Journal of Anxiety Disorders 26 (2012) 574–582

Contents lists available at SciVerse ScienceDirect

Journal of Anxiety Disorders

Review

Minority inclusion in randomized clinical trials of panic disorder

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ARTICLE INFO

Article history:
Received 28 September 2011
Received in revised form 1 February 2012
Accepted 4 February 2012

Keywords:
Panic disorder
Clinical trials
Ethnic differences
African Americans
Hispanic Americans
Asian Americans
Anxiety

ABSTRACT

In 1993, the National Institutes of Health issued a mandate that funded research must include participation by racial and ethnic minority groups, and researchers were required to include in their proposals strategies by which they would achieve diversity in their samples. A methodological search for randomized clinical trials of panic disorder was conducted to evaluate ethnoracial differences in panic disorder symptoms, rates of minority inclusion in North American studies, and effective methods of minority recruitment. Less than half of the studies identified reported ethnic and racial data for their sample. Of the 21 studies that did report this information ($n = 2687$), 82.7% were European American/non-Hispanic White, 4.9% were African American/Black, 3.4% were Hispanic, 1.1% were Asian American, and 1.4% were another ethnicity. The remaining 6.5% was simply classified as other/non-White. The primary recruitment techniques utilized were clinical referral and advertising, but neither of these methods were correlated with improved minority participation, nor was the number of recruitment sites. As minorities are greatly underrepresented in panic disorder studies, reported treatment outcomes may not generalize to all ethnic and cultural groups. Researchers have not followed NIH guidelines regarding inclusion of special populations. Inclusion of minorities in future studies is needed to fully understand issues related to the treatment of panic disorder in non-White populations. Suggestions for improved recruitment of ethnoracial minorities are discussed.

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doi:10.1016/j.janxdis.2012.02.011

1. Introduction

1.1. Prevalence across ethnic groups

Panic disorder, often accompanied by agoraphobia, is a serious anxiety condition, resulting in disability and distress. The National Comorbidity Survey Replication (NCS-R) indicates that in the past year, panic disorder criteria was met by 2.7% of the population, with 44.8% of that group exhibiting serious symptoms (Kessler, Chiu, Delmer, & Walters, 2005). Lifetime prevalence for panic disorder, with or without agoraphobia, is 4.7% (Kessler, Berglund, et al., 2005). The lifetime prevalence rates among racial/ethnic groups were greatest among those who identified as Hispanic (5.4%), followed by Non-Hispanic White (4.9%), and Non-Hispanic Black (3.1%; Breslau et al., 2006). Data from the Collaborative Psychiatric Epidemiology Studies ($N = 16{,}711$) revealed a similar pattern of panic disorder lifetime prevalence rates among White Americans (5.1%), Hispanic Americans (4.1%), African Americans/Black (3.8%), and Asian Americans (2.1%; Asnaani, Richey, Dimaite, Hinton, & Hofmann, 2010).

The empirical literature pertaining to the epidemiology of panic disorder is further intriguing, since cultural factors are ostensibly ignored as evidenced by disparate interpretations for conclusions drawn in this area. For instance, epidemiological studies do not show a significant difference in the prevalence of panic disorder across ethnic and racial groups. However, accurate rates may be difficult to determine as North American studies of panic disorder and other anxiety disorders utilize tests and measures constructed from a predominantly European American or Western perspective, and may fail to capture culturally distinct symptoms of other ethnic groups. Research indicates that the cultural differences may manifest in the way that symptoms are described and experienced (Guarnaccia, 1997), and studies that comprise the *National Institute of Mental Health Collaborative Psychiatric Epidemiology Surveys (CPES)* mirror this sentiment. These reflect efforts to study ethnic and cultural differences in mental health and wellbeing of African Americans (NSAL), Hispanics and Asian Americans (NLAAS). Alegría, Vila, et al. (2004) note that, "The reliance on measures developed in our cultural context that do not take semantics and cultural variation into account, fosters false assumptions, attributional errors, and misleading interpretations, mostly due to the absence of a solid understanding of how to incorporate cross-cultural variation in measurement." Others support this argument, citing America's growing minority population as reason to investigate panic disorder and other mental health problems in non-European American groups (Alegría, Takeuchi, et al., 2004).

Currently, there are 308.7 million people in the United States, and 13.6% of these are African American, 16.3% Hispanic or Latino American, and 5.6% Asian American, alone or in combination with some other racial group (Humes, Jones, & Ramirez, 2011). With the current lifetime prevalence of panic disorder, these numbers indicate that a considerable number of people from all ethnoracial groups are suffering from this disorder, making it an important public health concern.

1.2. Panic symptomatology in African American samples

Although work with ethnic minority populations is undoubtedly burgeoning, the scope of the empirical work in this area remains relatively sparse. Though one may presume that panic symptoms generalize across cultures, some ethnoracial groups describe panic symptomatology differently than their European American counterparts. For example, African Americans report symptoms such as wooziness on the brain, swimming head, heart tremors, itching, seeing red, and blood on the breath (Horwath, Johnson, & Hornig, 1994). Moreover, many African Americans express anxiety symptomatology through somatic complaints with symptoms such as numbing and a decreased emphasis on cognitive processes, and lower levels of subjective nervousness (Barrera, Wilson, & Norton, 2010; Heurtin-Roberts, Snowden, & Miller, 1997; Smith, Friedman, & Nevid, 1999). Additionally, there is evidence that African Americans with panic disorder have more separation anxiety and social phobia than European Americans (Friedman, Hatch, & Paradis, 1994).

Much of the information we have about panic disorder in African Americans comes from the work of Friedman and Paradis (2002), who, in a single study, found a high comorbidity of panic disorder with post-traumatic stress disorder and depression in African Americans. Along these lines, the researchers suggest that there is less self-blame and more spiritual dependence as a coping measure for the disorder. Last and most significantly they noted a higher incidence of sleep paralysis in African Americans, a phenomenon where, upon waking, an individual is unable to move and often experiences frightening hallucinations. Sleep paralysis is more common in African Americans, but the rate is particularly high in those with panic disorder (59%; Paradis, Friedman, & Hatch, 1997; Paradis & Freidman, 2005), indicating a connection between these symptoms that may be unique to African Americans. Given that a single investigation of panic disorder yielded these compelling results, it is plausible to conclude that other characteristics maybe found with further, culture-centered collaboration in this area of research.

1.3. Panic symptomatology in Hispanic samples

Guarnaccia (1997) suggests that criteria and diagnostic symptoms need to be expanded to include potential factors relevant to minority groups. In examining anxiety in Hispanic Americans, Karno et al. (1989) attributed selective migration by less fearful individuals to increased rates of anxiety in Hispanics in the Los Angeles area when compared to their Mexican counterparts across the border, but the stress of migration itself and subsequent minority status in the US may also be factors. Other relevant findings surround the phenomenology of the culture-bound syndrome termed *Ataques de Nervios* (American Psychiatric Association, 2000), which is similar to panic attacks but also may include uncontrollable anger or physical outbursts, described most often in Caribbean Hispanic cultures. The most common symptoms include dissociation, suicide attempts, fainting, seizures, shouting, crying, trembling, and heat in the chest (Hinton, Lewis-Fernandez, & Pollack, 2009). These symptoms may be conceptualized as a type