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Dimensional correlates of poor insight in obsessive–compulsive disorder ☆

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ABSTRACT

Background: Cross-sectional studies have associated poor insight in patients with obsessive–compulsive disorder (OCD) with increased OCD symptom severity, earlier age of onset, comorbid depression, and treatment response. The goal of this current study was to examine the relationship between dimensions of OCD symptomatology and insight in a large clinical cohort of Brazilian patients with OCD. We hypothesized that poor insight would be associated with total symptom severity as well as with hoarding symptoms severity, specifically.

Methods: 824 outpatients underwent a detailed clinical assessment for OCD, including the Yale–Brown Obsessive–Compulsive Scale (Y-BOCS), the Dimensional Yale–Brown Obsessive–Compulsive Scale (DY-BOCS), the Brown Assessment of Beliefs Scale (BABS), a socio-demographic questionnaire, and the Structured Clinical Interview for axis I DSM-IV disorders (SCID-P). Tobit regression models were used to examine the association between level of insight and clinical variables of interest.

Results: Increased severity of current and worst-ever hoarding symptoms and higher rate of unemployment were associated with poor insight in OCD after controlling for current OCD severity, age and gender. Poor insight was also correlated with increased severity of current OCD symptoms.

Conclusion: Hoarding and overall OCD severity were significantly but weakly associated with level of insight in OCD patients. Further studies should examine insight as a moderator and mediator of treatment response in OCD in both behavioral therapy and pharmacological trials. Behavioral techniques aimed at enhancing insight may be potentially beneficial in OCD, especially among patients with hoarding.

1. Introduction

Obsessive–compulsive disorder (OCD) is characterized by recurring, intrusive, anxiety-provoking thoughts or images (obsessions) associated with repetitive, physical or mental rituals (compulsions) aimed at relieving the anxiety. Despite being classified as a single disorder, OCD is a clinically heterogeneous condition, both in terms of symptom content (Bloch et al., 2008) and insight into OCD symptoms (Fontenelle et al., 2010). Since the diagnostic qualifier "with poor insight" was included in the DSM-IV in 1994, between 5% and 45% of patients with OCD have been found to have poor insight (Catapano et al., 2010; Eisen et al., 2001; Foa et al., 1995; Kishore et al., 2004; Marazziti et al., 2002; Matsunaga et al., 2002; Storch et al., 2008).

Poor insight has been associated with more severe symptoms (Bellino et al., 2005; Catapano et al., 2010; Kishore et al., 2004; Solyom et al., 1985), earlier age of onset, and longer duration of illness (Catapano et al., 2010; Kishore et al., 2004; Matsunaga et al., 2002). Poor insight has also been found to be associated with comorbid diagnoses such as depression (Catapano et al., 2001; Foa, 1979; Kishore et al., 2004) and body dysmorphic disorder (Eisen et al., 2004) and with a family history of schizophrenia (Catapano et al., 2001, 2010), OCD, and other anxiety disorders (Bellino et al., 2005). Several studies have shown that patients with poor insight are less responsive to behavioral therapy (Foa, 1979;

Abbreviations: OCD, Obsessive–compulsive disorder; Y-BOCS, Yale–Brown Obsessive–Compulsive Scale; DY-BOCS, Dimensional Yale–Brown Obsessive–Compulsive Scale; BABS, Brown Assessment of Beliefs Scale; SCID-P, Structured Clinical Interview for axis I DSM-IV disorders; DSM, Diagnostic and Statistical Manual of Mental Disorders; ANOVA, Analysis of Variance.

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Foa et al., 1999; Himle et al., 2006; Mataix-Cols et al., 2002; Solyom et al., 1985) and to pharmacotherapy (Catapano et al., 2001, 2010; Erzegovesi et al., 2001; Kishore et al., 2004) — although there is not unanimity on this point in the literature, as other studies have found no link between insight and response to CBT (Ito et al., 1995; Lelliott et al., 1988) or SRI trials (Alonso et al., 2008; Eisen et al., 2001; Ferrao et al., 2006).

Therefore, it remains unclear whether insight, by itself, is a predictor of poor treatment response, or whether this relationship is due to other confounding clinical factors. As mentioned above, insight is associated with other clinical variables that are also markers of poor treatment response, such as OCD severity (in some but not all studies (Catapano et al., 2010; Kishore et al., 2004; Solyom et al., 1985; Turksoy et al., 2002)), comorbid illnesses (especially depression, personality disorders and other anxiety disorders) (Alonso et al., 2008; Bellino et al., 2005; Catapano et al., 2010; Kishore et al., 2004; Turksoy et al., 2002), and symptom subtype (Bellino et al., 2005; Samuels et al., 2007b; Saxena, 2007). In order to better understand the poor-insight subgroup, it is important to clarify the pattern of symptoms and other clinical variables that is typically associated with poor insight. Additionally, few studies so far have analyzed how insight would associate with specific OCD symptom patterns. Previous studies have demonstrated a higher proportion of individuals with poor insight have hoarding symptoms which are consistently associated with poor response to treatment (Kishore et al., 2004; Matsunaga et al., 2002; Samuels et al., 2007b; Storch et al., 2007). Another study has found a positive relationship between poor insight and symmetry symptoms (Elvish et al., 2010).

Previous studies generally treated insight as a dichotomous entity (Catapano et al., 2001; Goodman et al., 1989; Himle et al., 2006; Marazziti et al., 2002; Matsunaga et al., 2002; Turksoy et al., 2002). Significant recent advances have been made in the measurement of insight. For instance, standardized instruments such as the Brown Assessment of Beliefs Scale (BABS) (Eisen et al., 1998) and the Overvalued Ideas Scale (OIS) (Neziroglu et al., 1999) have since been developed that allow assessment of insight as a continuous entity. Tools to quantitatively characterize OCD symptom dimensions have similarly advanced in recent years. The Dimensional Yale–Brown Obsessive Compulsive Scale (DY-BOCS) allows assessment of well-validated symptom dimensions of OCD in a continuous fashion (Rosario-Campos et al., 2006). Such continuous measures substantially increase both descriptive subtlety and analytical power.

The goal of the current study was to examine the relationship between OCD symptom dimensions and insight in a large clinical cohort of patients with OCD. We hypothesized that poor insight would be associated with total symptom severity as well as with hoarding symptoms (Bellino et al., 2005; Catapano et al., 2010; Kishore et al., 2004; Matsunaga et al., 2002; Samuels et al., 2007b; Solyom et al., 1985; Storch et al., 2007).

2. Method

2.1. Subjects

Eight hundred twenty-four adult OCD outpatients were recruited from seven sites located in six different Brazilian cities. Subjects were interviewed between August 2003 and August 2008. Subjects were included if they fulfilled DSM-IV diagnostic criteria for OCD, were between 18 and 65 years old and had a current Y-BOCS total score of greater than sixteen. Subjects were excluded if they were diagnosed with schizophrenia or any other condition that could compromise their understanding of the protocol questions. Informed consents were obtained from all participants. The study was approved by the Ethics Committees from all participating sites (Miguel et al., 2008).

2.2. Procedure

A more detailed description of the assessment methodology used for this study can be found elsewhere (Miguel et al., 2008). In brief, all interviews were performed by clinical psychologists or psychiatrists with expertise in OCD. Socio-demographic and clinical data were collected using a questionnaire developed by the researchers. The interviews were typically conducted over 2 to 5 h. A number of standardized instruments were used in the clinical interview. The Structured Clinical Interview for Diagnosis of Axis I (SCID-I) (First et al., 1997) was administered to confirm the diagnosis of OCD and to assess the presence of comorbid axis I disorders. The Yale–Brown Obsessive–Compulsive Scale (Y-BOCS) (Goodman et al., 1989) was used to determine global symptom severity. The Dimensional Yale–Brown Obsessive–Compulsive Scale (DY-BOCS) (Rosario-Campos et al., 2006) was administered to assess global severity of OCD as well as severity in each of the six OCD symptom dimensions, which include some obsessions and related compulsions (aggressive, sexual/religious, symmetry/ordering/counting, contamination/cleaning, hoarding, and miscellaneous). The score for each dimension has a range of 0 (no symptoms) to 15 (symptoms are extremely troublesome). The overall DY-BOCS score has a range of 0 to 30.

The Brown Assessment of Beliefs Scale (BABS) (Eisen et al., 1998) was used to rate the level of each subject's insight into their OCD symptoms. The BABS is a 7-item scale originally designed to measure degree of insight in OCD patients. The BABS consists of the items measuring conviction, perception of others' views of beliefs, explanation of differing views, fixity of ideas, attempt to disprove beliefs, insight, and ideas/delusions of reference. Each item ranges from 0 (non-delusional, or least pathological) to 4 (delusional, or most pathological) which leads to a total score with a range of 0 to 24. The BABS was translated into Portuguese by investigators with long-standing experience in OCD and fluency in both English and Portuguese. The Portuguese-language version of the BABS has not been validated or published upon previously.

2.3. Data analysis

Exploratory analysis of the relationship between clinical variables and insight was performed using PASW Statistics 18.0 (Inc., 2009). Patients were divided into 4 subgroups based on BABS insight score: a "perfect" insight group with a score of 0, a "good" insight group with a score of 1 to 11, a "poor" insight group with a score of 12 to 18, and a "delusional" group with a score of 19 to 24. The thresholds for dividing these groups were specified a priori and based on methodology for prior studies (Catapano et al., 2010; Eisen et al., 1998). We compared these 4 groups of patients on several demographic variables, using ANOVA for continuous variables and the Kruskal–Wallis H test for dichotomous variables. A total of 26 clinical comparisons were performed. Because these analyses were exploratory and intended for hypothesis generation, we set the threshold for statistical significance at $p<0.05$. All significant findings were then entered into an additional ANOVA model with Y-BOCS total score as a covariate to adjust for potential confounding by overall symptom severity.

Further statistical analyses were performed with STATA 11 (StataCorp., 2009). Our primary goal was to determine whether dimensional OCD symptom current and worst-ever severity scores on the DY-BOCS were associated with insight after adjusting for overall OCD symptom severity. We used Tobit regression rather than linear regression because BABS score were not normally distributed in our sample: BABS scores were left-censored with a large number of zero values. First, we conducted a Tobit regression in order to describe the association of OCD symptom severity with level of insight, with BABS score as the dependent variable, Y-BOCS score was the independent variable and age and gender as covariates which were forced in the model.

Then, we investigated the association of DY-BOCS symptom dimensions with insight and performed a backward stepwise Tobit regression, with the total BABS score as dependent variable, forcing in age, gender and total Y-BOCS score as covariates. We entered the five