J. Behav. Ther. & Exp. Psychiat. 41 (2010) 381–388

Contents lists available at ScienceDirect

Journal of Behavior Therapy and Experimental Psychiatry

journal homepage: www.elsevier.com/locate/jbtep

Dialectical behaviour therapy and an added cognitive behavioural treatment module for eating disorders in women with borderline personality disorder and anorexia nervosa or bulimia nervosa who failed to respond to previous treatments. An open trial with a 15-month follow-up

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ARTICLE INFO

Article history:
Received 30 July 2008
Received in revised form
8 April 2010
Accepted 8 April 2010

Keywords:
Eating disorders
Borderline personality disorder
Dialectical behavior therapy

ABSTRACT

There is evidence from case studies suggesting that adapted dialectical behavior therapy (DBT) for borderline personality disorder (BPD) and eating disorders (ED) might improve disorder related complaints. Twenty-four women with BPD (9 with comorbid anorexia nervosa [AN] and 15 with bulimia nervosa [BN]), who already had failed to respond to previous eating-disorder related inpatient treatments were consecutively admitted to an adapted inpatient DBT program. Assessment points were at pre-treatment, post-treatment, and 15-month follow-up. At follow-up, the remission rate was 54% for BN, and 33% for AN. Yet 44% of women with AN crossed over to BN and one woman additionally met the criteria of AN. For women with AN, the mean weight was not significantly increased at post-treatment, but had improved at follow-up. For women with BN, the frequency of binge-eating episodes was reduced at post-treatment as well as at follow-up. Self-rated eating-related complaints and general psychopathology, as well as ratings on global psychosocial functioning, were significantly improved at post-treatment and at follow-up. Although these findings support the assumption that the adapted DBT inpatient program is a potentially efficacious treatment for those who failed to respond to previous eating-disorder related inpatient treatments, remission rates and maintained eating-related psychopathology also suggest that this treatment needs further improvement.

1. Introduction

According to the "Practice guideline for the treatment of patients with eating disorders" of the American Psychiatric Association (2006), both women and men with eating disorders (ED) should be routinely assessed for personality disorders (PD). Previous studies have reported comorbidity rates for ED and borderline personality disorder (BPD) of around 3% for anorexia nervosa, restricting type, 21% for bulimia nervosa (BN), and 9% for binge-eating disorder (BED), when the disorders were assessed by diagnostic interviews (Cassin & von Ranson, 2005). Considering the potentially confounding effect of malnutrition at intake, personality pathology might be more difficult to detect in samples with AN. However, women who recovered from anorexia nervosa, restricting type (AN-R) or binge-purging type (ANBP) showed a low and similar rate of Cluster B disorders (5% and 11%, respectively; Wagner et al., 2006).

The comorbidity with BPD may have significant implications for the course and outcome of treatment for ED. For individuals with BN, the presence of BPD seems to be associated with a history of more frequent hospitalizations, a higher severity of psychopathology, lower levels of global psychosocial functioning, and more interpersonal problems (Johnson, Tobin, & Enright, 1989; Steiger, Thibaudeau, Leung, Houle, & Ghadirian, 1994; Wonderlich & Swift, 1990). In cluster-analytic approaches, the most impaired of three subgroups with BN were individuals classified as emotionally

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doi:10.1016/j.jbtep.2010.04.001

dysregulated (Thompson-Brenner & Westen, 2005; Westen & Harnden-Fischer, 2001). Compared to an over-controlled and a high-functioning subtype, those individuals had more experiences of sexual abuse, a more intensive treatment history, and higher comorbidity, particularly BPD. Furthermore, comorbid BPD increased the risk of poor response to psychosocial treatment (e.g., Coker, Vize, Wade, & Cooper, 1993; Herzog, Keller, Lavori, & Sacks, 1991; Johnson et al., 1989; Rossiter, Agras, Telch, & Schneider, 1993; Steiger & Stotland, 1996) and negative long-term outcomes for individuals with BN (Fichter, Quadflieg, & Rief, 1994).

To the best of our knowledge, there is no literature describing the impact of BPD on the course and outcome of AN. In one study, impulsivity was one of the factors predicting worse long-term outcomes (Fichter, Quadflieg, & Hedlund, 2006). In contrast, no association emerged in another study (Eddy et al., 2002). For patients with BED, poorer treatment response was reported for those with comorbid Cluster B psychopathology (15 of 20 participants with BPD; Wilfley et al., 2000). Additional evidence from cluster analyses revealed a subtype with predominant dieting behavior and a subtype with affective disturbance. The latter subtype was associated with elevated eating pathology, lower psychosocial functioning, and worse treatment response. In this subtype, 46% of the participants met the criteria for at least one personality disorder, and 21% fulfilled the criteria for BPD (Stice et al., 2001).

Currently, dialectical behavior therapy (DBT; Linehan, 1993a, b) is the most frequently investigated psychosocial intervention for BPD. This comprehensive treatment program is targeted at (1) promoting the motivation for change by detailed chain analyses, validation strategies, and management of reinforcement contingencies in individual therapy twice a week; (2) increasing target-oriented and appropriate behavior by teaching skills in a weekly group-format training, to control mindfully attention and cognition, regulate emotions, accept emotional distress, and make patients more effective in interpersonal situations; (3) ensuring the transfer of newly learned skills to everyday life by telephone coaching and case management; and (4) supporting therapists' motivation and skills with a weekly consultation team. The efficacy and effectiveness of DBT are summarized in several reviews (e.g., Lieb, Zanarini, Schmahl, Linehan, & Bohus, 2004; Oldham, 2006). In addition, DBT has been adapted to various target groups (e.g., adolescents, elderly persons) and specific settings (e.g., forensic inpatients, case management). Given that individuals with BPD are prone to frequent use of psychiatric facilities (Bender et al., 2001), the original outpatient model was modified for inpatients (Swenson, Sanderson, Dulit, & Linehan, 2001). In previous studies (Bohus et al., 2004; Kleindienst et al., 2008; Kröger et al., 2006), findings support the assumption that the inpatient treatment program reduced self-rated general psychopathology, depression, anxiety, dissociation, and self-mutilating behavior at post-treatment and at follow-up.

Recently, a randomized controlled trial comparing DBT and treatment by experts was conducted targeting only BPD (Harned et al., 2008). When comorbid ED were present, 27% overall reached the criteria for full remission from ED. This would suggest that further adaptation of DBT for individuals with dual diagnosis is needed. Other studies compared modified DBT for the treatment of outpatients with BED and BN alone to wait-list control conditions in randomized controlled trials. Women with BED who were treated with DBT improved on measures of binge-eating and eating-related pathology (Telch, Agras, & Linehan, 2001). A total of 89% stopped binge-eating by the end of treatment, and 56% were abstinent at the 6-month follow-up. Women with BN receiving DBT reduced their purging behavior by 98% and reached an abstinence rate of 29% (Safer, Telch, & Agras, 2001). DBT also appeared to improve the urge to eat in response to negative emotions.

In light of this evidence for the efficacy of DBT, Wilson, Grilo, and Vitousek (2007) suggested that individuals with BN and comorbid BPD should be treated with DBT strategies combined with cognitive behavioral therapy (CBT), which was considered as the first choice of treatment for BN. Also, it was recommended that DBT should be used to directly address comorbid BPD psychopathology in samples with BN (Rossiter et al., 1993; Wilson, 1996). Other authors proposed DBT interventions for individuals with ED and high scores of impulsivity (Bruce & Steiger, 2005).

To date, two case series examining DBT for individuals with ED and comorbid BPD have been published. Palmer et al. (2003) expanded a DBT outpatient program at a specialized ED unit to include a treatment module that trained patients in skills addressing eating behavior. At the outset of their study of 7 women with BPD, 5 fulfilled criteria for BN, 1 fulfilled criteria for BED, and 1 fulfilled criteria for an eating-disorder not otherwise specified (EDNOS). No data were given as to whether a participant had previously been treated for an ED. After 6–18 months, 3 women were in remittance and 4 fulfilled the criteria of EDNOS.

Based on clinical notes or diary-card entries, the frequency of self-injury and the number of inpatient bed days were reduced. No statistical analyses were conducted. Recently, a 6-month outpatient DBT program was conducted for 5 women with BED and 3 with BN as well as a comorbid BPD (Chen, Matthews, Allen, Kuo, & Linehan, 2008). One woman reported three inpatient stays due to AN, BN, and drug abuse. Concerning the binge-eating behavior, individual and group therapy were adapted to include the following: a description of binge-eating as a dysfunctional behavior to regulate aversive affective states; self-monitoring by a supplemented diary card; a 24-h time-out for the interaction between therapist and client after binge-eating behavior; eating and body mindfulness exercises; and acceptance strategies. One woman dropped out before post-treatment assessment, and another woman at 6-month follow-up. Although no statistical analyses were performed, large effect sizes indicate that the frequencies of self-injury, suicide attempts, and binge-eating episodes assessed by standardized interviews were reduced from pre-treatment to post-treatment.

With regard to the likelihood of increased risk for poor response and negative outcomes in psychosocial treatment for individuals with ED and BPD, the research question is raised whether those individuals who failed to respond to previous disorder related treatments benefit from a second-level treatment. Given the evidence for DBT as a treatment for BPD as well as a stand-alone treatment for BN and BED, findings from two case studies suggest that DBT is also an efficacious treatment for both BPD and ED. Note that a statistical analysis was not conducted, nor was a follow-up assessment reported in those case studies. Additionally, most studies were conducted in outpatient settings, although inpatient treatment programs are integrated into the mental-health care systems in most European countries. Hence, there is a need for further research to examine DBT inpatient programs.

The present study used data from a specialized BPD inpatient unit in Germany that provides a treatment module for BPD patients with comorbid ED. We selected individuals with BPD and AN/BN who were referred by health professionals because these patients failed to respond to at least one treatment targeting eating disorder. The aim of the present study was to investigate the preliminary efficacy of a 3-month DBT program adapted to an inpatient setting, and focusing on eating-disorder related complaints. Four hypotheses were tested: (1) We predict that the mean weight of individuals with AN will be increased at post-treatment. This level of weight gain should be maintained at follow-up. Also, we predict that indices for other eating-disorder related complaints will be reduced at post-treatment. In addition, the reduced symptom level should be maintained at follow-up. (2) With regard to individuals