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THE DEVELOPMENT OF A MEASURE TO ASSESS PUTATIVE MECHANISMS OF CHANGE IN THE TREATMENT OF BORDERLINE PERSONALITY DISORDER

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Borderline personality disorder (BPD) is a prevalent, chronic, and serious psychiatric problem characterized by a pattern of chaotic and self-defeating interpersonal relationships, emotional lability, identity disturbance, poor impulse control, frequent angry outbursts, frequent suicidality, and self-mutilation (Skodol et al. 2002).

Psychotherapy is the recommended primary technique for treating BPD patients (Oldham et al. 2001) and is the most widely practiced approach to their treatment. A meta-analysis (Perry, Banon, and Ianni 1999) suggests that psychotherapy is an effective treatment for personality disorder and may be associated with up to a sevenfold faster

rate of recovery in comparison with the natural course of the disorder. Several outcome studies have now demonstrated the efficacy and effectiveness of various treatments for BPD (Bateman and Fonagy 1999; Clarkin et al. 2001; Levy et al. in press; Linehan et al. 1991, 1999). Our own work (Clarkin et al. 2001) evaluated the effects of Transference-Focused Psychotherapy (TFP; Clarkin, Yeomans, and Kernberg 2006), a manualized and highly structured psychodynamic treatment, based on Kernberg's object relations theory, for treating BPD. This study found impressive reductions in the severity of self-harm behaviors, frequency of suicide attempts, and number and length of hospitalizations. In addition, reliable increases in global functioning and a generally low dropout rate of only 19.1% were observed in these patients. In a later study we found both symptomatic changes in terms of suicidality and reduction of depression (Clarkin, Levy, and Schiavi 2005) and personality changes in terms of changes in reflective function (Levy et al. in press).

Although outcome studies such as these are important for demonstrating the efficacy and effectiveness of treatment, their probative value for understanding a treatment's underlying processes of change is indirect and limited (Garfield 1990) and leaves clinicians with a high degree of uncertainty about the specific therapeutic techniques that relate to outcome in the treatment of BPD. Researchers are therefore confronted with much uncertainty as to the underlying processes of change. Understanding what promotes therapeutic change requires more direct study of treatment processes, including the specific techniques, common factors, patient characteristics, and therapist factors that might relate to outcome. Process research, more than comparative outcome studies or even experimental tests, is likely to be useful in providing evidence for or against the theoretical propositions that guide different psychological treatments and provide guidance to clinical practice. Validation for the treatment occurs to the extent that the proposed mechanisms of change are actually related to the treatment's effectiveness. Thus, identifying change processes has important implications for the evolution of clinical theory, effective practice, empirically grounded training and supervision, and efficient service delivery (Dahl, Kächele, and Thomä 1988).

However, despite the findings of clinical researchers such as Jones and Strupp, identifying mechanisms of change through process research has proved to be an ongoing challenge for psychotherapy

researchers. A number of authors have concluded that progress has been slow and the results disappointing (e.g., Greenberg and Pinsof 1986; Orlinsky and Howard 1986; Shapiro et al. 1994). These authors have identified three main problems with process research: (1) there is a lack of focus on specific theoretically driven treatments, (2) often measures assess vague, nonspecific techniques, and (3) often patient groups represent heterogenous diagnostic groups. That is, many previously developed process measures have been limited in their utility for examining the techniques and process variables driving therapeutic change in patients with BPD because they have been designed as transdiagnostic and pantheoretical measures.

In order to link specific treatment process variables to treatment outcome in patients with BPD, Levy and colleagues (2005) are developing a multi-item measure of psychotherapy technique and patient-therapist process called the Psychotherapy Process Rating Scale for Borderline Personality Disorder (PPRS-BPD). The PPRS-BPD is a 238-item measure developed to assess patient and therapist factors, specific therapist techniques, common factors, and putative mechanisms of change in three standard treatments for BPD: Dialectical Behavioral Therapy (DBT), Transference-Focused Therapy (TFP), and Supportive Psychotherapy (SPT). The PPRS-BPD was designed to be used with audiotaped or videotaped records of single treatment sessions. Items were designed to reflect the treatment techniques and patient-therapist process in TFP, DBT, and SPT, as well as common factors and proscribed techniques in each of the three treatments.

In this presentation we describe the conceptualization and approach to the development of a psychotherapy process measure designed to assess putative mechanisms of change in three common approaches to the treatment of BPD. In addition, we present details of our approach to training raters, as well as initial reliability data.

Methods

Participants. Participants were patients recruited from all treatment settings (i.e., inpatient, day hospital, and outpatient clinics) within the New York Presbyterian Hospital–Weill Medical College, Cornell University, Westchester Division, for an NIMH treatment development study (John F. Clarkin, PT; NIMH *MH-53705-02*). Potential subjects were screened with both clinical and semistructured interviews. A total of 38 patients were evaluated and met criteria for inclusion in the study.

Twenty-three subjects completed the planned treatment. Subjects ranged in age from 19 to 48 years (M = 32.71; SD = 7.52). Nineteen subjects (82.4%) were Caucasian; 4 (17.6%) were Hispanic.

Process measure. The Psychotherapy Process Rating Scale for Borderline Personality Disorder (PPRS-BPD) is designed (1) to assess therapist adherence and competence vis-à-vis the TFP manual; (2) to differentiate TFP from other psychotherapeutic approaches; and (3) to assess specific observable key therapeutic techniques and facilitative behaviors in the psychotherapy process with patients diagnosed with BPD so as to allow for the examination of the relationship between psychotherapy techniques and outcome. Each of the items is rated on a 9-point Likert scale, with respect to the frequency of therapist actions (adherence) and the quality of the delivery of those actions (competence). Consistent with the recommendations of Waltz and colleagues (1993), the items were designed to reflect techniques that are (1) unique and essential, (2) essential but not unique, (3) acceptable but not necessary, or (4) proscribed. The items were derived using a three-step instrument-development process. First, the treatment manual and training materials were reviewed in order to identify a preliminary roster of endorsed and proscribed interventions and techniques. These rosters were refined by three therapists with expertise in TFP for accuracy and inclusiveness (Kernberg, Clarkin, and Yeomans). Second, observational coding items representing the interventions on each roster were developed and then reviewed by experienced TFP therapists, and a preliminary instrument was constructed. In the third step, not yet complete, pilot items will be used by multiple raters to code at least fifty hours of videotaped TFP sessions. The final composition of the PPRS-BPD will be decided on the basis of the theoretical salience, representativeness, and reliability of each item.

Raters. Four raters were trained in the use of the PPRS-BPD by the first author. Raters are advanced clinical psychology doctoral students with psychotherapy experience, but inexperienced in working with severely disturbed borderline patients and relatively naive regarding treatment approaches for BPD. Raters were trained in a group format for two hours a week over a four-month period to reach adequate pre-study reliability (an intraclass correlation coefficient [$ICC_{(2,6)}$]> .70). Training consisted of didactic instruction and discussion of instrument; trainer and peer review of practice scales using pilot cases; and coding exercises designed to test and expand understanding of each scale item.

Raters reconvene on a weekly basis for the duration of the study for supportive training and to prevent rater drift. Raters code entire videotaped therapy sessions, which are randomly assigned.

Data Analysis and Results

Each of the four coders independently watched and rated ten randomly selected psychotherapy sessions from the Clarkin and colleagues (2001) BPD outcome study using the PPRS-BPD. After rating each session using the PPRS-BPD, the coders met to reach consensus on discrepant scores and to refine items. Reliability coefficients were calculated based on ratings before consensus was reached. Intraclass correlations (ICCs) between the four independent PPRS-BPD ratings were calculated using a mixed effects model with absolute agreement. All analyses were conducted using SPSS, version 14.0 (SPSS 2005). Independent ratings of ten videotaped psychotherapy sessions by these four raters resulted in average measure ICCs ranging from .90 to .96 and single measure ICCs ranging from .78 to .92. The overall ICC was .93.

Discussion

The results of this study provide preliminary support for the interrater reliability of the PPRS-BPD for identifying the specific, nonspecific, patient, and therapist factors in psychodynamic psychotherapy for BPD. Future presentations will examine the factor structure of the measure and relate factor dimensions to aspects of outcome. In addition, we will present data evaluating the reliability and effectiveness of the PPRS-BPD for identifying process components in other specific therapies for BPD, including behavioral and supportive treatments.

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