

# A conceptual paradigm for understanding culture's impact on mental health: The cultural influences on mental health (CIMH) model

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Received 14 February 2007; accepted 3 May 2007

## Abstract

Understanding culture's impact on mental health and its treatment is extremely important, especially in light of recent reports highlighting the realities of health disparities and unequal treatment. This article provides a conceptual paradigm for understanding how culture influences six mental health domains, including (a) the prevalence of mental illness, (b) etiology of disease, (c) phenomenology of distress, (d) diagnostic and assessment issues, (e) coping styles and help-seeking pathways, and (f) treatment and intervention issues. Systematic interrelationships between each of these domains are highlighted and relevant literature is reviewed. Although no one model can adequately capture the complex facets of culture's influence on mental health, the Cultural Influences on Mental Health (CIMH) model serves as an important framework for understanding the complexities of these interrelationships. Implications for clinical research and practice are discussed.

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Recently in the United States, the Surgeon General and the Institute of Medicine reported that racial and ethnic health disparities exist, and that in general, ethnic minorities continue to be missing from the research from which evidence-based treatments (EBTs) are drawn (Smedley, Smith, & Nelson, 2003; USDHHS, 2001). In addition, there is

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a growing body of European and other international literature supporting these findings and suggesting that immigrants and ethnic minorities evidence a disproportionate burden of illness and unequal access to health care services (Department of Health, 2003; Fernando, 2005). This accumulating body of evidence underscores the idea that extant health care systems may not be adequately prepared to meet the needs of minority and immigrant populations. The importance of incorporating issues of culture, race, and ethnicity into research, teaching, and clinical practice are sorely needed. This task has proven to be quite complicated given the limited resources that have been invested towards improving our understanding of cultural influences on mental health. Without guiding frameworks from which to work from, the larger audience of mental health professionals will continue to acknowledge that culture is important, but struggle in articulating how culture makes a difference and be unprepared in addressing growing world-wide health disparities.

The goal of this article is to provide a conceptual framework, the Cultural Influences on Mental Health (CIMH) model, to help bridge this gap and increase cultural understanding and awareness (see Fig. 1). In this article, we define culture broadly as not only including the set of attitudes, values, beliefs, and behaviors shared by a group of people (Barnouw, 1985), but also as inclusive of culture-related experiences such as those related to acculturation and being an ethnic minority. The CIMH model argues that culture permeates and affects several core domains of the illness process. Culture contributes to differences in (a) the prevalence of mental illness, (b) etiology and course of disease, (c) phenomenology or expression of distress, (d) diagnostic and assessment issues, (e) coping styles and help-seeking pathways, and (f) treatment and intervention issues. Because of the multitude of ways that culture can influence mental health issues, these domains are not meant to be all-inclusive, but rather provide a starting point for understanding the more visible ways that culture influences the development and treatment of psychopathology.

Cultural influences each of the above domains, which are also clearly and logically related. For example, cultural differences in the expression of distress (e.g., emotional distress or physical symptoms) could influence diagnostic accuracy in the assessment of depression, which in turn, impacts our ability to reliably estimate the prevalence of depression. What one believes to be the causes of one's problems (e.g., bodily problems causing depression or depression causing physical health problems) also plays a role in where one seeks help (e.g., primary care or mental health facility), and one's confidence in the treatment provided (e.g., belief that talk therapy is effective versus feeling like talking about problems makes one feel worse). Research conducted to examine how culture impacts each of these domains as well as how they are systematically interrelated continues to be limited. Understanding these interrelationships is integral to understanding how culture influences the development, progression, and treatment of mental illness.

The CIMH was initially developed to provide students and professionals with a broad and more sophisticated understanding of culture's dynamic influence on mental health. Specifically, in our teaching of culture and mental health issues, professionals and students often developed a simplistic understanding that culture matters, but often had difficulty understanding the dynamic and interactive nature of culture on interrelated mental health domains. The

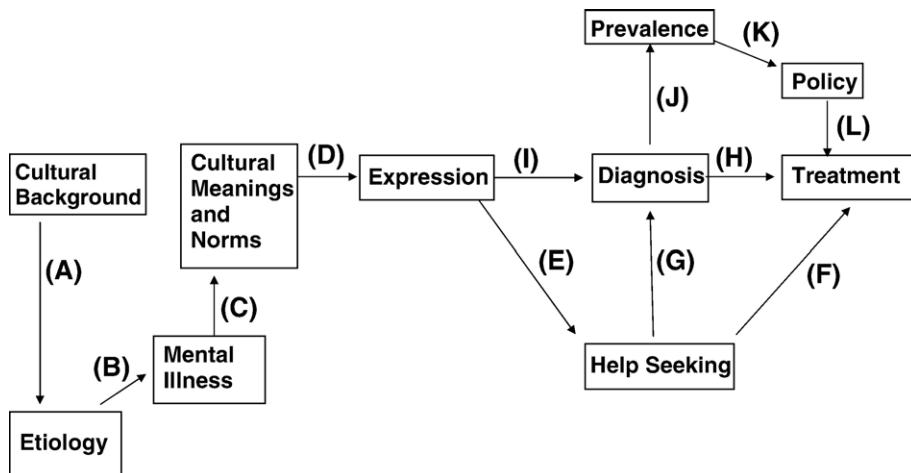


Fig. 1. The Cultural Influences on Mental Health (CIMH) Model.

CIMH model serves as an illustrative roadmap to help students and professionals visualize the complexities involved in understanding culture's influence on mental health. We acknowledge that no single conceptual model can adequately capture the complexities involved in understanding cultural influences on mental health, but hope that the CIMH model will provide a solid foundation for those wanting and needing to improve their cultural awareness.

## 1. The CIMH model

### 1.1. Cultural issues in the development of illness

At a basic level, we understand that the cultural background and characteristics of the individual plays an important role in the etiology of disease and the resulting psychological distress and mental illness as illustrated by Pathways A and B in Fig. 1. For instance, we know that the day to day experiences of people from different backgrounds may be very different. We also know that ethnic minorities are likely to be exposed to a disproportionate burden of unique stressful experiences. A basic example would be that of the refugee experience. Many refugees immigrate to countries around the world having experienced a variety of traumatic experiences, including war, genocide, violence, famine, and political persecution (Gong-Guy, Cravens, & Patterson, 1991; Williams & Berry, 1991). Whether one escapes to another country or not, those exposed to violent experience evidence increased risk for depression and post traumatic stress disorder, as has been found among Southeast Asian, African, Bosnian, and Kurdish refugees (Chung & Kagawa-Singer, 1993; Hirschowitz & Orkin, 1997; Kinzie et al., 1990; Kroll et al., 1989; Sundquist, Johansson, DeMarinis, Johansson, and Sundquist, 2005; Wahlsten, Ahmad, Von Knorring, 2001). Traumatic experiences are culture-universal in that anyone exposed to such stressors would likely be negatively affected. However, refugees are much more likely than the general population to experience traumas (Gong-guy et al., 1991; Williams & Berry, 1991), and as a result, their vulnerability to developing psychological problems increase with accumulated stress burden. Refugee experiences can be very different from that of other ethnic minorities. For example, Native Americans who have suffered from the cumulative impact of colonization and generations of oppression also suffer from higher rates of lifetime trauma and violent victimization than other groups living in the U.S. (National Center for Injury Prevention and Control, 2002; Walters & Simoni, 1999).

Regardless of refugee status, many immigrants also experience acculturative stresses while trying to adapt to a new cultural environment that those in the majority population are unlikely to face (Hovey, 2000; Williams & Berry, 1991). Acculturative stress, defined as the stress related to transitioning and adapting to a new environment (e.g., linguistic difficulties, pressures to assimilate, separation from family, experiences with discrimination, and acculturation-related intergenerational family conflicts) refers to adaptational stressors that can increase risk for mental health problems (Berry, 1998; Berry & Sam, 1997). These stressors have been found to have a detrimental effect on immigrant health and mental health, especially among recent immigrants (Berry, 1998; Goater et al., 1999; Hovey, 2000; Jarvis, 1998; King et al., 2005; Myers, & Rodriguez, 2003; Oh, Koeske, & Sales, 2002; Organista, Organista, & Kurasaki, 2003; Schrier, Van de Wtering, Mulder, and Selten, 2001; Vega & Rumbaut, 1991; Veling et al., 2006). The degree to which acculturative stresses are likely to have a negative impact partially depends on a number of pre-post migration factors, such as educational status, linguistic ability, refugee status, access to thriving ethnic neighborhoods in the host country, and support networks available (Williams & Berry, 1991).

Cultural assimilation, or the process of gradually taking on the characteristics of a new environment, can also increase risk for health problems as immigrants acculturate, possibly due to a regression to the normative prevalence rates of illness in the general population (Berry, 1998). For example, there is a growing body of research indicating that U.S. born Latinos evidence higher rates of a variety of mental and physical health problems than foreign-born Latinos (Escobar, Nervi, and Gara, 2000; Ortega, Rosenheck, Alegria, and Desai, 2000). Chinese Americans also evidence this cultural assimilation effect in relation to major depression (Hwang, Chun, Takeuchi, Myers, & Siddarth, 2005). A similar problem is also developing in European countries. For example, several studies have found that the rate of schizophrenia was approximately 2–3 times higher for African immigrants, Afro-Caribbeans, Asian, Surinam, Netherland Antilles, Moroccan, and other immigrants than Whites in Great Britain and the Netherlands (Goater et al., 1999; Jarvis, 1998; King et al., 2005; Schrier et al., 2001; Veling et al., 2006). There is little empirical evidence that explains why this is happening, however, some believe that it may be due to a combination of accumulated stress burden, increased exposure to culturally unfamiliar environmental and psychosocial experiences, racism and discrimination, and the loss and attenuation of culturally protective factors.

Immigrant issues aside, ethnic minorities are likely to be exposed to a number of other stressors that are unique to their minority status. For example, many minorities report negative experiences with racism and discrimination (Clark, Anderson, Clark, & Williams, 1999; Kessler, Mickelson, & Williams, 1999; Williams, 1996). Racial discrimination (whether overt, covert, or perceived) is likely to have a negative impact on health and mental health, and often leaves people with feelings of anger, disempowerment, fear, loss of control, and helplessness (Clark et al., 1999; Krieger, Sidney, & Coakley, 1999). Persistent ethnic and racial discrimination continues to be highly prevalent around the world with many citizens holding disparaging and negative stereotypes of ethnic minorities being dangerous, lazy, less intelligent, and so forth (Davis & Smith, 1990). Recent reports also indicate that ethnic and racial discrimination not only results in economic disadvantages for many ethnic minorities, but also persist in health care systems and exacerbate health disparities (Smedley et al., 2003).

In addition to being the target of racism, ethnic minorities are less likely to benefit from a number of privileges available to Whites (McIntosh, 1989; Rothenberg, 2005). In discussing White privilege, McIntosh (1989) notes, “I was taught to see racism only in individual acts of meanness, not in invisible systems conferring dominance in my group” (pp. 31). White privilege acts to confer a number of advantages to White people that ethnic minorities do not have. In the U.S., for example, Chin, Cho, Kang, and Wu (1999) note that:

For many people of color, racism has decreased the amount and value of economic, social, and cultural capital inherited from our ancestors. Not only did we receive less material wealth, we also received less “insider knowledge” and fewer social contacts so instrumental to one’s educational and professional advancement. The fact that runners today might compete on more equal “footing” does nothing to change this fact..even if you are individually innocent of any racial discrimination, do you still enjoy its illicit fruits? After all, discrimination (by others) has shrunk your pool of competitors for admissions, public contracting, and jobs. (pp. 3, 5)

Because of this, White privilege not only reduces the amount of stressful experiences that White Americans face, but also serves as a protective factor and increases their resources for anticipating and coping with adversity relative to persons of color.

Some ethnic minorities are exposed to a different set of stressful experiences that White Americans are less likely to face. In addition, these experiences may affect different groups differently, and as a result, bias research findings. For example, African Americans, Latino Americans, Native Americans, and some Asian American groups evidence a higher burden of poverty in the U.S. (Proctor & Dalaker, 2003). Given the high rates of poverty and the cumulative and current exposure to racism and discrimination experienced by many of these groups, it is surprising that ethnic minorities do not evidence even higher disproportionate rates of mental dysfunction than White Americans (Chernoff, 2002). Chernoff (2002) noted that while positive coping resources (e.g., kinship, spirituality, ethnic pride, collective unity) may help to preserve the mental health of minority communities, the disproportionate risk burden they carry still takes its toll as evidenced by the disproportionate burden of medical morbidity in many of these groups.

Betancourt and Lopez (1993) caution that understanding the relationship between race and socioeconomic status (SES) is a complex process and vulnerable to methodological and statistical bias. For example, they note that the prevalence of depressive symptoms was found to be higher among Latinos than White Americans in a study conducted by Frerichs, Aneshensel, and Clark (1981), which provided evidence of an ethnic difference. However, this effect may be overestimated because when SES is controlled, the ethnic effect disappeared and SES became the significant predictor of depression. Because SES and ethnicity can be highly overlapped in some minority groups, both variables need to be included in statistical analyses. However, this overlap also effectively limits our ability to disaggregate shared variability. In order to properly understand these relations, they caution that a sufficient representation of ethnic groups in multiple SES stratum is required (Betancourt & Lopez, 1993).

Social factors such as familial relationships serve as an important risk and protective factor for all people, but may also affect ethnic minorities differently. For example, research examining expressed emotions found that while family interactions involving criticism was more predictive of relapse for White Americans returning home after hospitalization for schizophrenia, emotional distance and lack of warmth played a stronger role than emotionally negative interactions in predicting relapse for Mexican American families (Lopez et al., 2004). Chao (1994) also challenged what were believed to be culture-universal relationships between parenting styles and child outcomes by noting that Chinese American parents tended to be more “authoritarian” but that Chinese American children still performed well in school. She introduced the notion of a Chinese parenting style called “Xiao xun” or “child training,” and believes that this culture-specific parenting style, based on Chinese notions of filial piety, may better explain child-parent relations

than predominant Western conceptualizations. More research needs to be done to examine operational differences in how family and social relations preserve or exacerbate mental health outcomes. In addition, more research needs to be conducted to examine how acculturation impacts family relations. Recently, Hwang (2006a) proposed a theory of Acculturative Family Distancing (AFD), noting how growing acculturative gaps place immigrant families at risk for developing AFD along two dimensions, a breakdown of communication and an increase of incongruent cultural values, both of which negatively impact family relations and increase risk for psychological distress and functional impairment.

### 1.2. Culture and the expression of distress

The cultural background of the individual not only influences the etiology and development of disease, but also plays a role in the definition and sociocultural meanings of illness. The sociocultural meanings in turn are shaped by cultural norms and beliefs, and ultimately serve as a filter to shape the manner in which distress is expressed as illustrated by Pathways C and D. People from all around the world experience mental illness, and for the most part, symptom profiles for the major disorders are similar (USDHHS, 2001). However, the manifestation of such difficulties (e.g., how they are communicated, experienced, whether they are expressed, and the social meanings of different symptom clusters) can vary by age, gender, and cultural background (Kleinman, 1978). For example, although there may be core symptoms of depression that are similar across cultures, there may also be differences in emphases placed on certain types of symptoms (e.g., differences in the loading of affective, cognitive, and somatic complaints) and/or symptoms associated with depression (e.g., headaches and stomachaches) that are not currently included in the U.S. Diagnostic Statistical Manual (DSM) or the International Classification of Disease (ICD) (APA, 1994; WHO, 1992). The sociocultural environment may act as a contextual backdrop and influence cultural conceptions of illness (e.g., what an illness is), symptom recognition and tolerance, the manner in which it is expressed, social meanings associated with it, and the manner in which it is communicated (e.g., directly, indirectly, or not at all) (Marsella, 1980).

When considering cultural differences in the expression of distress, etic (culture-universal phenomena) and emic (culture-specific phenomena) distinctions are also important to make (Fischer, Jome, & Atkinson, 1998; Sue, 1983). Using depression as an illustrative example, the etic perspective assumes that all people express depression in similar ways and that our diagnostic criteria can be applied to people from all backgrounds without significant cultural bias. On the other hand, an emic perspective would argue that there are likely to be both universal forms of depressive symptoms (i.e. criterial symptoms), as well as cultural variability in symptom expression (Fischer et al., 1998; Sue, 1983).

Somatization, or the degree to which people express their distress through physical symptoms can vary across cultural groups, affect different parts of the body, and carry different social meanings. For example, in Asian cultures, research suggests that somatic expression of distress is very common place; whereas, in Western cultures, there is a greater emphasis on talking about problems and expressing oneself verbally and emotionally (Chun, Enomoto, & Sue, 1996). When comparing Chinese and American psychiatric patients with depressive syndromes, Kleinman (1977) found that 88% of Chinese patients compared to 20% of U.S. patients did not present affective complaints and reported only somatic complaints. In Taiwan, nearly 70% of psychiatric outpatients presented with predominantly somatic complaints at their first visit (Tseng, 1975). Chun et al., (1996) note that somatization may be more prevalent among Asians because open displays of emotional distress is discouraged, possibly because of differences in value orientation and strong stigma associated with mental illness. Displays of psychological symptoms of depression may be perceived as characteristic of personal or emotional weakness. As a result, Asians may deny, suppress, or repress the experience and expression of emotions. This is not to say that Asians and Asian Americans do not experience psychologically related depressive emotions per se. Instead, there may be cultural differences in selective attention (e.g., amount of focus on the mind vs. body), ordering of such foci (e.g., focusing on somatic symptoms first because this is more culturally acceptable and less stigmatized than acknowledging cognitive and emotional symptoms), and/or willingness to express distress based on what's culturally appropriate or accepted (e.g., greater stigma associated with mental illness and/or differences in divulging problems to people outside of the family). In some Latino groups for example, somatic disturbances take the form of chest pains, heart palpitations, and gas (Escobar, Burnam, Karno, Forsythe, & Golding, 1987); whereas, in some African and South Asians groups it is sometimes expressed through burning of the hands and feet and the experience of worms in the head or the crawling of ants under the skin (APA, 1994; USDHHS, 2001).

There may even be linguistic differences in the language available to describe, interpret, and communicate one's problems. For example, in Native American culture, words for many Western conceptualizations of illness such as

depression and anxiety do not exist (Manson, Shore, & Bloom, 1985). In examining ethnic differences in the clinical presentation of depression, Myers et al. (2002) found that even after controlling for SES and severity of distress, African American and Latina women who were depressed reported more somatic complaints than White American women. Greater somatic manifestations among many ethnic groups may be associated with philosophical or cultural underpinnings that emphasize an integrated or holistic mind-body-spirit experience (Hwang, Wood, Lin, Cheung, & Wood, 2006). This can be seen in Traditional Chinese Medicine (TCM) where the mind and body are treated as one, inseparable, and a balance of yin (negative) and yang (positive) energies.

How psychological or emotional distress is initially expressed can also be culturally incongruent and open the door for social or self-criticism (Chun et al., 1996). In some cultures, extreme emotional reactions may elicit negative social responses (e.g., other perceiving this person as crazy, weak, or lazy); whereas, somatic expression of distress may elicit empathy and help rally support from social networks (e.g., the belief that this person has a real medical problem and needs help). Illnesses are dynamic in that they represent complex social constructs that are influenced by social norms and complex social feedback interactions between the person and their social environment (Chun et al., 1996). In some cultures, attribution of interpersonal distress to physical causes may also initially protect patients from feeling negative emotions and worry, and reduce feelings of shame, weakness, and loss of control.

Although Chinese patients may initially report more somatic symptoms and suppress or ignore emotional symptoms, this does not mean that they do not experience emotional and cognitive symptoms (Cheung, 1982; Cheung & Lau, 1982). In fact, clinical experience tells us that after developing a good therapeutic relationship, Chinese patients begin to feel more comfortable expressing more cognitive and affective symptoms. In addition, studies have found that although some patients were more likely to focus on physical complaints when they initially came into treatment, they were fully aware of and capable of expressing feelings and talking about the social problems that had brought them into treatment after a strong patient-therapist relationship developed (Cheung, 1982; Cheung & Lau, 1982).

Culture-bound syndromes, defined as culture-specific idioms of distress that form recognized symptom patterns and have distinct clinical characteristics, symptom constellations, and social meanings, have been documented in many cultures (APA, 1994; Levine & Gaw, 1995). Two of the most researched include ataque de nervios and neurasthenia. Ataque de nervios, often characterized as a form of panic attack among Latinos, is associated with feelings of being out of control due to stressful events relating to family difficulties (APA, 1994). Unlike traditional panic attack, it is not associated with the hallmark symptoms of acute fear or apprehension. Other symptoms include trembling, uncontrollable shouting or crying, somatic feelings of heat rising through the chest to the head, dissociative experiences, seizure-like fainting episodes, and aggressive behavior (APA, 1994). Recent evidence suggests that although a portion of those diagnosed with ataque de nervios also meet criteria for panic disorder, the majority of subjects with ataque de nervios do not, suggesting that ataque de nervios is a more inclusive construct (Lewis-Fernandez et al., 2002). Key features that distinguish ataque de nervios from panic include a more rapid onset of attack, being preceded by an upsetting event in one's life, and greater fears of losing control, going crazy, depersonalization, sweating, and dizziness (Lewis-Fernandez et al., 2002; Liebowitz et al., 1994).

Neurasthenia (NT) or *shenjing shuairuo* in Mandarin Chinese, commonly referred to as a Chinese form of depression, is characterized by two highly overlapping symptom domains including increased fatigue after mental effort (e.g., poor concentration, increased distractibility, inefficient thinking) or physical weakness or exhaustion that is accompanied by physical pains and inability to relax (e.g., headaches, dizziness, sleep difficulties, gastrointestinal problems, anhedonia, and bodily pain) (WHO, 1992). This diagnosis continues to be used in China and is included in the Chinese Classification of Mental Disorders, Second Edition (Neuropsychiatry Branch of the Chinese Medical Association, 1989). There continues to be controversy about whether neurasthenia is merely major depression with a cultural label or whether it is a distinct diagnostic entity. For example, Kleinman (1982) found that 87% of psychiatric patients diagnosed with NT in a Chinese clinic could be rediagnosed with major depression. In contrast, a recent epidemiological study of Chinese Americans in Los Angeles found that 78% of those diagnosed with neurasthenia did not meet criteria for major depression or an anxiety disorder, yielding a neurasthenia prevalence rate that was as high as that of major depression (Zheng et al., 1997).

Many other culture-bound syndromes have also been documented (Levine & Gaw, 1995). Unfortunately, there is less empirical research to help us understand these syndromes which affect people from all around the world. For example, many cultures believe in magical powers, spiritual possessions, and witchcraft or juju. In Northern Africa and parts of the Middle East, cases of "Zar" or a spiritual possession type culture-bound syndrome have been reported (Grisaru, Budowski, & Witztum, 1997). In Western Africa and different parts of Asia, similar but qualitatively distinct

small-scale epidemics of genital shrinking distress have also been reported (Dzokoto & Adams, 2005). There is clearly a link between culture and the development, expression, and definition of psychiatric disorders. Because of the link between Westernization and increasing rates of eating disorders across the world, some have also begun to question whether commonly accepted psychiatric disorders which were believed to be culture-universal, such as anorexia nervosa and bulimia, are actually western culture-bound syndromes (Banks, 1992; Keel & Klump, 2003).

### 1.3. Expression of distress, diagnostic accuracy, and the prevalence of illness

The ability to accurately identify and classify illness is an essential part of providing quality health care (Corey, Corey, & Callahan, 1993). Accurate diagnoses help practitioners properly identify the problem, prescribe an appropriate treatment, and understand the etiology, course, and prognosis of the illness. Moreover, the ability to accurately diagnose a problem helps us determine the prevalence of different illnesses and assess the public health needs of different populations. Diagnostic and assessment practices can be especially challenging because of cultural differences in the manifestation, presentation, and concealment of problems (Pathway I). As a result, current diagnostic systems, which are based on Western conceptualizations of mental illness, may be less accurate in diagnosing those from different cultural backgrounds. In fact, there is much literature documenting the fact that ethnic minorities are more likely to be misdiagnosed than Whites (Fernando, 2005; Smedly et al., 2003; USDHHS, 2001).

Differences in expression influence diagnostic accuracy and ultimately impact our ability to assess the prevalence and rate of psychiatric disorders across different groups as illustrated by Pathway L. Ability to differentially diagnose patient problems is necessary for accurate referral and treatment. In order to develop accurate assessment instruments, Marsella, Kaplan, & Suarez (2002) recommends the following considerations: (a) appropriate items and questions, including the use of idioms of distress; (b) opportunities to index frequency, severity, and duration of symptoms since groups vary in their reporting within certain modes; (c) establishment of culturally relevant baselines in symptom parameters; (d) sensitivity to the mode and context of response (i.e., self-report, interview, translation issues); (e) awareness of normal behavior patterns; and (f) symptom scales should be normed and factor-analyzed for specific cultural groups. In addition to having accurate assessment instruments, clinicians need to be culturally competent and aware so that diagnostic errors can be reduced.

Accurate clinical diagnoses are essential to providing appropriate and equitable services for all patients. Inaccurate diagnosis severely impairs our ability to properly assess the prevalence of problems in different communities, which in turn, impacts our understanding of the immediacy of the problem and our ability to respond with policy efforts (Pathway K). For example, epidemiological studies assessing the rates of depression among Chinese and Chinese Americans have found lower rates of depression than the general U.S. population (Chen et al., 1993; Hwu, Yeh, & Chang, 1989; Takeuchi et al., 1998; Yeh, Hwu, & Lin, 1995). However, community-based studies of Asian Americans have found higher rates of depressive symptoms among Asian Americans than White Americans (Abe & Zane, 1990; Kuo, 1984; Okazaki, 1997; Sue & Sue, 1987a). Is this because Asians Americans are truly less depressed, or is it because they exhibit a narrower range of symptoms, and consequently do not meet the five out of nine symptoms required to qualify for a diagnosis? If they only meet three or four of the five symptoms required, but evidence similar or greater severity in those symptoms or evidence equal or greater functional disability, should they not meet criteria for depression? Is this discrepancy due to methodological and/or reporting biases where some ethnic minorities may be less likely to reveal psychiatric difficulties to interviewers whom they do not personally know, but are willing to endorse experiencing a problem on a symptom checklist? Should an individual who evidences additional other symptoms be given a diagnosis of depression if these symptoms are not included in the DSM or ICD, but are indicative of cultural manifestations of depression (e.g., somatic difficulties)? Should an individual be given a diagnosis of major depression if they do not meet diagnostic criteria, but do meet criteria for a depressive culture-bound syndrome such as neurasthenia? Because health care insurance does not pay for services unless a diagnosis is provided, should individuals who evidence considerable illness burden but do not meet Western criteria for depression be excluded from coverage? These and other culture-related questions need to be answered if we are to provide appropriate care. If left unattended, biases in diagnostic practices may lead to inaccurate assumptions about how prevalent problems are in minority communities, and inappropriately influences funding and policy decisions, resulting in deficiencies in the type, quality, and amount of treatments provided (Pathways K and L).

When diagnosing those from different cultural backgrounds, practitioners must also be knowledgeable enough to understand whether symptoms and behaviors are culturally normative. For example, Egeland, Hostetter, and Eshleman

(1983) pointed out that an insufficient understanding of Amish cultural values and norms can easily lead to misdiagnosis of bipolar illness. They pointed out examples of what would be considered to be normative behaviors by mainstream White standards would meet manic criteria for grandiosity, excessive involvement, and reckless behavior in Amish culture (e.g., driving a car, using machinery, dressing in nontraditional clothes, flirting with a married woman, smoking, taking vacations off season, and excessive telephone usage).

In addition, it is also important to understand within-group differences in psychiatric risk. For example, Brown, Ahmed, Gary, and Milburn (1995) found a significant within-group age effect indicating that African Americans between the ages of 20–29 and over age 65 evidenced the highest risk for major depression than those in their middle adulthood. In examining gender differences, the National Comorbidity Survey found that African American women between the ages of 35 to 44 were at particularly high risk for becoming depressed (Blazer, Kessler, McGonagle, & Swartz., 1994). Among Chinese Americans, elderly Chinese American women have been found to have the highest rates of suicide when compared to other groups (Yamamoto et al., 1997; Yu, 1986). Unfortunately, some ethnic groups such as Native Americans have been subject to the cumulative effects of devastating experiences, and as a result evidence more illness burden as a whole than White Americans (Robins, Chester, & Goldman, 1996).

#### *1.4. Culture, expression of distress, and help-seeking*

In raising the issue of culture, illness, and care, Kleinman (1978) introduced the notion of the explanatory model of illness. He proposed that how a patient understands and experiences an illness is embedded within a social context. As a result, those from different cultural backgrounds may experience and interpret their illnesses differently, as well as affix different labels to their sickness (Kleinman, 1978, 1988). These labels serve to prescribe a socially sanctioned sick role that can potentially minimize the social consequence and the amount of stigma experienced by those who are ill. Explanatory models may also impact the manner in which distress is expressed and experienced, and play a role in identifying what types of expression are more culturally normative. When both the practitioner and client are from the same cultural system, it is more likely that they will have matching explanatory models which reinforce socially constituted “clinical realities” (Kleinman, 1978). However, when the patient and clinician’s explanatory models do not match, the cultural and clinical realities of what is perceived to be wrong, what caused the problem, and what type of treatment is most appropriate may conflict and lead to misdiagnosis, greater disbelief in the service provided, treatment dissatisfaction, noncompliance, and less than optimal outcomes.

Cultural meanings of illness are likely to influence the manner in which distress is expressed (Pathway D). The manner in which one experiences his/her illness and expresses his/her distress is embedded in a larger cultural milieu, and ultimately affects the who, why, when, how, and if people seek help and cope with problems as illustrated in Pathway E. Those who believe his/her problem is psychological might seek help from a psychologist, while those who believe his/her problems are somatic, and because there is a large amount of stigma associated with mental illness in many cultures, may choose to seek help from a primary care physician (Hwang et al., 2006). There is some research to suggest that ethnic minorities may be more likely to seek psychiatric help from their primary care physician than mental health practitioners, but that primary care doctors are at greater risk for not detecting mental health problems among various ethnic minority groups (Borowsky et al., 2000).

For many ethnic minorities, an additional choice has to be made, whether to seek help from a formal source (e.g., psychiatrist or physician), or whether to explore more indigenous or informal sources of treatment that they may be more familiar with, have greater access to, and have more confidence in (e.g., TCM, herbal treatment, or religious prayer). Research examining alternative services have found that even though use of alternative therapies are popular among U.S. citizens in general (Eisenberg et al., 1998), ethnic minority groups may be more likely to turn to indigenous or complementary treatments for physical and mental health care (Barnes, Powell-Griner, McFann, & Nahin, 2004; Becerra & Inlehart, 1995; Koss-Chioino, 2000).

The relation between cultural beliefs about the causes of illness and where one seeks help also needs to be further researched. There is a growing body of research confirming that non-White groups hold different beliefs about the causes of their illness than Whites. For example when explaining why they developed schizophrenia, Bangladeshis and African-Caribbeans living in the U.K. are more likely to cite supernatural causes than Whites who more frequently cite biological reasons (McCabe & Priebe, 2004). Different beliefs about the causes of one’s illness may result in differential usage of coping methods to deal with one’s problems. For example, depressed Chinese Americans seeking health in primary care rarely reported depressed mood spontaneously and only 10% of patients labeled their illness as a

psychiatric condition and 3.5% sought care from a mental health professional for their depression (Yeung, Chang, Gresham, Nierenberg, & Fava, 2004). Most of the patients sought help from primary care, lay help, and used alternative treatments.

Religion may also act as a powerful coping resource for all groups (George, Larson, Koenig, McCullough, 2000), there is some evidence to suggest that marginalized ethnic minorities such as African Americans may engage in more religious coping to deal with adversity than White Americans (Conway, 1985), and that they report having greater satisfaction with their religious coping efforts and feel more connected to God (McAuley, Pecchioni, Grant, 2000; Myers & Hwang, 2004). Better integration of indigenous and alternative health care services (e.g., herbal medicine, prayer, and TCM) may help facilitate the patient's "buy-in" to therapy because it establishes a cultural bridge that links the patient's cultural beliefs to the treatment.

Currently, most people suffering from a mental illness do not receive treatment (USDHHS, 1999). Ethnic minorities are also less likely to have access to and use mental health service than Whites, with many groups evidencing delayed help-seeking (Cheung & Snowden, 1990; Robins & Regier, 1991; Snowden & Cheung, 1990; Swartz et al., 1998; Sussman, Robin, Earls 1987). The underutilization of mental health services by minorities is likely the result of a combination of culture-related and economic barriers, such as lack of insurance and greater poverty in many minority communities (USDHHS, 2001). For example, African Americans, Native Americans, Latino Americans, and some Asian American groups have a much higher rate of poverty and are less likely to be insured than White Americans (Proctor & Dalaker, 2003; Brown, Ojeda, Wyn & Levan, 2000). Lack of insurance and financial barriers have been found to be related to decreased help-seeking rates among ethnic minorities (Abe-Kim, Takeuchi, & Hwang, 2002; Chin, Takeuchi, & Suh, 2000). However, even when health insurance plans do cover mental health services or when sociodemographic and need variables are controlled, it does not seem to increase treatment seeking as much for ethnic minorities as for Whites (Padgett, Struening, Andrew, Pittman, 1995; Swartz et al., 1998), indicating that financial barriers are not sufficient explanations of why ethnic minorities utilize mental health services at a lower rate.

Not enough research has been conducted on stigma, which is one of the most formidable obstacles to making mental health services available and accessible to the general public (USDHHS, 1999). Stigma towards mental illnesses is a worldwide phenomenon and operates by motivating the general public to reject, avoid, fear, and discriminate against those with mental illness (Corrigan, 2004). As a result, those with mental illness become ashamed, conceal their problems, and delay or do not seek help due to fear of being stigmatized and negatively labeled. Unfortunately, there is little comparative research examining the prevalence of mental illness stigma among different ethnic groups. However, many people believe that stigma operates more severely among non-White communities, and has a more detrimental impact on help-seeking behavior for a number of reasons, including ethnic communities being less educated about mental health issues or where to seek treatment, cultural incongruity between cultural beliefs and Western psychiatric services, decreased confidence in the treatments available, and collectivistic cultural orientation which places greater importance on social appearances (Ng, 1997; Uba, 1994). For example, Ng (1997) pointed out that stigma is such a powerful factor in Asian cultures that it not only reflects badly on the one who is ill, but it also diminishes the economic and marriage value for that person as well as his/her family. Because strong stigma towards mental illness is often equated with being "crazy" or "weak" in many ethnic minorities, community interventions that focus on public health education and decreasing stigma in community and clinical populations are sorely needed.

The shortage of ethnic minority mental health professionals and the limited availability of services available in various ethnic languages also act as a barrier to treatment. Some research suggests that ethnic minorities would prefer an ethnic-matched provider, but that few ethnic minority providers are available (USDHHS, 2001). This issue becomes even more salient because many ethnic minority groups have less than positive attitudes towards mental health services. For example, because of historical experiences with racism and discrimination, African Americans may have a greater fear and misunderstanding of mental health services than White Americans (Clark et al., 1999; Keating & Robertson, 2004). Mistrust of mental health providers was cited as a major barrier to receiving mental health treatment by ethnic minorities (USDHHS, 1999). Summative reports in the U.S. and England have also found that some ethnic minorities lack confidence in the mental health care system and feel that they have been mistreated and discriminated against by providers and the system (Smedley et al., 2003; USDHHS, 2001).

Reducing the impact of racism and addressing social inequalities that act as barriers to care needs to be properly addressed if we are to improve care for ethnic minorities. In summarizing the apparent failure of England's mental health system in treating ethnic minorities over the past 20 years, Fernando (2005) notes that ethnic minorities are more often than Whites to be diagnosed as schizophrenic, compulsorily detained in hospitals, admitted as offender patients,

held by the police for observation for mental illness, transferred to locked wards from open wards when they are patients in hospitals, given high doses of medication when they are hospital patients, and are less likely to be referred for psychotherapy when suffering from a mental illness. Keating (2000) underscores that anti-racist perspectives and proper staff training is critical in fighting provider racist ideas, institutional racism, and discriminatory practices. Until these issues are adequately addressed, social inequalities, fear of discriminatory maltreatment, and dissatisfaction with services will continue to act as barriers to care.

### *1.5. Help-seeking, diagnoses, and their relation to treatment*

The from who, when, why, how, and if one seeks help is likely to affect treatment quality, availability, access, and outcomes as illustrated by Pathway F, and also has important implications for treatment outcome if people are delaying treatment and coming in only when their problems get intolerably worse. Practitioners from different help-seeking sources such as primary care, mental health services, and indigenous medicines may also diagnose patients differently (Pathway G), leading to different types of treatment given as well as potentially different outcomes (Pathway H). Overall, the available research evidence indicates that ethnic minorities evidence higher levels of mental illness burden and disability, and that they are less likely to have access to and receive quality health and mental health services (Smedley et al., 2003; Sue & Chu, 2003; USDHHS, 2001). In addition, some ethnic minority groups are more likely to drop out of treatment prematurely and evidence worse treatment outcomes (Smedley et al., 2003; USDHHS, 2001). Given what we currently know about the relationship between culture and various mental health domains, there are a number of strategies that we can use to improve services.

For example, if we believe that stigma plays a large role in why minorities do not seek care (Ng, 1997; Uba, 1994), more efforts need to be placed on public health education and breaking down common stereotypes and misperceptions of mental illness and its treatment. In addition, if we know that minorities are likely to seek other sources of support first or to access alternative sources of care (Barnes et al., 2004; Becerra & Inlehart, 1995; Eisenberg et al., 1998; Koss-Chioino, 2000), a stronger coordination of services could be established and educational brochures and resources could be placed in strategic locales. If we know that some ethnic minorities may delay treatment seeking and as a result are more likely to be severely ill at point of entry and be hospitalized into the health care system (Breaux and Ryujin, 1999; Hu, Snowden, Jerrell, & Nguyen, 1991; Snowden and Cheung, 1990; Sue, 1977; Sue & Sue, 1987b), more effort should be placed on ensuring that the initial contact is culturally sensitive and that a smooth transition is made in referring clients to service centers that may be better able to serve their needs. In addition, greater emphasis on orienting clients to mental health services should help decrease stigma, misperceptions, and comfort in treatment which will hopefully reduce treatment outcomes. There is some evidence to suggest that treating patients in a more culturally sensitive manner (i.e., providing client-therapist ethnic matching and being treated at ethnic-specific services) can reduce premature treatment dropouts (Flaskerud & Liu, 1991; Sue, Fujino, Hu, Takeuchi, & Zane, 1991; Takeuchi, Sue, & Yeh, 1995). Among English speaking Asian Americans, the beneficial effects of being treated at a culturally sensitive treatment center seem to outweigh the positive effects of being matched with an ethnically similar therapist (Takeuchi et al., 1995), indicating that training therapists to be culturally competent and developing culturally congruent interventions can serve as a form of quality improvement, and should be a top priority in improving care.

Unfortunately, we still know little about the direct benefits of cultural competence in influencing outcomes for minority groups. There continues to be a lack of empirical research examining this issue, and as a result, we have yet to confirm the active mechanisms that might lead to more positive results. In order to improve cultural competency trainings, an integration of theory, clinical insight, and empirical findings will be needed to better inform our efforts. It is surprising that more resources have not been delegated to understand this very important issue. Other areas that need more work include building a better recruitment and training pipeline to address the shortage of ethnic minority mental health professionals.

Recently, the American Psychological Association (APA) published "Guidelines on Multicultural Education, Training, Research, Practice, and Organizational Change for Psychologists (APA, 2003). Although these guidelines reinforce the idea that culture and diversity need to be taken into account when treating diverse clientele, they have been largely aspirational. Specifically, professionals who want and need to be culturally competent are left with the message that culture matters, but continue to struggle with how to be a more culturally competent provider in concrete terms.

It is still unclear how discrepancies in the availability of effective treatments for ethnic minorities are being addressed. There seems to be growing interest in understanding whether psychological treatments work in refugee

populations. For example, a small body of outcome research indicates that various psychotherapies may be effective in treating PTSD in adult and child refugees in Africa, Sweden, and other European countries (Lustig et al., 2004; Neuner, Schauer, Klaschik, Karunakara, Elbert, 2004; Paunovic & Ost, 2001). However, there is little long-term outcome research and there is some evidence to suggest that refugees may continue to suffer from the enduring effects of war and trauma (Carlsson, Mortensen, Kastrup, 2005).

Recent reports indicate that ethnic minorities have for the most part been left out of the U.S. APA's initiative to establish, define, and validate empirically supported treatments. For example, the U.S. Surgeon General's report indicates that out of the 9266 participants involved in the efficacy studies forming the major treatment guidelines for depression, bipolar disorder, schizophrenia, and ADHD, only 561 participants were African American, 99 were Latino, 11 were Asian Americans or Pacific Islanders, and none were Native Americans or Alaskan Natives. Other reviews have also found that although there is a growing body of literature documenting that psychotherapeutic treatments work with some minority groups, there continues to be a dearth of research examining how they respond to Empirically Based Treatments (EBTs) (Miranda et al., 2005).

This critical lacuna in our knowledge along with our under-preparedness to effectively treat ethnic minorities suffering from mental illness is becoming more apparent. Mental health providers are faced with the dilemma of either (1) implementing an "as-is approach" to disseminating Empirically Based Treatments (EBTs) to ethnic groups who are culturally different, (2) adapting EBTs to be more culturally congruent in order to better fit the needs of ethnic clientele, or (3) developing new, culture-specific EBTs for each ethnic group (Hwang, 2006b). Implementing an "as is approach" or culturally unmodified EBT is likely to improve quality of care because ethnic minorities currently seldom receive EBTs. However, this may not fully address the discrepancy in treatment outcomes between ethnic minority and White patients, and we still do not know whether EBTs are ecologically valid or will be effective in treating ethnic minorities. Developing new ethnic-specific treatments may be prohibitively costly and not yet fully justified. Again, given the importance of these issues, it is surprising that so little treatment research has been conducted on ethnic minorities.

In trying to address this dilemma, some effort has been put forth to increase cultural competence, develop ethnic-specific approaches (Costantino, Malgady, & Rogler, 1986; Morita, Kondo, & LeVine, 1998), and adapt EBTs to better meet the needs of immigrant communities (Malgady, Rogler, & Costantino, 1990). Sue (1998) brought to the attention the issue of "dynamic sizing" or the skill of knowing when to generalize our cultural knowledge and when to flexibly individualize treatments. Awareness of dynamic sizing helps prevent the development of rigid overgeneralizations and stereotypes that may work to decrease the cultural effectiveness of those learning to be culturally competent. Hays (2001) also provided the "ADDRESSING" framework to help clinicians understand and respond to cultural complexities. Specifically, minorities possess many aspects of identity that may be even more salient than ethnicity and that should be included in the conceptualization of how best to treat the client, such as their (A) age and generational influences, (D) developmental or acquired disabilities (D), (R) religion and spiritual orientation, (E) ethnicity, (S) socioeconomic status, (S) sexual orientation, (I) indigenous heritage, (N) national origin, and (G) gender. For example, a client is not just Vietnamese American. Adapting therapy to be more culturally responsive can be incredibly difficult because culture can have both proximal and distal effects on the various domains of mental health, as illustrated by the CIMH model. This can be especially problematic when providers attempt to apply cultural knowledge to the therapeutic process because such knowledge is quite distal to therapeutic outcomes and practitioners have difficulty operationalizing this information (Sue & Zane, 1987).

In trying to bridge the gap between cultural understanding and helping practitioners think systematically about improving treatment efforts, Hwang (2006b) developed the Psychotherapy Adaptation and Modification Framework (PAMF) to help facilitate adaptation of psychotherapy for use with ethnic minorities. The PAMF framework consists of a three tiered framework consisting of 6 broad domains, 25 adaptable therapeutic principles, and corresponding rationales. Domains targeted for adaptation include: (a) dynamic issues and cultural complexities, (b) orienting clients to psychotherapy and increasing mental health awareness, (c) understanding cultural beliefs about mental illness, its causes, and what constitutes appropriate treatment, (d) improving the client-therapist relationship, (e) understanding cultural differences in the expression and communication of distress, and (f) addressing cultural issues specific to the population. This three-tiered approach to presenting cultural adaptations to therapy was developed in order to make the PAMF more accessible, user-friendly, and adaptable for use with other diverse populations.

Because many mental health professionals need and want to be more culturally competent, research and trainings that help practitioners conceptualize and actualize these hard to render and needed skills are sorely needed. Adaptation of treatments is especially important since the concept of therapy and the rationale behind therapeutic treatment may be

culturally unfamiliar or foreign to those who have had little exposure or experience with mental illness, and to cultures where mental illness can be especially stigmatizing (Hwang, 2006; Hwang et al., 2006). Although the core healing elements of many therapies may generalize across cultures, packaging treatments to better fit with a patient's needs is integral to improving patient satisfaction, improving treatment involvement, compliance, outcomes, and reducing premature dropout. It is the responsibility of treatment providers to deliver culturally sensitive care that is easily translatable and understood by consumers, not the responsibility of patients to adjust to the requirements of treatment approaches that may be culturally dystonic. Because health disparities are very real, cultural sensitivity and modifications that make health care services more accessible to consumers are a necessity rather than a luxury.

### *1.6. Meeting the needs of ethnic minority and immigrant communities: policy implications*

Given that many ethnic minorities and immigrants are culturally different from White Americans and Europeans, current health care systems may not be prepared to meet the needs of rapidly diversifying countries. This has become increasingly evident as recent reports reaffirm that racial and ethnic health disparities do exist, and that there may be biases in the health care system that influence whether people of differing backgrounds receive equitable services (Smedley, 2003; USDHHS, 2001). Concrete plans for preventing health disparities at all levels need to be implemented. These plans need to be global and international in nature. Recently, the World Health Organization (WHO) reported that mental illness accounts for five of the top ten leading causes of disability around the world and accounts for between 12–15% of the disease burden in the world (Murray & Lopez, 1996).

Yet few national and international policies have been developed to address this global problem. For example, when reviewing existing international policies across the world for child and adolescent mental health care, Shatkin and Belfer (2004) found that only 18% of countries worldwide had an identifiable mental health policy. This is especially problematic for developing countries where access to quality health and mental health care is less available. Patel, Saraceno, and Kleinman (2006) note that policies that help address international access to services need to be established and that it is unethical to deny effective and affordable care to those suffering from mental illness. For example, international property rights agreements deny developing countries the right to produce generic versions of drugs, resulting in unaffordable prices set by pharmaceutical companies. Civil rights abuses, including denial of basic rights, forced long-term residential treatment, treatment with older drugs with severe side effects, unsanitary conditions, and forced lockdowns of those who are mentally ill, also occur throughout the world. In addition to improving training and educational programs, policies that establish incentives for returning to one's country and reducing the brain drain among developing countries need to be developed.

In the U.S., the President's New Freedom Commission (2003) and the Institute of Medicine (IOM, 2001) recommend that transformations in mental health delivery systems target 6 goals for improvement, including ensuring that people understand that mental health is essential to general health, mental health care is consumer and family driven, disparities in mental health services are eliminated, early screening, assessment, and referral services are established, quality mental health care is delivered and research is accelerated, and technology be used to access mental health care and information. These recommendations are surprisingly similar to targeted improvements in England (Beinecke, 2005), and could be applied to international services and a Global Alliance for Mental Health under the umbrella of the World Health Organization (Patel & Kleinman, 2006). When actualizing these goals, particular attention needs to be made to fulfilling these obligations to ethnic minority and immigrant populations.

Fernando (2005) notes that some of the more successful multicultural services in the UK tend to employ a number of "good practices," including the use of multicultural multidisciplinary teams, specific cultural sensitivity and anti-racist practice trainings, anti-oppressive practices in establishing collaborative ties with communities and helping clients deal with racism, increasing the number of ethnic minority staff and improving the educational pipeline, linking psychological support to housing, providing advocacy to help clients deal with statutory services, integrating cultural spirituality and alternative treatments to psychotherapeutic services, and culturally adapting psychotherapy for clientele. For developing countries, these goals may only be aspirational and critical economic and social problems may need to be addressed more immediately.

There is much that we can do as mental health researchers, practitioners, and teachers to improve our cultural awareness and competence. However, mental health providers need to develop a more sophisticated understanding of how culture systematically affects several interrelated mental health domains. The CIMH conceptual framework was developed to help providers move beyond simplistic dyadic conceptualizations of cultural influences and to better

understand the complexities involved in providing culturally competent and sensitive care. Although we acknowledge that this paradigm is far from comprehensive, we offer it as a basic framework for understanding systematic and interrelated cultural issues and their impact on mental health. We hope that the CIMH model can be used to help improve the teaching of psychological research and practice.

## References

- Abe-Kim, J., Takeuchi, D., & Hwang, W. (2002). Predictors of help seeking for emotional distress among Chinese Americans: family matters. *Journal of Consulting & Clinical Psychology*, 70(5), 1186–1190.
- Abe, J. S., & Zane, N. W. (1990). Psychological maladjustment among Asian and White American college students: controlling for confounds. *Journal of Counseling Psychology*, 37(4), 437–444.
- American Psychological Association (1994). *Diagnostic and statistical manual of mental disorders*, 4th ed. Washington, DC: American Psychological Association.
- American Psychological Association (2003). Guidelines on multicultural education, training, research, practice, and organizational change for psychologists. *American Psychologist*, 58(5), 377–402.
- Banks, G. (1992). "Culture" in culture-bound syndromes: the case of anorexia nervosa. *Social Science Medicine*, 34(8), 867–884.
- Barnes, P. M., Powell-Griner, E., McFann, K., & Nahin, R. L. (2004). Complementary and alternative medicine use among adults: United States, 2002. *Advance Data from Vital and Health Statistics*, 343.
- Barnouw, V. Culture and personality. Chicago: Dorsey Press.
- Becerra, R. M., & Inlehart, A. P. (1995). Folk medicine use: diverse populations in a metropolitan area. *Social Work in Health Care*, 21, 37–52.
- Beinecke, R. H. (2005). Comparing implementing the transformation to quality mental health systems in England and the United States with recommendations for areas of international shared learning and collaboration. *International Journal of Mental Health*, 33(4), 35–63.
- Berry, J. W. (1998). Acculturation and health: theory and research. In S. S. Kazarian, & D. R. Evans (Eds.), *Cultural clinical psychology: Theory, research, and practice* (pp. 39–57). London: Oxford University Press.
- Berry, J. W., & Sam, D. L. (1997). Acculturation and adaptation. In J. W. Berry, M. S. Segall, & C. Kagitcibasi (Eds.), *Handbook of cross-cultural psychology*, Vol. 3 (pp. 291–326). Boston: Allyn & Bacon.
- Betancourt, H., & Lopez, S. R. (1993). The study of culture, ethnicity, and race in American psychology. *American Psychologist*, 48(6), 629–637.
- Blazer, D. G., Kessler, R. C., McGonagle, K. A., & Swartz, M. S. (1994). The prevalence and distribution of major depression in a national community sample: the National Comorbidity Survey. *American Journal of Psychiatry*, 151, 979–986.
- Borowsky, S. J., Rubenstein, L. V., Meredith, L. S., Camp, P., Jackson-Triche, M., & Wells, K. B. (2000). Who is at risk of nondetection of mental health problems in primary care? *Journal of General Internal Medicine*, 15, 381–388.
- Breux, C., & Ryujin, D. (1999). Use of mental health services by ethnically diverse groups within the United States. *The Clinical Psychologist*, 52, 4–15.
- Brown, D. R., Ahmed, F., Gary, L. E., & Milburn, N. G. (1995). Major depression in a community sample of African Americans. *American Journal of Psychiatry*, 152(3), 373–378.
- Brown, E.R., Ojeda, V.D., Wyn, R., & Levan, R. (2000). Racial and ethnic disparities in access to health insurance and health care. Los Angles: UCLA Center for Health Policy Research and the Henry J. Kaiser Family Foundation.
- Carlsson, J. M., Mortensen, E. L., & Kastrup, K. (2005). A follow-up study of mental health and health-related quality of life in tortured refugees in multidisciplinary treatment. *Journal of Nervous and Mental Disease*, 193(10), 651–657.
- Chao, R. K. (1994). Beyond parental control and authoritarian parenting style: understanding Chinese parenting through the cultural notion of training. *Child Development*, 65(4), 1111–1120.
- Chen, C. N., Wong, J., Lee, N., Chan-Ho, M. W., Lau, J. T., & Fung, M. (1993). The Shatin community mental health survey in Hong Kong I: major findings. *Archives of General Psychiatry*, 50(2), 125–133.
- Chernoff, N. N. (2002). NIMH Study: Blacks mentally healthier. *American Psychological Society*, 15, 21–36.
- Cheung, F. (1982). Somatization among Chinese: a critique. *Bulletin of the Hong Kong Psychological Society*, 8, 27–35.
- Cheung, F. M., & Lau, B. W. (1982). Situational variations of help-seeking behavior among Chinese patients. *Comprehensive Psychiatry*, 23(3), 252–262.
- Cheung, F. K., & Snowden, L. R. (1990). Community mental health and ethnic minority populations. *Community Mental Health Journal*, 26, 277–291.
- Chin, J., Cho, S., Kang, J., & Wu, F. (1996). Beyond self-interest: Asian Pacific Americans toward a community of justice. *UCLA Asian Pacific American Law Journal*, 129–162.
- Chin, D., Takeuchi, D., & Suh, D. (2000). Access to health care among Chinese, Korean, and Vietnamese Americans. In C. Hogue & M.A. Hargraves (Eds.), *Minority health in America* (pp. 77–98). Baltimore: Johns Hopkins University.
- Chun, C., Enomoto, K., & Sue (1996). Health care issues among Asian Americans: implications of somatization. In P. M. Kato & T. Mann (Eds.), *Handbook of diversity issues in health psychology* (pp. 347–365). New York, NY: Plenum Press.
- Chung, R. C., & Kagawa-Singer, M. (1993). Predictors of psychological distress among Southeast Asian refugees. *Social Science and Medicine*, 36, 631–639.
- Clark, R., Anderson, N. B., Clark, V. R., & Williams, D. R. (1999). Racism as a stressor for African Americans. *American Psychologist*, 54, 805–816.
- Conway, K. (1985). Coping with the stress of medical problems among Black and White elderly. *International Journal of Aging and Human Development*, 21, 29–48.

- Costantino, G., Malgady, R. G., & Rogler, L. H. (1986). Cuento therapy: a culturally sensitive modality for Puerto Rican children. *Journal of Consulting & Clinical Psychology*, 54(5), 639–645.
- Corey, G., Corey, M. S., & Callanan, P. (1993). *Issues and ethics in the helping professions*. California: Brooks/Cole Publishing Company.
- Corrigan, P. (2004). How stigma interferes with mental health care. *American Psychologist*, 59(7), 614–625.
- Davis, J. A., & Smith, T. W. (1990). *General social surveys, 1972–1990*. Chicago: National Opinion Research Center.
- Department of Health (2003). *Delivering race equality: A framework for action*. London: Department of Health.
- Dzokoto, V. A., & Adams, G. (2005). Understanding genital-shrinking epidemics in West Africa: Koro, Juju, or mass psychogenic illness? *Culture, Medicine, and Psychiatry*, 29, 53–78.
- Egeland, J. A., Hostetter, A. M., & Eshleman, S. K. (1983). Amish Study, III: The impact of cultural factors on diagnosis of bipolar illness. *American Journal of Psychiatry*, 140(1), 67–71.
- Eisenberg, D., Davis, R., Ettner, S., Appel, S., Wilkey, S., Van Rompay, M., et al. (1998). Trends in alternative medicine use in the United States, 1990–1997: results of a follow-up national survey. *Journal of the American Medical Association*, 280, 1569–1575.
- Escobar, J. I., Burnam, M. A., Karno, M., Forsythe, A., & Golding, J. M. (1987). Somatization in the community. *Archives of General Psychiatry*, 44, 713–718.
- Escobar, J. I., Nervi, C. H., & Gara, M. A. (2000). Immigration and mental health: Mexican Americans in the United States. *Harvard Review of Psychiatry*, 8(2), 64–72.
- Fernando, S. (2005). Multicultural mental health services: projects for minority ethnic communities in England. *Transcultural Psychiatry*, 42(3), 421–436.
- Fischer, A. R., Jome, L. M., & Atkinson, D. R. (1998). Reconceptualizing multicultural counseling: universal healing conditions in a culturally specific context. *Counseling Psychologist*, 26(4), 525–588.
- Flaskerud, J. H., & Liu, P. Y. (1991). Effects of an Asian client-therapist language, ethnicity and gender match on utilization and outcome of therapy. *Community Mental Health Journal*, 27(1), 31–42.
- Frerichs, R. R., Aneshensel, C. S., & Clark, V. A. (1981). Prevalence of depression in Los Angeles County. *American Journal of Epidemiology*, 113, 691–699.
- George, L. K., Larson, D. B., Koenig, H. G., & McCullough, M. E. (2000). Spirituality and health: what we know, what we need to know. *Journal of Social and Clinical Psychology*, 19(1), 102–116.
- Goater, N., King, M., Cole, E., Leavey, G., Johnson-Sabine, E., Blizzard, N., et al. (1999). Ethnicity and outcome of psychosis. *British Journal of Psychiatry*, 175, 34–42.
- Gong-guy, E., Cravens, R. B., & Patterson, T. E. (1991). Clinical issues in mental health service delivery to refugees. *American Psychologist*, 46(6), 642–648.
- Grisar, N., Budowski, D., & Witzum, E. (1997). Possession by the ‘Zar’ among Ethiopian immigrants to Israel: psychopathology or culture-bound syndrome? *Psychopathology*, 30, 223–233.
- Hays, P. (2001). *Addressing cultural complexities in practice: A framework for clinicians and counselors*. Washington, DC: American Psychological Association.
- Hirschowitz, R., & Orkin, M. (1997). Trauma and mental health in South Africa. *Social Indicators Research*, 41, 169–182.
- Hovey, J. D. (2000). Acculturative stress, depression, and suicidal ideation in Mexican American immigrants. *Cultural Diversity and Ethnic Minority Psychology*, 6(2), 134–151.
- Hu, T. W., Snowden, L. R., Jerrell, J. M., & Nguyen, T. D. (1991). Ethnic populations in public mental health: services choice and level of use. *American Journal of Public Health*, 81, 1429–1434.
- Hwang, W. (2006). Acculturative family distancing: theory, research, and clinical practice. *Psychotherapy: Theory, Research, Practice, Training*, 43(4), 397–409.
- Hwang, W. (2006). Adapting psychotherapy to better meet the needs of ethnic minorities. *American Psychologist*, 61(7), 702–715.
- Hwang, W., Chun, C. A., Takeuchi, D. T., Myers, H. F., & Siddarth, P. (2005). Age of first onset major depression in Chinese Americans. *Cultural Diversity and Ethnic Minority Psychology*, 11(1), 16–27.
- Hwang, W., Lin, K., Cheung, F., & Wood, J. (2006). Cognitive-behavioral therapy with Chinese Americans: research, theory, and clinical practice. *Cognitive and Behavioral Practice*, 13, 293–303.
- Hwu, H., Yeh, E. K., & Chang, L. Y. (1989). Prevalence of psychiatric disorders in Taiwan defined by the Chinese diagnostic interview schedule. *Acta Psychiatrica Scandinavica*, 79(2), 136–147.
- Institute of Medicine (2001). *Crossing the quality chasm: a new health system for the 21st century*. Washington, D.C.: National Academy of Sciences Press.
- Jarvis, E. (1998). Schizophrenia in British immigrants: recent findings, issues and implications. *Transcultural Psychiatry*, 35(1), 39–74.
- Keating, F. (2000). Anti-racist perspectives: what are the gains for social work? *Social Work Education*, 19(1), 77–87.
- Keating, F., & Robertson, D. (2004). Fear, black people and mental illness: a vicious cycle? *Health and Social Care in the Community*, 12(5), 439–447.
- Keel, P. K., & Klump, K. L. (2003). Are eating disorders culture-bound syndromes? Implications for conceptualizing their etiology. *Psychological Bulletin*, 129(5), 747–769.
- Kessler, R. C., Mickelson, D. D., & Williams, D. R. (1999). The prevalence, distribution, and mental health correlates of perceived discrimination in the United States. *Journal of Health and Social Behavior*, 40, 208–230.
- King, M., Nazroo, J., Weich, S., McKenzie, K., Bhui, K., Karlson, S., et al. (2005). Psychotic symptoms in the general population of England: a comparison of ethnic groups (The EMPIRIC study). *Social Psychiatry and Psychiatric Epidemiology*, 40, 375–381.
- Kinzie, J. D., Boehnlein, J. K., Leung, P. K., Moore, L. J., Riley, C., & Smith, D. (1990). The prevalence of post-traumatic stress disorder and its clinical significance among Southeast Asian refugees. *American Journal of Psychiatry*, 147, 913–917.
- Kleinman, A. (1977). Depression, somatization and the new cross-cultural psychiatry. *Social Science & Medicine*, 11, 3–19.

- Kleinman, A. (1978). Clinical relevance of anthropological and cross-cultural research: concepts and strategies. *American Journal of Psychiatry*, 135(4), 427–431.
- Kleinman, A. (1982). Neurasthenia and depression: a study of somatization and culture in China. *Culture, Medicine, and Psychiatry*, 6, 117–190.
- Kleinman, A. (1988). *Rethinking psychiatry: From cultural category to personal experience*. New York: The Freeman Press.
- Koss-Chioino, J. D. (2000). Traditional and folk approaches among ethnic minorities. In J. F. Aponte & J. Wohl (Eds.), *Psychological intervention and cultural diversity*. Needham Heights, MA: Allyn & Bacon.
- Krieger, N., Sidney, S., & Coakley, E. (1999). Racial discrimination and skin color in the CARDIA study: implications for public health research. *American Journal of Public Health*, 88, 1308–1313.
- Kroll, J., Habenicht, M., Mackenzie, T., Yang, M., Chan, S., Vang, T., et al. (1989). Depression and post-traumatic stress disorder in Southeast Asian refugees. *American Journal of Psychiatry*, 146, 1592–1597.
- Kuo, W. H. (1984). Prevalence of depression among Asian-Americans. *Journal of Nervous & Mental Disease*, 172(8), 449–457.
- Levine, R. E., & Gaw, A. C. (1995). Culture-bound syndromes. *The Psychiatric Clinics of North America*, 18(3), 523–535.
- Lewis-Fernandez, R., Guarnaccia, P. J., Martinez, I. E., Salman, E., Schmidt, A., & Liebowitz, M. (2002). Comparative phenomenology of ataque de nervios, panic attacks, and panic disorder. *Culture, Medicine, and Psychiatry*, 26, 199–223.
- Liebowitz, M. R., Salman, E., Jusino, C. M., Garfinkel, L., Street, D. L., Cardenas, J., et al. (1994). Ataque de nervios and panic disorder. *American Journal of Psychiatry*, 151(6), 871–875.
- Lopez, S. R., Nelson Hipke, K., Polo, A. J., Jenkins, J., Karno, M., Vaughn, C., et al. (2004). Ethnicity, expressed emotion, attributions, and course of schizophrenia: family warmth matters. *Journal of Abnormal Psychology*, 113, 428–439.
- Lustig, S. L., Kia-Keating, M., Knight, W. G., Geltman, P., Ellis, H., Kinzie, J. D., et al. (2004). Review of child and adolescent refugee mental health. *Journal of the American Academies of Child and Adolescent Psychiatry*, 43(1), 24–36.
- Manson, S. M., Shore, J. H., & Bloom, J. D. (1985). The depressive experience in American Indian communities: a challenge for psychiatric theory and diagnosis. In A. Kleinman & B. Good (Eds.), *Culture and depression* (pp. 331–368). Berkeley, CA: University of California Press.
- Marsella, A. J. (1980). Depressive experience and disorder across culture. In H. C. Triandis & J.G. Draguns (Eds.), *Handbook of cross-cultural psychology*, Vol. 6. (pp. 237–289) Boston: Allyn & Bacon.
- Marsella, A. J., Kaplan, A., & Suarez, E. (2002). Cultural considerations for understanding, assessing, and treating depressive experience and disorder. In M. Reinecke & M. Davison (Eds.), *Comparative treatments of depression* (pp. 47–78). NY: Springer.
- McCabe, R., & Priebe, S. (2004). Explanatory models of illness in schizophrenia: comparison of four ethnic groups. *British Journal of Psychiatry*, 185, 25–30.
- Miranda, J., Bernal, G., Lau, A., Kohn, L., Hwang, W., & La Framboise, T. (2005). State of the science on psychosocial interventions for ethnic minorities. *Annual Review of Clinical Psychology*, 1, 113–142.
- McIntosh, P. (July/August 1989). White privilege: unpacking the invisible knapsack. *Independent School*, 49(2), 31–35.
- Malgady, R. G., Rogler, L. H., & Costantino, G. (1990). Culturally sensitive psychotherapy for Puerto Rican children and adolescents: a program of treatment outcome research. *Journal of Consulting & Clinical Psychology*, 58(6), 704–712.
- McAuley, W. J., Pecchioni, L., & Grant, J. A. (2000). Personal accounts of the role of God in health and illness among older rural African American and White residents. *Journal of Cross-Cultural Gerontology*, 15(1), 13–35.
- Morita, S., Kondo, A., & LeVine, P. (1998). *Morita therapy and the true nature of anxiety-based disorders (shinkeishitsu)*. Albany, NY: State University of New York Press.
- Murray, C. J. L., & Lopez, A. D. (1996). *The global burden of disease*. Geneva: World Health Organization.
- Myers, H. F., & Rodriguez, N. (2003). Acculturation and physical health in racial and ethnic minorities. In K. M. Chun, P. B. Organista & G. Marin (Eds.), *Acculturation: advances in theory, measurement, and applied research* (pp. 163–186). Washington, D. C.: American Psychological Association.
- Myers, H. F., & Hwang, W. (2004). Cumulative psychosocial risks and resilience: A conceptual perspective on ethnic health disparities in late life. In N. A. Anderson, R. A. Bulatao, & B. Cohen (Eds.), *National Research Council, Critical Perspectives on Racial and Ethnic Disparities in Health in Later Life Committee on Population, Division of Behavioral and Social Sciences and Education*. (pp. 492–539) Washington, D.C.: The National Academies Press.
- Myers, H. F., Lesser, I., Rodriguez, N., Bingham, C. B., Hwang, W., Camp, C., et al. (2002). Ethnic differences in clinical presentation of depression in depressed adult outpatients. *Cultural Diversity & Ethnic Minority Psychology*, 8(2), 138–156.
- National Center for Injury Prevention and Control. (2002). CDC fact book: Different people, different injuries 2001–2002. Retrieved from <http://www.cdc.gov/ncipc/default.htm>
- Neuner, F., Schauer, M., Klaschik, C., Karunakara, U., & Elbert, T. (2004). A comparison of narrative exposure therapy, supportive counseling, and psychoeducation for treating posttraumatic stress disorder in an African refugee settlement. *Journal of Consulting and Clinical Psychology*, 72(4), 579–587.
- Neuropsychiatry Branch of the Chinese Medical Association (1989). *Chinese classification of mental disorders (ccmd-2)*. Chansha, Hunan, China: Task Force on CCMD-2 of CMA.
- Ng, C. H. (1997). The stigma of mental illness in Asian cultures. *Australian and New Zealand Journal of Psychiatry*, 31, 382–390.
- Oh, Y., Koeske, G. F., & Sales, E. (2002). Acculturation, stress, and depressive symptoms among Korean immigrants in the United States. *Journal of Social Psychology*, 142(4), 511–526.
- Okazaki, S. (1997). Sources of ethnic differences between Asian American and White American college students on measures of depression and social anxiety. *Journal of Abnormal Psychology*, 106(1), 52–60.
- Organista, P. B., Organista, K. C., & Kurasaki, K. (2003). The relationship between acculturation and ethnic minority mental health. In K. M. Chun, P. B. Organista, & G. Marin (Eds.), *Acculturation: Advances in theory, measurement, and applied research* (pp. 139–162). Washington, D. C.: American Psychological Association.

- Ortega, A. N., Rosenheck, R., Alegria, M., & Desai, R. A. (2000). Acculturation and the lifetime risk of psychiatric and substance use disorders among Hispanics. *Journal of Nervous & Mental Disease, 188*(11), 728–735.
- Padgett, D., Struening, E. L., Andrews, H., & Pittman, J. (1995). Predictors of emergency room use by homeless adults in New York City: the predisposing, enabling, and need factors. *Social Science & Medicine, 41*, 547–556.
- Patel, V., Saraceno, B., & Kleinman, A. (2006). Beyond evidence: the moral case for international mental health. *American Journal of Psychiatry, 163*(8), 1312–1315.
- Paunovic, N., & Ost, L. (2001). Cognitive-behavior therapy vs exposure therapy in the treatment of PTSD in refugees. *Behaviour Research and Therapy, 39*, 1183–1197.
- President's New Freedom Commission on Mental Health (2003). *Achieving the promise: Transforming mental health in America*. Washington, D.C.: U.S. Department of Health and Human Services.
- Proctor, B. D., & Dalaker, J. (2003). U.S. Census Bureau, Current Population Reports. *Poverty in the United States: 2002* (pp. 60–222). Washington, D.C.: U.S. Government Printing Office.
- Robins, R. W., Chester, B., & Goldman, D. (1996). Cumulative trauma and PTSD in American Indian communities. In A. J. Marsella, M. J. Friedman, E. T. Gerrity, & R. M. Scurfield (Eds.), *Ethnocultural aspects of posttraumatic stress disorder* (pp. 239–254). Washington, DC: American Psychological Association.
- Robins, L., & Regier, D. A. (1991). *J. Psychiatric disorders in America: The Epidemiologic Catchment Area Study*. New York: The Free Press.
- Rothenberg, P. S. (2005). *White privilege: Essential readings on the other side of racism* (2nd ed.). New York: Worth Publishers.
- Schrier, A. C., Van de Wtering, B. J. M., Mulder, P. G. H., & Selten, J. P. (2001). Point prevalence of schizophrenia in immigrant groups in Rotterdam: data from outpatient facilities. *European Psychiatry, 16*, 162–166.
- Shatkin, J. P., & Belfer, M. L. (2004). The global absence of child and adolescent mental health policy. *Child Adolescent Mental Health, 9*, 104–108.
- Smedley, B. D. S., Stith, A. Y., & Nelson, A. R. (2003). *Unequal treatment: Confronting racial and ethnic disparities in health care*. Washington, DC: National Academies Press.
- Snowden, L. R., & Cheung, F. K. (1990). Use of inpatient mental health services by members of ethnic minority groups. *American Psychologist, 45*, 347–355.
- Sue, S. (1977). Community mental health services to minority groups: some optimism, some pessimism. *American Psychologist, 32*(8), 616–624.
- Sue, S. (1983). Ethnic minority issues in psychology: a reexamination. *American Psychologist, 38*(5), 583–592.
- Sue, S. (1998). In search of cultural competence in psychotherapy and counseling. *American Psychologist, 53*(4), 440–448.
- Sue, S., & Chu, J. Y. (2003). The mental health of ethnic minority groups: challenges posed by the supplement to the surgeon general's report on mental health. *Culture, Medicine, and Psychiatry, 27*, 447–465.
- Sue, D. W., & Sue, S. (1987). Cultural factors in the clinical assessment of Asian Americans. *Journal of Consulting & Clinical Psychology, 55*(4), 479–487.
- Sue, D., & Sue, S. (1987). Cultural factors in the clinical assessment of Asian Americans. *Journal of Consulting & Clinical Psychology, 55*(4), 479–487.
- Sue, S., Fujino, D. C., Hu, L., Takeuchi, D. T., & Zane, N. W. (1991). Community mental health services for ethnic minority groups: a test of the cultural responsiveness hypothesis. *Journal of Consulting & Clinical Psychology, 59*(4), 533–540.
- Sue, S., & Zane, N. (1987). The role of culture and cultural techniques in psychotherapy: a critique and reformulation. *American Psychologist, 42* (1), 37–45.
- Sundquist, K., Johansson, L., DeMarinis, V., Johansson, S., & Sundquist, J. (2005). Posttraumatic stress disorder and psychiatric co-morbidity: symptoms in a random sample of female Bosnian refugees. *European Psychiatry, 20*, 158–164.
- Sussman, L. K., Robins, L. N., & Earls, F. (1987). Treatment seeking for depression by Black and White Americans. *Social Science and Medicine, 24*, 187–196.
- Swartz, M. S., Wagner, H. R., Swanson, J. W., Burns, B. J., George, L. K., & Padgett, D. K. (1998). Comparing use of public and private mental health services: the enduring barriers of race and age. *Community Mental Health Journal, 34*, 133–144.
- Takeuchi, D. T., Chung, R. C., Lin, K., Shen, H., Kurasaki, K., Chun, C., & Sue, S. (1998). Lifetime and twelve-month prevalence rates of major depressive episodes and dysthymia among Chinese Americans in Los Angeles. *American Journal of Psychiatry, 155*(10), 1407–1414.
- Takeuchi, D. T., Sue, S., & Yeh, M. (1995). Return rates and outcomes from ethnicity-specific mental health programs in Los Angeles. *American Journal of Public Health, 85*(5), 638–643.
- Tseng, W. S. (1975). The nature of somatic complaints among psychiatric patients: the China case. *Comprehensive Psychiatry, 16*, 237–245.
- Uba, L. (1994). *Asian Americans: Personality patterns, identity, and mental health*. New York: Guilford Press.
- U.S. Department of Health and Human Services. (2001). Mental Health: Culture, Race, and Ethnicity – A Supplement to Mental Health: A Report of the Surgeon General. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General.
- U.S. Department of Health and Human Services (1999). *Mental Health: A report of the Surgeon General*. Rockville, MD: Author.
- Vega, W. A., & Rumbaut, R. G. (1991). Ethnic minorities and mental health. *Annual Review of Sociology, 17*, 351–383.
- Veling, W., Selten, J., Veen, N., Laan, W., Blom, J. D., & Hoek, H. W. (2006). Incidence of schizophrenia among ethnic minorities in the Netherlands: a four-year first-contact study. *Schizophrenia Research, 86*, 189–193.
- Wahlsten, V. S., Ahmad, A., & Von Knorring, A. (2001). Traumatic experiences and posttraumatic stress reactions in children and their parents from Kurdistan and Sweden. *Nordic Journal of Psychiatry, 55*(6), 395–400.
- Walters, K. L., & Simoni, L. M. (1999). Trauma, substance abuse, and HIV risk among urban American Indian women. *Cultural Diversity and Ethnic Minority Psychology, 5*, 236–248.
- Williams, D. R. (1996). Race/ethnicity and socioeconomic status: measurement and methodological issues. *International Journal of Health Services, 26*, 483–505.
- Williams, C. L., & Berry, J. W. (1991). Primary prevention of acculturative stress among refugees: application of psychological theory and practice. *American Psychologist, 46*(6), 632–641.

- World Health Organization (1992). *The ICD-10 Classification of Mental and Behavioral Disorders: Clinical descriptions and diagnostic guidelines*. Geneva, Switzerland: WHO.
- Yamamoto, J., Chung, C., Nukariya, K., Ushijima, S., Kim, J., Dai, Y., et al. (1997). Depression prevention, suicide prevention in elderly Asian Americans. *American Journal of Forensic Psychiatry*, 18(3), 75–83.
- Yeh E., Hwu H., & Lin T. (1995). Mental disorders in Taiwan: Epidemiological studies of community population. In Lin T., Tseng W. & Yeh E.K. (Eds.), *Chinese societies and mental health* (pp. 247–265). Hong Kong: Oxford University Press.
- Yeung, S., Chang, D., Gresham, R. L., Jr., Nierenberg, A. A., & Fava, M. (2004). Illness beliefs of depressed Chinese Americans in primary care. *Journal of Nervous and Mental Disease*, 192(4), 324–327.
- Yu, E. S. (1986). Health of the Chinese elderly in America. *Research on Aging*, 8, 84–109.
- Zheng, Y., Lin, K., Takeuchi, D., Kurasaki, K. S., Wang, Y., & Cheung, F. (1997). An epidemiological study of neurasthenia in Chinese-Americans in Los Angeles. *Comprehensive Psychiatry*, 38(5), 240–259.