Psychotherapy for Patients With Borderline Personality Disorder: Focusing on the Mechanisms of Change



John F. Clarkin

Joan and Sanford I. Weill Medical College of Cornell University



Kenneth N. Levy

Pennsylvania State University and Joan and Sanford I. Weill Medical College of Cornell University

A major development in the field of psychotherapy research is the growing recognition of the need for evidence on the mechanisms of change in psychotherapy. The empirical evidence that psychotherapy has a positive and significant effect must be amplified with data on the mechanisms of action in the various psychotherapies. This special issue is devoted to the articulation of putative mechanisms of change in the psychotherapy of patients with borderline personality disorder by leading researchers in this field. © 2006 Wiley Periodicals, Inc. J Clin Psychol 62: 405–410, 2006.

Keywords: borderline personality disorder; mechanisms of change

There have been important milestones in the development of psychotherapy research that have shaped the field as we now know it. This special issue has been constructed around what could become the next significant milestone in the field: focus on the mechanisms of change in psychotherapy research.

Mechanisms of change research involves a detailed analysis of how the intervention procedures within the treatment session impact on the patient processes that precede and are crucial to ultimate clinical change. The question of the mechanisms of change in psychotherapy seeks to learn how a particular therapy works, not what is the outcome of the treatment per se. In reference specifically to the treatment of patients who have borderline personality disorder (BPD), what are the in-session treatment procedures that

Correspondence concerning this article should be addressed to: John F. Clarkin, Ph.D., New York Presbyterian Hospital—Cornell Medical Center, 21 Bloomingdale Road, White Plains, NY 10605; e-mail: jclarkin@med.cornell.edu.



change basic patient processes (whether they be at the level of neurocognition, information processing, memory retrieval and modification, or modified conceptions of self and others in interaction) that lead to clinical change?

The field of psychotherapy research has amassed a vast amount of data on the outcomes of different forms of psychotherapy. There are growing evidence and consensus that psychotherapy has a positive and significant effect (Lambert & Ogles, 2004). More specific to the focus of this issue, recent metaanalysis indicates that both psychodynamic and cognitive behavioral approaches to the personality disorders are effective (Leichsenring & Leibing, 2003). With few exceptions, psychotherapy research has been dominated more by interest in the relation of treatment outcome to different treatment strategies (increasingly dominated by the application of cognitive-behavioral strategies to all patient conditions) than in matching of preliminary research on the specific patient dysfunctions that need creative intervention. Empirical treatment development involves a number of essential steps, including research on the nature of the clinical dysfunction, specification of the treatment, and theory and research on the mechanisms of change in the treatment process (Kazdin, 2004). It is possible that mechanisms of change research will foster more attention to the patient dysfunctions, implied but not captured by the diagnostic criteria of BPD in the Diagnostic and Statistical Manual of Mental Disorders (DSM), as they intersect with the specific treatment interventions. Fonagy and Bateman (this issue) emphasize the need for understanding the pathology at biological, behavioral, and psychological levels in a developmental context before generating appropriate treatment strategies.

Time to Focus on Mechanisms

This is a propitious time to focus on mechanisms of change research in reference to pathology manifested by BPD patients. Treatments for borderline patients that have been articulated and described represent modified psychodynamic approaches (Bateman & Fonagy, 1999, 2004; Clarkin, Yeomans, & Kernberg, 2006), cognitive (Beck et al., 2004; Young, 2000), cognitive-behavioral (Linehan, 1993), and combinations of psychodynamic and cognitive approaches (Ryle, this issue). Dialectal Behavior Therapy (DBT) has consistently shown superiority in comparison to treatment as usual, as Lynch and associates document in this issue, in reducing suicidal behavior and related symptoms. Psychodynamic treatments show positive patient change in studies using the patient as the control (Clarkin et al., 2001) and in comparison to treatment as usual (Bateman & Fonagy, 2004). Livesley (2005) suggests that these findings point to a practical, integrative clinical approach in which the clinician matches problem areas unique to the individual patient (behaviors, symptoms, core issues in self-definition) to a combination of cognitive-behavioral and dynamic techniques. The development of mechanisms of change research may refine and further specify such an approach.

Specifying the BPD Dysfunctions

In any psychotherapy research there is the central issue of specifying a relatively homogeneous patient group to receive the treatment under investigation. Since the introduction of the *Diagnostic and Statistical Manual of Mental Disorders*, third edition (DSM-III) and its successors, the Axis I or Axis II diagnosis has been used to select patients for many psychotherapy studies. The psychotherapy research on BPD featured in this special issue is representative of that approach. This method of selecting relatively homogeneous patient groups for intervention, however, is fraught with difficulties (Clarkin & Levy,

2004). BPD is diagnosed if the individual has any five or more of a set of nine criteria in the Diagnostic and Statistical Manual of Mental Disorders, fourth edition (DSM-IV), Axis II (American Psychiatric Association, 1994). This method ensures that patients receive the same diagnosis and receive it with an overlapping but different set of criteria. The nine criteria include items relating to identity diffusion, impulsivity, and affect dysregulation. That BPD symptomatology is characterized by several major dimensions of psychopathology has long been established. The empirical clusters or primary dimensions of BPD have been discussed by researchers (e.g., Clarkin, Hull, & Hurt, 1993) and clinicians since the seminal multivariate work by Grinker and colleagues (Grinker, Werble, & Drye, 1968). A burgeoning literature has suggested that impulsivity and negative affectivity/emotional dysregulation are the two core personality traits that characterize much of the phenotypic variation seen in BPD (Gurvits, Koenigsberg, & Siever, 2000; Linehan, 1993; Siever & Davis, 1991; Trull, 2001; Trull, Sher, Minks-Brown, Durbin, & Burr, 2001). Theoretical literature has only recently begun to address the manner in which these dimensions are linked to major underlying personality or temperament processes and how these processes yield BPD through as yet unspecified interactions among the processes themselves, and environmental and developmental inputs (Clarkin & Posner, 2005).

The articles in this special issue specify the patient pathology, beyond the Axis II criteria, that becomes the focus of that intervention. Emotion dysregulation and related behaviors, deficits in emotion dysregulation in attachment relationships, dysfunctional beliefs and schemas, and enhanced capacity for accurate self-reflection are described in this special issue as important areas for intervention.

It is likely that laboratory tests of neurocognitive functioning (e.g., Lenzenweger, Clarkin, Fertuck, & Kernberg, 2004) and use of sophisticated tools such as functional magnetic resonance imaging (fMRI) to examine human functioning simultaneously at the brain and behavior levels will contribute to the relatively recent investigations of the mechanisms of change in psychotherapy. Borderline pathology has been conceptualized as involving difficulties in self-regulation and attention mechanisms that are related to impulsive behavior and affect dysregulation (Posner et al., 2002, 2003). Empirical designs that require the borderline patient to regulate behavior under the influence of affective stimuli in the fMRI environment reveal the difficulties the BPD patient has in the regulation of affect at the brain and behavior levels. This research may contribute to our understanding of the relative contributions of affect stimulation and cognitive control that the patient lacks as compared to normal control subjects. Increased amygdala activation to negative stimuli in BPD patients has been described (Donegan et al., 2003; Herpertz et al., 2001), and decreased ventromedial prefrontal and increased amygdalar-ventral striatal function have been studied under conditions of behavioral inhibition in the context of negative emotion (Silbersweig et al., in press) in these patients.

In-session Treatment Strategies

Schools of therapy (e.g., cognitive-behavioral, psychodynamic) provide general descriptors of treatment strategies that do not adequately specify actions of the individual therapist with the individual patient. The specification of treatments by label left much ambiguity about the intervention, and the field introduced the use of treatment manuals to specify the treatments beyond their label, to guide therapists in the more homogeneous treatment under investigation, and to allow replication. Most of the authors and orientations represented in this special issue have published treatment manuals describing in detail their particular conceptualizations of borderline pathology and the strategies and

techniques used by their therapists to bring about change in patients. A close examination of the treatment manuals suggests that although all the researchers are focused on treating patients who have BPD, they each have models of the patient dysfunction that lead them to put emphasis on certain aspects of the patient pathology. For example, DBT has been targeted for that subgroup of patients who have borderline personality disorder who exhibit active and extensive suicidal behavior. Other treatments focus on the mental activity of the patient in processing interpersonal behavior. None of the approaches are inappropriate, as each examines different aspects of the pathology.

We, the editors of this special issue, have been fortunate to enlist the participation of some of the leading researchers in the treatment of borderline patients. The various articles in this section stimulate the reader to compare the different approaches to the essential aspects of borderline pathology and the related specific therapeutic interventions. For example, affect dysregulation and related dysfunctional behaviors are conceptualized as the key deficit by Lynch and associates. Fonagy and Bateman place this affect dysregulation within the attachment and interpersonal sphere. There seem to be similarities among the concepts of mindfulness (Lynch et al., this issue), mentalization (Fonagy & Bateman, this issue), and reflective functioning (Levy & Clarkin, this issue), all of which are seen as processes the individual can use to modulate affective stimulation.

Potential Benefits of Mechanisms of Change Research

The current status of psychotherapy research is based on multiple demonstrations of outcome, with variable maintenance of gains and scant information about exactly how the treatments achieve their ends. Mechanisms of change research will advance the empirical status of psychotherapy by specifying how the various treatments achieve their immediate effects on patient functioning.

Research on the mechanisms of change could potentially have beneficial effects in the clinical delivery of care. If the connection between individual patient dysfunctions and specific treatment strategies and techniques can be specified, that connection will enable the clinician to match patient and treatment more precisely, both at the assessment and initial treatment orientation levels, and at the level of flexibility as the treatment progresses. Such a development could contribute to resolving some of the existing controversies over the methods to match patient and therapy. The early focus in the evidence-based treatment movement on creating a list of treatments that have shown superiority over treatment as usual for specific DSM disorders (Chambless & Hollon, 1998) is limited by the patient heterogeneity disguised by the DSM diagnoses. More precise definition of patient dysfunctions in diagnoses, as explicated in this special issue, would lead to more precise matching of patients beyond DSM diagnoses to specific interventions.

References

- American Psychiatric Association. (1994). Diagnostic and statistical manual of mental disorders (4th ed.). Washington, DC: Author.
- Bateman, A., & Fonagy, P. (1999). The effectiveness of partial hospitalization in the treatment of borderline personality disorder: A randomized controlled trial. American Journal of Psychiatry, 156, 1563–1569.
- Bateman, A., & Fonagy, P. (2004). Psychotherapy for borderline personality disorder. Oxford: Oxford University Press.
- Beck, A.T., Freeman, A., & Davis, D.D. (2004). Cognitive therapy of personality disorders (2nd ed.). New York: Guilford Press.

- Chambless, D.L., & Hollon, S.D. (1998). Defining empirically supported psychological interventions. Journal of Consulting and Clinical Psychology, 66, 7–18.
- Clarkin, J.F., Foelsch, P.A., Levy, K.N., Hull, J.W., Delaney, J.C., & Kernberg, O.F. (2001). The development of a psychodynamic treatment for patients with borderline personality disorder: A preliminary study of behavioral change. Journal of Personality Disorders, 15(6), 487–495.
- Clarkin, J.F., Hull, J.W., & Hurt, S.W. (1993). Factor structure of borderline personality disorder criteria. Journal of Personality Disorders, 7, 137–143.
- Clarkin, J.F., & Levy, K.N. (2004). The influence of client variables on psychotherapy. In M.J. Lambert (Ed.), Bergin and Garfield's handbook of psychotherapy and behavior change (5th ed., pp. 194–226). New York: Wiley.
- Clarkin, J.F., & Posner, M. (2005). Defining the mechanisms of borderline personality disorder. Psychopathology, 38, 56–63.
- Clarkin, J.F., Yeomans, F., & Kernberg, O.F. (2006). Psychotherapy for borderline personality: An object relations approach. Washington, DC: American Psychiatric Publishing.
- Donegan, N.H., Sanislow, C.A., Blumberg, H.P., Fulbright, R.K., Lacadie, C., Skudlarski, P., et al. (2003). Amygdala hyperactivity in borderline personality disorder: Implications for emotional dysregulation. Biological Psychiatry, 54, 1284–1293.
- Grinker, R.R., Werble, R., & Drye, R.C. (1968). The borderline syndrome: A behavioral study of ego functions. New York: Basic Books.
- Gurvits, I.G., Koenigsberg, H.W., & Siever, L.J. (2000). Neurotransmitter dysfunction in patients with borderline personality disorder. Psychiatric Clinics of North America, 23, 27–40.
- Herpertz, S.C., Dietrich, T.M., Wenning, B., Krings, T., Erberich, S.G., Willmes, K., et al. (2001). Evidence of abnormal amygdala functioning in borderline personality disorder: A functional MRI study. Biological Psychiatry, 50, 292–298.
- Kazdin, A.E. (2004). Psychotherapy for children and adolescents. In M.J. Lambert (Ed.), Bergin and Garfield's handbook of psychotherapy and behavior change (5th ed., pp. 543–589). New York: Wiley.
- Lambert, M.J., & Ogles, B.M. (2004). The efficacy and effectiveness of psychotherapy. In M.J. Lambert (Ed.), Bergin and Garfield's handbook of psychotherapy and behavior change (5th ed., pp. 139–193). New York: Wiley.
- Leichsenring, F., & Leibing, E. (2003). The effectiveness of psychodynamic theory and cognitive behavior therapy in the treatment of personality disorders: A meta-analysis. American Journal of Psychiatry, 160, 1223–1232.
- Lenzenweger, M.F., Clarkin, J.F., Fertuck, E.A., & Kernberg, O.F. (2004). Executive neurocognitive functioning and neurobehavioral systems indicators in borderline personality disorder: A preliminary study. Journal of Personality Disorders, 18, 421–438.
- Linehan, M.M. (1993). Cognitive-behavioral treatment of borderline personality disorder. New York: Guilford Press.
- Livesley, W.J. (2005). Principles and strategies for treating personality disorder. Canadian Journal of Psychiatry, 50, 442–450.
- Posner, M.I., Rothbart, M.K., Vizueta, N., Levy, K., Thomas, K.M., & Clarkin, J. (2002). Attentional mechanisms of borderline personality disorder. Proceedings of the National Academy of Sciences, 99, 16366–16370.
- Posner, M.I., Rothbart, M.K., Vizueta, N., Thomas, K.M., Levy, K.N., Fossella, J., et al. (2003). An approach to the psychobiology of personality disorders: Development and psychopathology, 15, 1093–1106.
- Siever, L.J., & Davis, K.L. (1991). A psychobiological perspective on the personality disorders. American Journal of Psychiatry, 148, 1647–1658.
- Silbersweig, D., Clarkin, J., Goldstein, M., Kernberg, O., Tuescher, O., Levy, K., et al. (in press). Failure of fronto-limbic inhibitory function in the context of negative emotion in borderline personality disorder.

- Trull, T.J. (2001). Relationships of borderline features to parental mental illness, childhood abuse, Axis I disorder, and current functioning. Journal of Personality Disorders 15, 19–22.
- Trull, T.J., Sher, K.J., Minks-Brown, C., Durbin, J., & Burr, R. (2001). Borderline personality disorder and substance use disorders: A review and integration. Clinical Psychology Review, 20, 235–253.
- Young, J.E. (2000). Schema therapy for borderline personality disorder: Detailed treatment model. New York: Cognitive Therapy Center of New York.