrointestinal symptoms. (The beliefs about a rising "abdominal wind" do no exist in central Thailand; rates of gastrointestinal-focused panic would be expected to be much lower, which appears to be the case [50].)

Vietnam

During French colonial rule, the Vietnamese adopted "neurasthenia" and "cardiac neurasthenia" theories. In Vietnam, as in Cambodia, "weakness" and "heart weakness" are common presentation of anxiety disorders, particularly generalized anxiety disorder, panic disorder, and PTSD [40,55,56]. In addition, Vietnam adopted the Chinese diagnosis of "weak kidney"; consequently, Vietnamese greatly fear that weakness may lead to "kidney"

weakness," are hypervigilant to back sensations (from the disordered kidney), and sometimes experience urinationinduced panic attacks-it is feared that semen can be lost in the urine [57,58]. Like Cambodians, Vietnamese have frequent "orthostatic panic" [20,58], but they do not have the "wind overload" syndrome; they attribute orthostatic dizziness to hypertension, hypotension, weakness, or "heart weakness." Among Vietnamese, the "hit by the wind" syndrome is a common panic disorder presentation. When in a self-perceived weakened state, Vietnamese worry that a wind gust will strike the body—that weakness has caused the skin pores to open and form a portal through which a "poisonous wind" may enter the body and wreak havoc, even result in death. And Vietnamese worry that a headache indicates various serious physiological abnormalities, such as overly tense nerve fibers that may snap; if the nerve fibers snap, it may cause death, insanity, or permanent loss of intelligence [58]. Consequently, Vietnamese frequently experience headache-focused panic.

Discussion

We have reviewed certain culturally specific distress syndromes that are common anxiety presentations in Asian countries (see Table 1). These syndromes are a common presenting form of various anxiety disorders.

As illustrated, there are many weakness-related syndromes in Asia, and among Asian refugees. Among Asian groups, many syndromes generate catastrophic ideas about energy depletion. Symptoms such as poor sleep and appetite, and worry itself, are particularly feared because they are thought to deplete the body. Asian patients often treat anxiety-type somatic and psychological complaints by taking medications that purportedly increase bodily energy, such as vitamin injections or other supplements. The mental health clinician should be aware of these energy-depletion-related worries, and catastrophic cognitions. The clinician should address energy-depletionrelated fears (e.g., of "heart weakness"), and frame proffered treatments (e.g., prescribed medications) as directly increasing mental and bodily energy by effects on nerve transmission, and indirectly, by improving sleep and appetite (which are key "energy"-restorative processes) and by decreasing worry (which is thought to be an "energy"depleting process).

An understanding of Asian distress syndromes is needed to design adequate assessment and treatment of anxiety disorders in these populations. The patient's concerns about anxiety symptoms—about having a "syndrome"—must be addressed to stop the vicious cycle of arousal, attention, and catastrophic cognitions. Explanatory models about anxiety symptoms, which

generate catastrophic cognitions about anxiety symptoms, are often not simply idiosyncratic; they reflect certain culture-determined explanatory models about the meaning and significance of anxiety symptoms [59,60]. Some of these explanatory models may be anxiogenic, and this will have a profound influence on the rates, chronicity, phenomenology, presentation, and self-treatment of anxiety disorders. These explanatory models may result in higher rates of certain kinds of anxiety disorders in certain societies: the high rates of panic disorder among Cambodian refugees owing to several syndromes (e.g., "weak heart," "limb blockage," "sore neck," "abdominal wind") generating catastrophic cognitions about autonomic arousal symptoms [47,61].

Studies suggest that treatments addressing culturally specific catastrophic cognitions about anxiety-type symptoms are effective [48,56,61]. Not only do a patient's anxiety symptoms need to be elicited, but also his or her symptom schemata, illness attributions, and illness representations—what the patient thinks the symptom means and their implications. This is especially important in respect to an anxiety disorder, a disorder in which catastrophic interpretations of symptoms form a key cog in the very generation of disorder; symptom interpretation leads to certain behaviors, to the arousal- and attentional-caused increase of symptoms, to avoidance, and to disability (Fig. 1).

To summarize, evaluating a culture's distress syndromes plays a key role in the treatment of anxiety disorders for the following four reasons:

- 1. Such an evaluation is a key aspect of building therapeutic rapport; one must determine what *the patient considers* to be his or her disorder.
- 2. In the treatment of anxiety disorders, addressing catastrophic cognitions is a key aspect of treatment; cognitions are the very cogs of panic disorder and other anxiety conditions. Only by understanding a group's distress syndromes, and distress-syndromerelated catastrophic cognitions, can one identify and modify catastrophic cognitions (on such a treatment approach, see [48,61]).
- 3. Distress syndromes—for example, neck-focused distress among Cambodian refugees—are often associated with panic attacks, and those panic attacks frequently combine panic disorder characteristics (viz., catastrophic cognitions) and PTSD-like characteristics (viz., trauma associations). The clinician must specifically assess for distress-syndrome-associated panic attacks, catastrophic cognitions, and trauma associations.
- 4. In prescribing a medication, knowledge of distress syndromes is crucially important. The clinician should

present the medication in a way congruent with the patient's concerns: a Cambodian patient attributing anxiety-type symptoms to "weakness," and to a "weak heart," will be much more likely to take a medication, and to have positive expectations about its effects, if it is framed as an "energy medicine"—as directly increasing energy; as promoting sleep, so the body can rejuvenate itself; and as improving appetite, so bodily energy supplies can be replenished. Also, if the clinician knows the distress syndrome that the patient fears having, then the clinician will be able to better identify and recognize symptoms that are of most concern to the patient, and to specifically design the pharmaceutical intervention to alleviate those symptoms, monitoring them closely in treatment: if a Cambodian patient is extremely concerned that poor appetite will make replenishing of bodily energy impossible, that poor appetite is a pathognomonic sign of a dangerous inner weakening, then this symptom must be specifically targeted in the pharmacological intervention.

In future studies, when assessing the relationship between a specific distress syndrome and DSM-IV anxiety disorders, researchers should assess whether the person considers him- or herself to have the distress syndrome. Often researchers operationalize criteria for the distress syndrome in order to assess for its presence (e.g., in studies of neurasthenia among Chinese populations). However, a patient may meet "criteria" for the distress syndrome but may not consider him- or herself to have the disorder. Such patients most likely do not have the catastrophic cognitions characteristic of the distress syndrome, and so a less robust relationship to anxiety disorders would be expected. Future studies should carefully indicate whether the patient self-labels him- or herself as having the distress syndrome, and ideally, assess syndrome-related catastrophic cognitions about anxiety symptoms. Such an evaluation is of critical therapeutic import, and will allow for a more adequate analysis of the relationship of distress syndromes in Asia to DSM-IV anxiety disorders.

Conflict of Interest

Mark Pollack has been on advisory boards and has done consultation for AstraZeneca, Brain Cells Inc, Bristol Myers Squibb, Cephalon, Dov Pharmaceuticals, Forest Laboratories, GlaxoSmithKline, Janssen, Jazz Pharmaceuticals, Labopharm, Eli Lilly & Co, Medavante, Neurocrine, Neurogen, Novartis, Otsuka Pharmaceuticals, Pfizer, Predix, Roche, Laboratories, Sanofi, Sepracor, Solvay, Tikvah Therapeutics, Transcept Inc, UCB Pharma, Wyeth. He has received research grants from Astra-Zeneca, Bristol Myers Squibb, Cephalon, Cyberonics,

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