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Depression and anxiety among patients with somatoform disorders, panic disorder, and other depressive/anxiety disorders in Taiwan

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ABSTRACT

The aim of this study is to compare the severity of depression and anxiety in individuals with somatoform disorders, panic disorder, other depressive/anxiety disorders, and healthy controls in a Han Chinese population. According to the DSM-IV-TR-based diagnostic interviews, we recruited 152 subjects with somatoform disorders (SG), 56 with panic disorder (PG), 85 with other depressive/anxiety disorders (OG), and 179 without any psychiatric disorder (NG). The four groups reported on the Beck Depression Inventory-II (BDI-II) and Beck Anxiety Inventory (BAI) for depressive and anxiety symptoms, respectively. Correlation analysis and multivariate regression analysis were used to determine the effects of demographic factors and psychiatric diagnoses on depressive and anxiety symptoms separately. BDI-II scores were not significantly different in SG, PG, and OG but were higher than NG. SG and PG had the highest BAI scores, whereas NG had the lowest. Multiple linear regression analyses revealed that the associated factors for BDI-II were gender, residential location, somatoform disorders, panic disorder, major depressive disorder (MDD), and generalized anxiety disorder, whereas BAI was significantly associated with somatoform disorders, panic disorder, and MDD. Our results strongly suggest the inclusion of clinical assessment of depressive and anxious symptoms in patients with somatoform disorders.

1. Introduction

Somatoform disorders are psychiatric disorders whose main manifestations are somatic complaints. According to the definition in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR), one of its features is that "the presentation is similar to a general medical condition, but cannot be fully explained by a general medical condition." This overlaps medically unexplained symptoms (MUS), as defined by others (Henningsen et al., 2007; Steinbrecher and Hiller, 2011). The prevalence of somatoform disorders is not low: 1.56–20% of patients in internal medicine have conditions compatible with the general definition of somatoform disorders (Fink et al., 2004; Liu et al., 2012); however, the diagnosis of somatoform disorders is not frequently used in psychiatry (Hamilton et al., 2013).

Many researchers have pointed out that anxiety disorders and depressive disorders are common comorbidities of somatoform disorders (Bener et al., 2013; Essau, 2007; Haftgoli et al., 2010; Leiknes et al., 2010; Shidhaye et al., 2013; van der Meer et al., 2012), with rates between 20% and 66.7% (Essau, 2007; Grover et al., 2015; Leiknes et al., 2007). Some patients present with mixed pictures, in which somatic, anxious, and depressive symptoms all exist but are not severe (Hanel et al., 2009; Oxman et al., 1983). Therefore, one alternative is to use a dimensional approach in which the severity of the somatic, anxious, and depressive features can be evaluated independently (Hanel et al., 2009). Emotional and somatic symptoms in somatoform disorders tend to be chronic (McKenzie et al., 2010). Because the waxing and waning problems last for long periods, daily-life functions may be impaired (Luo et al., 2014). Suicidality must also be considered in somatoform disorders (Wiborg et al., 2013). Somatic symptoms show limited improvement with medications; however, comorbid symptoms of depression and anxiety may benefit from pharmacological treatments (van der Feltz-Cornelis et al., 2011).

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Psychological intervention (such as cognitive-behavioral therapy) may be helpful for both somatic and depressive/anxiety symptoms (van der Feltz-Cornelis et al., 2011; Weck et al., 2015). Evaluation of emotional disturbances is therefore important in patients with somatoform disorders.

Awareness and attribution of somatic symptoms are affected by culture. Hsu and Folstein et al. (1997) compared somatoform disorders in Caucasian and Chinese Americans. They concluded that somaticizers were more common among Chinese Americans and that the somatic manifestations of the two groups were also different; however, a high proportion of comorbid depression was found in both groups (Hsu and Folstein, 1997). Studies in Asia also found meaningful relationships among somatic, depressive, and anxious symptoms (Koh et al., 2008; Li et al., 2009; Luo et al., 2014; Tominaga et al., 2014). Research performed in Korea found that anxiety/depression had a direct influence on somatic symptoms in patients with somatoform disorders (Koh et al., 2008). Alexithymia was associated with a number of somatic symptoms and negative feelings in Japan (Tominaga et al., 2014). A study in China found that anxiety and depression were related to quality of life in subjects with pain disorder (Luo et al., 2014). In Taiwan, Li et al. (2009) found the rates of depression and anxiety disorders in patients with MUS were 35.6% and 29.7%, respectively; however, information about whether the severity of emotional disturbances in somatoform patients is different in other depressive/anxiety patients in Asian countries is still lacking. For example, panic disorder is considered to be an anxiety disorder with mental and physical suffering. In DSM-IV-TR, panic disorder is in a higher diagnostic hierarchy because somatoform disorders can only be diagnosed when panic disorder is ruled out. On the other hand, whether the degree of depression and depression in individuals with somatoform disorders is compatible with that of patients with other depressive/anxiety disorders (such as major depressive disorder [MDD] or generalized anxiety disorder [GAD]) is an interesting topic. We speculated that the emotional disturbance in chronic, persistent somatoform disorders may not be less than in panic disorder, and the comorbidity of somatoform disorders may worsen the severity of MDD or GAD. The degree of anxiety/depression in several of the somatoform disorders categories (e. g., undifferentiated somatoform disorder, pain disorder, hypochondriasis) was also worthy of exploration.

Our study was designed to clarify the features of anxiety and depression in somatoform patients. There were three major aims of this study: to compare the severity of anxiety and depression in patients with somatoform disorders, panic disorder, other depressive/anxiety disorders, and healthy subjects; to assess the severity of anxiety and depression in undifferentiated somatoform disorder, pain disorder, and hypochondriasis; and to explore whether comorbid somatoform disorders affect the degree of anxiety and depression. Our hypotheses were: (1) the severity of anxiety/depression in somatoform disorders is not lower than that in panic disorder or other anxiety/depressive disorders; (2) comorbidity with somatoform disorders may increase the severity of depression or anxiety in individuals with MDD or GAD; (3) when considering various types of psychiatric diagnoses and demographic factors, somatoform disorders still have a meaningful influence on depression and anxiety.

2. Methods

2.1. Procedure

This study was performed at the National Taiwan University Hospital and the National Taiwan University Hospital, Yun-Lin Branch. The two hospitals are in an urban area of northern Taiwan and a rural area of middle Taiwan, respectively. The Institutional Review Board of National Taiwan University Hospital approved this study. Subjects were recruited between January and December 2014. The research was cross-sectional; all data about a subject were collected on 1 day. The targeted subjects included: (1) psychiatric patients with depression, anxiety, and somatic manifestations and (2) a healthy population without a psychiatric history or chronic somatic discomfort. Enrolling the healthy subjects is for understanding the degree of depression/anxiety in the population around our studying sites. The degree of depression/anxiety in the population around these sites is not necessarily equal to the normative data in Taiwan. Psychiatric patients were referred from the outpatient clinic of the psychiatric department. The outpatients who had the diagnoses of somatoform disorders and did not meet the exclusion criteria were routinely invited to enter this study. Patients complained mainly depressive/anxiety symptoms (e.g. somatic symptoms are not their major concerns) were also recruited into this study. Healthy controls were recruited by posting an advertisement in the hospital and on the internet (it means, if the control subject have somatoform disorders, they are likely to be our outpatients). Potential subjects with the following conditions were excluded: (1) age less than 15 or higher than 70, (2) having psychotic symptoms, reality disturbances, or cognitive impairments, (3) having a life-threatening physical illness, and (4) having problems in understanding words on the questionnaires. After subjects completed the informed consent, diagnostic interviews were performed by board-certified psychiatrists. Members of the research team then gathered demographic data and assisted the subjects in completing the questionnaires. The demographics included age, gender, educational level, marital status, residential location (for understanding possible urban-rural differences), and duration of illness (may be helpful for clarifying whether the chronic somatoform disorders affect the severity of anxiety/depression). Questionnaires used in this study were the Beck Depression Inventory-II and Beck Anxiety inventory, tools to measure the severity of recent emotional disturbances.

2.2. Psychiatric diagnoses and grouping

Diagnostic interviews were performed by four board-certified psychiatrists. The duration of each interview was approximately 20–40 min. Diagnoses were based on DSM-IV-TR criteria. The DSM-IV-TR concept was adopted because there is yet a DSM-5-based structuralized diagnostic tool. Because somatoform disorders were the main target of investigation in this study, the Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I), Module G (Somatoform Disorders) was used for evaluation of this category (First, 2002). According to the definitions, we believed that undifferentiated somatoform disorder and hypochondriasis could be comorbid. The former focused on a “feeling” of somatic discomforts, whereas the latter “worried” about having a severe illness. These two concepts were not mutually exclusive, and this viewpoint was supported by a previous study (Leibbrand et al., 2000). DSM-IV-TR psychiatric diagnoses other than somatoform disorders were made by the same psychiatrists without SCID-I (for shortening the duration of interview and for maintaining the participating will of the subjects). Patients recruited for this study had at least one of following diagnoses: somatoform disorders, mood disorders, anxiety disorders, adjustment disorders, or sleep disorders.

All subjects were divided into four groups according to their diagnoses. Those with current panic disorder belonged to the panic disorder group (PG). Subjects having any one of somatoform disorders entered the somatoform disorders group (SG). In this study, if a patient had a current panic disorder, then a diagnosis of somatoform disorder was not made, so that PG and SG did not