Available online at www.sciencedirect.com

ScienceDirect

Behavior Therapy 45 (2014) 314–327

Behavior Therapy

www.elsevier.com/locate/bt

Modular Cognitive-Behavioral Therapy for Body Dysmorphic Disorder: A Randomized Controlled Trial

Sabine Wilhelm
Massachusetts General Hospital and Harvard Medical School

Katharine A. Phillips
Elizabeth Didie
Rhode Island Hospital and Alpert Medical School of Brown University

Ulrike Buhlmann
Humboldt-Universität zu Berlin

Jennifer L. Greenberg
Jeanne M. Fama
Aparna Keshaviah
Massachusetts General Hospital and Harvard Medical School

Gail Steketee
Boston University

There are few effective treatments for body dysmorphic disorder (BDD) and a pressing need to develop such treatments. We examined the feasibility, acceptability, and efficacy of a manualized modular cognitive-behavioral therapy for BDD (CBT-BDD). CBT-BDD utilizes core elements relevant to all BDD patients (e.g., exposure, response prevention, perceptual retraining) and optional modules to address specific symptoms (e.g., surgery seeking).

Thirty-six adults with BDD were randomized to 22 sessions of immediate individual CBT-BDD over 24 weeks (n = 17) or to a 12-week waitlist (n = 19). The Yale-Brown Obsessive-Compulsive Scale Modified for BDD (BDD-YBOCS), Brown Assessment of Beliefs Scale, and Beck Depression Inventory–II were completed pretreatment, monthly, posttreatment, and at 3- and 6-month follow-up. The Sheehan Disability Scale and Client Satisfaction Inventory (CSI) were also administered. Response to treatment was defined as ≥30% reduction in BDD-YBOCS total from baseline. By week 12, 50% of participants receiving immediate CBT-BDD achieved response versus 12% of waitlisted participants (p = 0.026). By posttreatment, 81% of all participants (immediate CBT-BDD plus waitlisted patients subsequently treated with CBT-BDD) met responder criteria. While no significant group differences in BDD symptom reduction emerged by Week 12, by posttreatment CBT-BDD resulted in significant decreases in BDD-YBOCS total over time (d = 2.1, $p < 0.0001$), with gains maintained during follow-up. Depression, insight, and disability also significantly improved. Patient satisfaction was high, with a mean CSI score of 87.3% (SD = 12.8%) at

This research was supported in part by a grant from the National Institute of Mental Health to Dr. Wilhelm (R34 MH070490). The authors wish to thank Kara Watts, Stefanie Renaud, Tracy Singer, Katherine Crowe, Irina Kasarskis, William Menard, Luana Marques, Sherrie Delinsky, Hillary Cerullo, Angela Stewart, Jennifer Ragan, and Natasha Hansen for their assistance in conducting this study.

Address correspondence to Sabine Wilhelm, Ph.D., Massachusetts General Hospital, Simches Research Building, 185 Cambridge Street, Suite 2282, Boston, MA, 02114; e-mail: wilhelm@psych.mgh.harvard.edu.

0005-7894/45/314-327/$1.00/0

posttreatment. CBT-BDD appears to be a feasible, acceptable, and efficacious treatment that warrants more rigorous investigation.

Keywords: body dysmorphic disorder; BDD; cognitive-behavioral therapy; body image; treatment

BODY DYSMORPHIC DISORDER (BDD) is a common and severe disorder characterized by distressing or impairing preoccupation with nonexistent or slight defects in physical appearance (American Psychiatric Association [DSM-IV-TR], 2000). BDD affects an estimated 1.7% to 2.4% of the population (Buhlmann et al., 2010; Koran, Abujaoude, Large, & Serpe, 2008; Rief, Buhlmann, Wilhelm, Borkenhagen, & Brähler, 2006). The disorder typically begins during early adolescence (Phillips & Diaz, 1997; Phillips et al., 2006) and in observational studies is associated with a chronic, unremitting course (Phillips et al., 2013). Intrusive appearance-related thoughts occupy an average of 3 to 8 hours per day (Phillips, Gunderson, Mallya, McElroy, & Carter, 1998). Individuals with BDD usually display poor or absent insight, with more than one-third of patients describing delusional beliefs about being disfigured (Eisen, Phillips, Coles, & Rasmussen, 2004; Phillips, 2004; Phillips, McElroy, Keck, Pope, & Hudson, 1994). Two-thirds have ideas/delusions of reference, believing others take special notice of the "defect" (e.g., mock it; Phillips, 2004; Phillips et al., 1994). Sufferers engage in time-consuming ritualistic behaviors aimed at checking, hiding, or improving perceived flaws, such as surgery seeking, self-injurious skin picking, or excessive grooming (Phillips et al., 1998). BDD often causes marked social, academic, and occupational impairment. Individuals with BDD may drop out of school or work, or have difficulty developing or maintaining meaningful relationships due to appearance concerns (Phillips & Diaz, 1997). BDD is associated with high lifetime rates of psychiatric hospitalization, being housebound, and suicidality (Phillips et al., 2005; Phillips & Menard, 2006).

Despite the prevalence and morbidity associated with BDD, treatment research on BDD is scarce. Case reports, case series, and two studies using waitlist control groups provided initial, preliminary support for the effectiveness of CBT specifically developed for BDD (see Ipser, Sander, & Stein, 2009; Wilhelm, Phillips, Fama, Greenberg, & Steketee, 2011; Williams, Hadjistavropoulos, & Sharpe, 2006, for review). These preliminary studies were promising; however, conclusions about the generalizability and replicability of their results are limited by the small number of studies, small sample sizes, and restrictive inclusion criteria (see Wilhelm et al., 2011, for review). Moreover, most prior studies of CBT did not report on medication use during treatment. This is a major limitation, given that certain medications have been shown to be efficacious for BDD (e.g., Phillips & Hollander, 2008). Furthermore, only one study was based on a treatment manual (unpublished), which focused on weight/shape concerns (which are not among the most common areas of concern in BDD). Treatment manuals allow for standardized dissemination of a new treatment. Thus, the lack of a widely applicable and tested CBT manual for BDD has been a major limitation for the field.

To this end, Wilhelm and colleagues recently developed a manual for a modular individual CBT for BDD (CBT-BDD; Wilhelm, Phillips, & Steketee, 2013). CBT-BDD is informed by cognitive-behavioral models of the development and maintenance of BDD (e.g., Veale, 2004; Wilhelm, Buhlmann, Hayward, Greenberg, & Dimaite, 2010; Wilhelm & Neziroglu, 2002; Wilhelm et al., 2011), including recent studies suggesting that BDD patients focus on details at the expense of reduced processing of global features (e.g., Deckersbach et al., 2000; Feusner, Townsend, Bystritsky, & Bookheimer, 2007). CBT-BDD utilizes standard core elements relevant to all BDD patients, plus optional modules used as needed. Core treatment elements include psychoeducation, cognitive interventions (e.g., to address maladaptive beliefs related to BDD, the importance of appearance or self-worth), exposure to avoided situations and prevention of rituals, and mindfulness and perceptual retraining (e.g., to reduce selective attention to details such as appearance flaws). Optional treatment modules are provided to flexibly tailor treatment to address symptoms that affect some but not all patients (e.g., skin picking, surgery seeking). For all patients, treatment ends with relapse prevention strategies and booster sessions focused on helping patients maintain their gains.

Wilhelm et al. (2011) piloted their CBT-BDD manual (n = 12) using expert therapists (S.W., K.P., G.S.) to test treatment procedures, determine treatment duration, and revise the manual based on actual application. The use of broader inclusion criteria than most prior CBT studies increased the sample's representativeness. The 2011 Wilhelm et al. study included individuals with suicidal thinking, delusional BDD beliefs, and males as well as females. In intent-to-treat (ITT) analyses, BDD symptoms and depressive symptoms improved significantly at posttreatment. Seventy-five percent of the ITT sample were treatment responders (i.e., had at least a 30% reduction in BDD-symptom severity over the course of treatment), as were 80% of the completer sample.