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Personality dimensions and treatment drop-outs among eating disorder patients treated with cognitive behavior therapy

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Abstract

Premature, unilateral interruption of inpatient treatment of eating disorders (ED) is a key factor limiting success. We evaluated the role of personality dimensions (temperament and character) in predicting drop-out in 145 consecutive ED inpatients (133 females) who entered cognitive behavior therapy. Baseline assessment included anthropometry, the Eating Disorder Examination, the Beck Depression Inventory, the State-Trait Anxiety Inventory, and the Temperament and Character Inventory (TCI). Treatment was based on the new transdiagnostic cognitive behavior theory of ED, adapted for an inpatient setting; it was manual-based and lasted 20 weeks (13, inpatients; 7, residential day hospital). Thirty-four patients (23.4%) discontinued treatment. Drop-outs had a lower level of education, a higher prevalence of separation or divorce in the family, and lower scores on the TCI Persistence scale. After correction for age, gender and body-mass index, scores on the Persistence scale continued to be significantly related to drop-out, and the association was confirmed by Kaplan-Meier analysis. Eating disorder patients with low Persistence scores are significantly less likely to complete inpatient treatment.

Keywords: Eating disorders; Drop-out; Persistence; Personality; Inpatient; Cognitive-behavioral

1. Introduction

Inpatient treatment is often indicated for the management of anorexia nervosa. Indications include medical instability, risk of suicide, severe interpersonal problems at home, and failure of less intensive methods (Fairburn et al., 2003; Vandereycken, 2003; Yager and Andersen, 2005). For bulimia nervosa in the US and UK, the majority of treatment takes place in outpatient settings. Commonly, in European countries, such as Italy, Germany and Switzerland, and with varying frequency in the US, inpatient treatment is offered to patients who fail to respond to outpatient treatment (Mahon, 2000; Dalle Grave, 2005a). No indications have been published for the inpatient treatment of eating disorders not otherwise specified (NOS), although a recent survey found that approximately 40% of the patients admitted to a specialist inpatient unit for eating disorders meet the diagnostic criteria for this category (Dalle Grave and Calugi, 2007).

The clinical approach to eating disorder treatment in inpatient settings gradually shifted from a restrictive

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behavioral approach, involving compulsory hospitalization, toward a more lenient approach with fewer behavioral constraints (Touyz et al., 1984; Dalle Grave et al., 1993). Many current inpatient therapeutic efforts are dedicated to engaging patients in the treatment protocol and allowing them to retain a larger degree of control over the treatment process. Despite these changes, most subjects with eating disorders often terminate inpatient treatment prematurely (Woodside et al., 2004). Longitudinal data indicate that dropping out is predictive of a poorer post-treatment outcome (Baran et al., 1995; Carter et al., 2004). These observations underline the importance of studying factors involved in the drop-out process. A better knowledge of these factors could help develop strategies to reduce attrition and thus improve the final outcome (Woodside et al., 2004).

The drop-out rate in outpatient controlled trials of psychotherapy for anorexia nervosa is extremely variable, averaging nearly 40% in adults (Agras et al., 2004; Halmi et al., 2005), and varying from 10% to 20% in adolescents (Szmukler et al., 1985; Lock et al., 2006). In adult bulimia nervosa patients, the drop-out from outpatient controlled trials is on average 20%, with a range from 0% to 35% (Mitchell, 1991). No data are available in adolescents with bulimia nervosa and in patients with eating disorder NOS.

All the empirical investigations on drop-out in inpatient eating disorder units were carried out on anorexia nervosa. Five studies focused on adults (Vandereycken and Pierloot, 1983; Kahn and Pike, 2001; Surgenor et al., 2004; Woodside et al., 2004; Zeeck et al., 2005) and one on adolescent patients (Godart et al., 2005). The drop-out rate ranged from 20.2 to 51% with a median around 32.4%. A small number of baseline characteristics were found to predict drop-out in two or more independent studies. Predictors included the binge eating/purging type of anorexia nervosa (Kahn and Pike, 2001; Surgenor et al., 2004; Woodside et al., 2004), higher levels of maturity fears (Woodside et al., 2004; Zeeck et al., 2005), older age at onset of anorexia nervosa (Vandereycken and Pierloot, 1983; Godart et al., 2005), and older age at admission (Vandereycken and Pierloot, 1983; Godart et al., 2005). Additional predictors of premature termination of inpatient treatment were identified in a single study. These included longer duration of illness, lower educational or socioeconomic status, different treatment method (Vandereycken and Pierloot, 1983), lower restraint scores, more intense concerns about weight (Woodside et al., 2004) and active fluid restriction (Surgenor et al., 2004). Finally, in two unrelated studies treatment discontinuation was associated with lower body mass index (BMI) at admission (on average, 13.9 kg/m^2 vs. 14.8 in continuers; $P<0.007$) (Surgenor et al., 2004) or higher BMI ($P<0.03$) (Godart et al., 2005).

The role of personality, assessed by the seven-factor model of the Temperament and Character Inventory (TCI) (Cloninger, 1994), in the decision of eating disorder patients to discontinue treatment has been little investigated (Fassino et al., 2004). One study found that patients with anorexia nervosa who dropped out of treatment with brief outpatient individual psychodynamic psychotherapy had lower scores than completers on Harm Avoidance, Self-Directedness and Cooperativeness (Fassino et al., 2002b). In a similar setting, the same investigators found that drop-outs with bulimia nervosa had lower scores than completers on Self-Directedness and Cooperativeness (Fassino et al., 2003). No data are available on hospitalized patients with anorexia nervosa, bulimia nervosa and eating disorder NOS.

In the present study we tested the role of personality dimensions in predicting drop-out in a large sample of eating disorder patients representing the three DSM-IV (American Psychiatric Association, 2000) diagnostic subtypes (anorexia nervosa, bulimia nervosa, and eating disorder NOS) who had been consecutively hospitalized in a specialist eating disorder inpatient unit. Our hypothesis was that personality dimensions different from those identified in outpatient studies might predict drop-out in an inpatient setting.

2. Methods

2.1. Subjects

Participants comprised 145 Caucasian patients (133 females and 12 males; age range, 13–50) with an eating disorder diagnosed according to DSM-IV criteria. All patients were consecutively and voluntarily admitted to the eating disorder inpatient unit of Villa Garda Hospital between November 2003 and November 2005. All these patients had failed less intensive treatments (e.g. outpatient treatment) or had an eating disorder of clinical severity not manageable in an outpatient setting. Patients with active substance abuse, schizophrenia and other psychotic disorders were not included. The indications and contraindications for the inpatient treatment were evaluated during an eligibility interview completed by a senior specialist in the field (RDG). The Eating Disorder Examination interview (EDE) 12.0D (Fairburn and Cooper, 1993) was used to generate operational definitions of the DSM-IV diagnoses of anorexia nervosa and bulimia nervosa. Those eating disorders that did not meet the operational definitions of