Mentalization-based treatment for borderline personality disorder in adults and adolescents: for whom, when and how?

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Abstract

Borderline personality disorder (BPD) is common in clinical practice. Psychotherapy is the treatment of choice, and Mentalization-based treatment (MBT) is one of the empirically supported treatments that are currently available. For adults, two variants of MBT (MBT day hospital (MBT-DH) and MBT intensive outpatient (MBT-IOP)) have been developed and empirically evaluated. In this paper, we will present a review of research of development, efficacy, and implementation of MBT. We first discuss evidence on the effectiveness of MBT-DH and MBT-IOP, the lack of comparative research, as well as the lack of research on predictors of treatment response. Next, we go on to discuss research suggesting that the dissemination and implementation of MBT for adolescents is hindered by the reluctance of clinicians to diagnose BPD in adolescence. As a result, there is a dearth of evidence-based treatments for adolescents, including MBT, although the recent increase in studies in this area suggests that this trend may be changing. Finally, we focus on the implementation of treatment programs for BPD patients. Although we now have different effective treatments for BPD, the implementation of these treatments in routine clinical practice has proven to be much more complex than initially thought. In addition, treatments such as MBT are multi-modal, long-term treatments. Both societal pressures to increase the cost-effectiveness of our treatments, and new theoretical insights into the role of social learning and salutogenesis in the development of BPD, force us to reconsider some of our assumptions concerning the nature of treatment for individuals with BPD.

Introduction

Borderline personality disorder

Borderline personality disorder (BPD) is quite common in clinical practice (Leichsenring, Leibing, Kruse, & Leweke, 2011; Soeteman, Verheul, & Busschbach, 2008). Prevalence rates range from 3% in the general population to 10% in an outpatient setting (Trull, Jahng, Tomko, Wood, & Sher, 2008; Zimmerman, Chelminsky, & Young, 2008). BPD is associated with a broad range of problems, including co-morbid psychiatric disorders (Laurenssen et al., 2014a), self-destructive behaviour (Paris, 2000), severe impairments in daily functioning (Bateman & Fonagy, 2004), a low quality of life (Soeteman et al., 2008), and high societal costs (Soeteman, Hakkaart-van Roijen, Verheul, & Busschbach, 2008). Psychotherapy is the treatment of choice for patients with BPD (Leichsenring, Leibing, Kruse, & Leweke, 2011; Soeteman, Verheul, & Busschbach, 2008). Different empirically supported treatments are currently available for adults and are recommended by treatment guidelines (American Psychiatric Association, 2001; Landelijke Stuurgroep Multidisciplinaire Richtlijnontwikkeling in de GGZ, 2008; National Institute for Health and Clinical Excellence, 2009). These include Dialectical behaviour therapy (DBT: Linehan, 1993), Schema focused therapy (SFT: Young, Klosko, & Weishaar, 2003), Transference focused therapy (TFP: Clarkin, Yeomans, & Kernberg, 1999), Systems training for emotional predictability and problem solving (STEPPS: Blum, Bartels, St. John, & Pfohl, 2002), and Mentalization-based treatment (MBT: Bateman & Fonagy, 2004, 2006, 2012).

Different variants of MBT have been developed and empirically evaluated. In this paper, we will present a review of research of development, efficacy, and implementation of MBT. We

then will discuss new theoretical insights that force us to reconsider assumptions concerning the nature of treatment for individuals with BPD.

Mentalization-based treatment

BPD is characterized by impulsivity, and instability in affects, relationships, and identity. Bateman and Fonagy (2004) have related these problems to severe impairments in mentalizing capacities. Mentalizing can be defined as "the ability to understand actions by both other people and oneself in terms of thoughts, feelings, wishes, and desires" (Bateman & Fonagy, 2016, p.3).

MBT was first developed in the United Kingdom by Bateman and Fonagy (2004, 2006, 2012, 2016). It has its roots in attachment theory and contemporary social neuroscience. The main goal of MBT is to improve the mentalizing capacities of patients with BPD, especially within everyday interpersonal interactions. Two types of MBT have been developed and empirically evaluated for adults with BPD: MBT day hospital (MBT-DH) (Bateman & Fonagy, 1999, 2001, 2008) and intensive outpatient MBT (MBT-IOP) (Bateman & Fonagy, 2009). The main goals of both variants of MBT are 1) engagement in therapy, 2) reduction of psychiatric symptoms, 3) improvement of self- and interpersonal functioning, 4) decrease in number of self-destructive acts and suicide attempts, and 5) improvement in social and occupational functioning. To achieve these goals, all treatment components focus on the enhancement of the patient's mentalizing capacity. Both types of MBT are also quite structured, and involve different tasks, aims and strategies in the different phases of treatment, ranging from a pre-treatment, main treatment and follow up treatment phase (see Table 1), in order to ensure that treatment is delivered in a consistent, coherent and continuous way (Bateman & Fonagy, 2016).

MBT-DH was first compared with standard psychiatric care in a randomized controlled trial (Bateman & Fonagy, 1999). MBT-DH was superior to standard psychiatric care in terms of reduction in depressive symptoms, suicidal and parasuicidal behaviour, hospitalization days, and improvement in social and interpersonal functioning. Two follow-up studies showed that these results were maintained at 18 months (Bateman & Fonagy, 2001) and 8 years (Bateman & Fonagy, 2008) follow-up. Health care costs were similar for both groups during treatment, but after treatment the MBT-DH group showed substantially lower costs (Bateman & Fonagy, 2003).

MBT-IOP, in turn, was compared with structured clinical management in a randomized controlled trial (Bateman & Fonagy, 2009). In both groups, improvements were found in terms of parasuicidal behaviour, self-reported psychiatric symptoms, social and interpersonal functioning and medication use. Patients treated with MBT-IOP however, showed a stronger decrease of symptoms, including suicidal behaviour and hospitalization, particularly at long-term follow-up.

Our group conducted a naturalistic study (Bales et al., 2012) which showed that MBT-DH was associated with improvements in level of symptom distress, personality pathology, and social and interpersonal functioning. Effect sizes were moderate to large, comparable to and sometimes even higher than the effect sizes in the original UK trial (Bateman & Fonagy, 1999). Furthermore, a reduction of parasuicidal behaviour was observed. In another study, we (Bales et al., 2015) showed that patients in MBT-DH showed greater benefits than patients who received other specialized psychotherapies for personality disordered patients. Jorgensen and colleagues (2013), in turn, compared MBT-IOP with supportive psychotherapy. In this study, no differences were found between both conditions, which may, however, have resulted from potential spill-over effects as the same therapists offered both treatments.

Although these findings suggest that both MBT-DH and MBT-IOP may be effective in the treatment of severe BPD, it is not clear whether both treatments are equally effective, nor whether some patients may benefit more from MBT-DH or MBT-IOP. In response, we set up a trial directly comparing the efficacy of both treatments. As these treatments also differ considerably in terms of intensity and frequency, a detailed economic analysis focusing on the cost-effectiveness of both treatment programmes is a key focus of this trial (Laurenssen et al., 2014) (see Table 1). Finally, this study also aims to investigate potential differential treatment response as a function of pre-treatment patient characteristics. Results of this study will thus inform both cost-effectiveness considerations as well as the potential importance of treatment tailoring.

-> insert Table 1

Borderline personality disorder in adolescents

Our group has also been involved in the development and evaluation of MBT for adolescents with marked personality pathology. Yet, the development, dissemination and implementation of MBT for this age group is hindered by at least three factors. First, because of the fear for stigmatization, the supposed changeability of personality at this age, and difficulty to distinguish between normal and abnormal personality, clinicians are often still reluctant to diagnose BPD in adolescents (Allertz & van Voorst, 2007; Chanen & McCutcheon, 2008). Research, however, shows that the reliability and validity of the diagnosis of BPD in adolescence is comparable to that in adulthood (Chanen, Jovev, McCutcheon, Jackson, & McGorry, 2008; Kaess, Brunner, & Chanen, 2014; Miller, Muehlenkamp, & Jacobson, 2008; Westen, DeFife, Malone, & DiLallo, 2014).

There is now broad consensus that diagnosing BPD in adolescents is important and valid (Fonagy et al., 2015; Landelijk Kenniscentrum Kinder- en Jeugdpsychiatrie, 2011; National Institute for Health and Clinical Excellence, 2009). PDs are quite common in adolescents (Feenstra, Busschbach, Verheul, & Hutsebaut, 2011; Grilo et al., 1998; Westen, Shedler, Durett, Glass, & Martens, 2003) and are associated with a higher burden of disease than in any other life phase. PDs in adolescents are associated with more painful affects (Bradley, Zittel Conklin, & Westen, 2005), more self-destructive and suicidal behaviour (Claes & Vandereycken, 2007; Lewinsohn, Rohde, & Seeley, 1996), and high societal costs (Cailhol et al., 2012; Feenstra et al., 2012). These findings, however, have trouble finding their way into clinical practice (Laurenssen, Hutsebaut, Feenstra, Luyten, & Busschbach, 2013).

Second, until recently, there was relatively little known about the potential role of impairments in mentalizing, a central focus of MBT, in adolescence. However, over the last decade, there is an increasing number of both theoretical and empirical studies that have begun to address this gap (Fonagy & Luyten, 2016; Rossouw & Fonagy, 2012; Sharp & Kim, 2015).

Third, despite the high unmet needs for treatment of adolescents with BPD, and the fact that adolescence is a key period to intervene because of the flexibility of BPD traits in this life phase (Chanen & McCutcheon, 2013), there is a dearth of evidence-based treatments for adolescents with BPD, including MBT. In a randomized controlled trial, Chanen and colleagues (2008) compared Cognitive analytic therapy (CAT) with good clinical care. No significant differences were found, however, between the two groups, although there was some evidence suggested that the CAT group improved more rapidly. Schuppert and colleagues (2009, 2012) investigated the effects of an Emotion regulation training (ERT) in a randomized controlled trial as compared to TAU. Patients in both treatment groups improved equally, while patients in the ERT group showed a significant increase in internal locus of

control. Finally, a number of studies suggest that Dialectical behaviour therapy (DBT: Linehan, 1993) is associated with a reduction in the need for hospitalization, attrition, and behavioural incidents for adolescents with BPD symptoms (MacPherson, Cheavens, & Fristad, 2013; Mehlum et al., 2014), however more research is needed with adequate randomization and follow up (Fonagy et al., 2015).

Mentalization-based treatment for adolescents

As for MBT for adolescents, different adaptations have been described. Bleiberg (2001) described a treatment approach based on MBT principles based on developmental- and attachment theory specifically. Asen and Bevington (2007) developed AMBIT (Adolescent Mentalization Based Integrative Therapy) for the 'hard to reach' adolescents, a flexible team-based outreach approach. In a randomized controlled trial, Rossouw and Fonagy (2012) compared outpatient MBT for adolescents with TAU in adolescents with self-harm. In this study, 73% of the adolescents met DSM-IV criteria for BPD. MBT was found to be superior to TAU in terms of reductions in self-harm and depressive symptoms. Bo and colleagues (2016) investigated a Mentalization-based group therapy for adolescents with BPD. They found that the majority of the adolescents showed improvements in terms of reduction of BPD symptoms, depression and general psychopathology. An interesting finding in their study is that adolescents with enhanced trust in peers and parents in combination with improvements in mentalizing capacities showed more reduction of BPD symptoms. In a small pilot-study, Laurenssen and colleagues (2014b) investigated inpatient MBT for adolescents. Promising results were found, with a decrease in level of symptom severity and improvements in personality functioning and quality of life. However, there were marked problems with the implementation of this treatment (Hutsebaut, Bales, Busschbach, & Verheul, 2012), which

has led to the development of an adapted outpatient MBT program for adolescents, which is currently investigated in a pilot-trial (see Table 2)

As is the case for adults, very little is known about the optimal treatment length and frequency in MBT for adolescents, nor is much known about the potential of treatment tailoring. Little is known about predictors, beyond the fact that MBT may be particularly indicated in more severe patients (Bateman & Fonagy, 2013). And although implementation problems associated with inpatient MBT (as for instance expressed in high levels of acting out and burn-out in therapists), suggest that outpatient treatment may be associated with better outcomes, there is currently no empirical support for this assumption. Likewise, less intensive (i.e., outpatient) and outreaching interventions may be most effective in adolescents, as it maximizes their opportunities for social learning and provides the least disruption to the normative developmental challenges they face. Again, however, empirical evidence in this area is largely lacking, and there may be a subgroup of adolescents for which intensive, inpatient and/or step-down programmes may be indicated.

-> insert Table 2

Implementation of MBT

Another neglected issue in research on MBT concerns implementation issues. While MBT may have shown to be effective in well-controlled studies, it remains to be seen whether it can be effectively implemented in routine clinical care. A recent study in The Netherlands, for example, showed that only 23% of the patients diagnosed with BPD received specialized psychotherapy such as MBT (Hermens, van Splunteren, van den Bosch, & Verheul, 2011). Furthermore, as noted, the evidence in support of evidence-based treatments is often obtained

in controlled conditions, typically in randomized controlled trials. It is less clear whether these results can be maintained in less optimal conditions typical for clinical practice. Several studies suggest that dissemination of evidence-based treatments, and particularly of more complex lengthy treatment such as BPD, leads to less beneficial outcomes (Durlak & DuPre, 2008; Shoenwald, 2008). This has been shown, for example, for multi-systemic therapy for youngsters with behavioural problems (Henggeler, 2004).

The outcome of psychotherapy may be strongly related to the organizational context in which the treatment model is delivered; and this may be particularly the case in treating patients with complex psychopathology, such as BPD (Bateman & Krawitz, 2013).

Indeed, studies suggest that the implementation of treatment models for patients with BPD is a complex process, with risks in relation to both effectiveness as well as safety, for both staff and patients (Hutsebaut, Bales, Verheul, & Busschbach, 2012). We were first alerted to the importance of implementation issues in the context of a study on the implementation of MBT for adolescents (MBT-A). In this study, we serendipitously found that problems with the implementation of MBT-A depended on problems at three levels of implementation: at the organizational level (i.e., organizational structures, institutional culture, staffing, logistics and budget planning), the team level (i.e., team culture, leadership, team communication), and at the level of individual team members (i.e., personal selection, experience and knowledge). Implementation studies of other therapeutic modalities for BPD, such as DBT and SFT, have come to similar conclusions (Nadort et al., 2009; van den Bosch & Sinnaeve, 2015).

This study and subsequent experiences with the implementation of MBT, have led to the development of a quality manual for MBT, in which these three levels are described and discussed in detail. Also, specific recommendations for the successful implementation of MBT are made (Bateman, Bales, & Hutsebaut, 2013). Currently, we are in the process of systematically studying the influence of these three levels on the implementation of MBT in

routine clinical practice. For instance, in a quasi-experimental study by our research group (Bales et al., submitted), we showed that the effect sizes of poorly implemented MBT for adults with BPD were only half and at long-term follow-up even a third of successfully implemented MBT. Hence, if replicated, these findings suggest that there is a clear need for strategies to monitor and adjust conditions under which MBT may be an effective treatment for BPD.

Does intensity and frequency matter?

The assumption that more severely disturbed patients require the most intensive treatment, seems no longer justified (Bateman & Fonagy, 2016). Together with societal pressures, this forces us to reconsider the role of issues of frequency and intensity and the relationship between both.

Recent theoretical conceptualizations, rooted in contemporary evolutionary biology and developmental psychopathology, provide an interesting perspective on this issue in our opinion. Specifically, Fonagy and Luyten (2015) have proposed a new conceptualization of mechanisms of change in the treatment of patients with BPD, which has immediate implications for issues related to treatment frequency and intensity. They suggest that change in psychotherapy, and in the treatment of BPD in particular, involves three systems or sets of processes. The first system relates to the extent to which the patient feels validated and understood by the theoretical understanding of his or her condition that is conveyed upon him. All evidence-based treatment models provide a framework, in which the patient can examine important issues. A model of the mind is offered in a coherent way, which enables the patient to feel understood (Communication system 1: the teaching and learning of content). By experiencing that the therapist is seeking to understand the patient's perspective, patients can learn to hear and to listen (Communication system 2: the re-emergence of robust mentalizing).

Hence, the experience of feeling thought about sets the patient in a learning mode: he or she becomes (again) open to communication and thus to change. Indeed, rigidity, defined lacking the capacity to be open to new information conveyed by others, is a hallmark of BPD. Yet, the re-emergence of mentalizing is not the mechanism behind change in this new approach. For true change to happen, the patient has to change the way how he or she feels and thinks about the (social) world, which is ultimately also shown in changes in behaviour. This, however, also implies that the extent to which a patient might benefit from any given treatment will also be determined by the social world of that patient (Communication system 3: the re-emergence of social learning beyond therapy). Although patients may actively contribute to a changing environment (as is for instance shown in patients ending specific relationships and seeking out other people and contexts in this phase of the treatment), often there are serious limitations to patients ability and possibilities to bring about change in their environment. This necessarily implies that treatment should explicitly focus on the social environment of the patient, and thus the length and intensity of treatment may also be dependent on the quality of the social environment of the patient.

Conclusions

Different variants of MBT for both adults as well as adolescents have been developed and empirically evaluated. However, the question of "what works for whom" also remains largely elusive in this domain. In our opinion, research is needed investigating which patients might benefit more from the more intensive forms of treatment and which patients will benefit more from less intensive forms of treatments.

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Table 1: Comparing MBT-DH and MBT-IOP

	MBT-DH	**MBT-IOP**
Pre-treatment	Focus on engaging the patient in treatment and crisis management Introductory course (MBT-i) Biweekly individual sessions with a focus on crisis planning	
Main treatment	18 months (maximum), 5 days Group psychotherapy (daily) Individual psychotherapy (weekly) Individual crisis planning (on indication) Art therapy (twice a week) Writing therapy (weekly) Mentalizing cognitive group therapy (weekly) Social hour and community meeting Medication consults (on indication)	18 months (maximum) Group psychotherapy (twice a week) Individual psychotherapy (weekly) Individual crisis planning (on indication) Medication consults (on indication)
Follow up treatment	Individual tailored stepped down care, aiming at relapse prevention, maintaining the gains made in mentalizing capacities	

Table 2: Components of MBT for adolescents

Pre-treatment	Focus on engaging the patient in treatment and crisis management Introductory course (MBT-i) Introductory course for parents (MBT-i) Biweekly individual sessions with a focus on crisis planning Family sessions (monthly)
Main treatment	12 months Group psychotherapy (weekly) Individual psychotherapy (weekly) Individual crisis planning (on indication) Family sessions (biweekly) Medication consults (on indication)
Follow up treatment	Individual tailored stepped down care, aiming at relapse prevention, maintaining the gains made in mentalizing capacities