MBT: Quality in mind

The implementation of mentalization-based treatment in the Netherlands

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The implementation of *Mentalization-Based Treatment* in the Netherlands

DAWN BALES

De keuze voor het zelfportret van **Marlene Dumas 'het kwaad is banaal'** stamt voort uit mijn liefde voor haar werk. Ik bewonder haar lef, expressiviteit en de directe manier waarop ze controversiële onderwerpen aanpakt. De rauwe emotie die zo aanwezig is in haar schilderijen, ervaren onze patiënten elke dag op de een of andere manier. Voor mij hebben haar schilderijen ook iets analytisch. Net of ze met een helikopterview zijn geschilderd. Dit zorgt voor enige afstand, waardoor de emoties die de schilderijen oproepen, draaglijk worden. Marlene Dumas maakt van controversiële onderwerpen iets humaans door net een ander perspectief te bieden. Dit is wat wij onze patiënten binnen MBT ook proberen te leren: terwijl ze voelen er ook naar kunnen kijken om beter te kunnen reflecteren (over zichzelf, de ander en relaties). Door te reflecteren en open te staan voor andere perspectieven proberen we ze los te laten komen van de vaste en rigide beelden die ze van zichzelf en anderen hebben. Als therapeut reflecteren we over hen, en stimuleren we hun reflectie, waardoor ze uiteindelijk weer meer vertrouwen hebben en open staan voor hun omgeving.

Ik dank Marlene Dumas hartelijk voor het gebruik van haar zelfportret. Ik voel me vereerd.

'MBT: Quality in mind'

The implementation of Mentalization-Based Treatment in the Netherlands

Dawn Lee Bales

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The implementation of Mentalization-Based Treatment in the Netherlands

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TABLE OF CONTENTS

Chapter 1

Introduction, aims and outline of dissertation

INTRODUCTION

This dissertation represents a long-term developmental process beginning in 2004, when Mentalization-Based Treatment (MBT, see Box 1) was first implemented in the Netherlands. This process was driven by the ambition to implement high-quality evidence-based interventions for patients with borderline personality disorder (BPD). Over the past 13 years, a series of treatment studies were conducted, the training and dissemination center MBT Netherlands was set up, a MBT quality management system was developed and implemented, and multiple adaptations for new populations were developed: i.e. MBT for adolescents, MBT Early, MBT for parents.

These developments took place at the Viersprong, a Dutch treatment centre offering specialized outpatient, day hospital and inpatient treatment for personality disorders. There are now 43 MBT treatment groups with 80 therapists running at the Viersprong, in which approximately 800 patients (300 new patients yearly) are treated. Over the past 10 years, MBT Netherlands has trained over 4800 therapists throughout the Netherlands and Flanders. Although there are no formal data about the number of patients starting MBT treatment in the Netherlands and Flanders, an extrapolation of the Viersprong data would lead to a maximum capacity of 18,000 new patients yearly.

Box 1: Mentalizing, Borderline Personality Disorder and Mentalization-Based Treatment

Mentalizing refers to the fundamental psychological process of understanding oneself and others in terms of thoughts, feelings, wishes and desires. The way we understand ourselves, others and relations, is thought to be fundamental in establishing regulatory capacities, intimate relationships, everyday interactions and social functioning. Mentalizing develops within the context of early attachment relationships, but also the broader sociocultural context plays an important role in determining the development of this capacity. Constitutional vulnerabilities in interaction with early adversity (in particular emotional neglect) is assumed to undermine the development of mentalizing capacities, which is reflected in emotional regulation problems, self-destructive, behavioral, interpersonal and social problems. These symptoms are characteristic of (borderline) personality disorders, but also various other psychological disorders are marked by gross deficits or considerable imbalances in and between different mentalizing capacities. Therefore, to date, mentalizing-based treatment (MBT) is considered to be a transdiagnostic treatment model, aiming to increase the resilience of patients' mentalizing capacity irrespectively of the diagnosis.

MBT is a highly structured treatment in terms of trajectories (initial phase, main treatment phase and final phase), and in terms of the structure of the treatment session. In all treatment components, a therapeutic process is developed with the mind of the patient as focus of treatment. The core of MBT is to recover mentalizing when it is lost and to maintain mentalizing when it is present during the sessions, hereby increasing the resilience of the individual's capacity to keep it going when it would otherwise be lost.

The above mentioned developmental process is documented in this dissertation, disclosing both successes and failures, sharing new insights and learning experiences, in the hope that the continuous effort to implement high quality MBT stimulates and inspire other clinicians, researchers, and innovators in the field to provide the best care for the patients in need.

Developmental process

In 2004, de Viersprong found itself confronted with increasing numbers of patients with severe and complex BPD (see Box 2) for whom they did not have available a suitable and tailored treatment program.

Box 2: Borderline personality disorder (BPD)

BPD is a serious and complex mental disorder and are among the most common and disturbing personality disorder in clinical populations (Fonagy, P., Luyten, P., Bateman, A, 2017; Soeteman, D.I., Verheul, R., Busschbach, J. 2008; Leichsenring, F. Leibing, E., Kruse, J. New, A.S., Leweke, F., 2011). It is a highly disabling disorder characterized by severe instability in affect, identity, interpersonal relationships and behavioral dysregulation (APA, DSM V, 2013) and associated with high levels of psychiatric co-morbidity, including mood, anxiety and substance abuse disorders (Bateman & Krawitz, 2013). Long-term rehabilitation is poor (Zanarini et al., 2012) and many BPD patients suffer from physical health problems as well (Zanarini et al., 20XX). For these reasons, BPD is also associated with seriously impaired health related quality of life (Soeteman, DI., Verheul, R., & Busschbach, J.J.V., 2008) and a high social economic burden (Soeteman, D.I., Hakkaart-van Roijen,L., Verheul, R., Busschbach, J.J.V., 2008). Lifetime risk for completed suicide associated with BPD is up to 10% (Paris, J., 2000) as compared to approximately 0,5 % of the total population.

For a long time, it was though that BPD was almost impossible to cure, but the last two decades this idea has been replaced by a more optimistic view regarding the changeability of BPD. Beneficial effects of psychotherapy, most notably dialectical behavior therapy and psychodynamic approaches, have been demonstrated in a growing number of studies, often showing large effects on BPD, related symptoms and quality of life (Leichsenring et al., 2011; Stoffers et al., 2012, Cristea, et al., 2017). Moreover, there is increasing evidence for the cost-effectiveness of psychotherapy for BPD (Bateman & Fonagy; Arntz; Soeteman et al, 2010). The evidence is strongest for Dialectical Behavior therapy, Schema-Focused Therapy, Transference Focused Psychotherapy, and Mentalization-Based Treatment, but to a somewhat lesser extent also for non-specialized psychotherapies such as Structured Clinical Management. National and international guidelines for the treatment of Borderline PD all recognize the central role of these psychotherapies.

At that time, de Viersprong became interested in MBT. A randomized trial reported promising treatment results for MBT not only on core symptoms such as (para)suicidal behaviour but also on related symptomatology and social and interpersonal functioning (Bateman & Fonagy, 1999; see also see Box 3). At the end of 2004, de Viersprong was the first treatment center in the Netherlands to implement MBT and to investigate the effects in a naturalistic setting outside the UK, independently of the developers of MBT. The current PhD trajectory is closely related to this dissimilation of MBT and started in 2008.

Box 3: Summary of evidence for Mentalization-Based Treatment

This box summarizes the RCTs and naturalistic studies to date that have tested the effectiveness of the MBT approach for BPD patients (excluding studies in this dissertation, Bales et al., 2012, 2015). The first empirical evidence for MBT originated from a randomized controlled trial (RCT) in the United Kingdom (UK), comparing the effectiveness of MBT in a day hospital setting with standard psychiatric care for patients with severe BPD (Bateman & Fonagy, 1999). At the end of maximal 18 months of treatment, major reductions were reported in depressive and anxiety symptoms, social and interpersonal problems, suicide attempts, and acts of self harm. In a 18-month follow-up study, 36 months after starting treatment, patients continued to improve on nearly all outcome measures (Bateman & Fonagy, 2001). A longer term follow-up study of this group, 5 years after all treatment was completed and 8 years after the first patients entered into treatment, found that those

receiving MBT still had better outcomes than those who received standard psychiatric care. Superior levels of improvement were shown on levels of suicidality (23% in the MBT group vs. 74% in the group who received standard psychiatric), diagnostic status (3% vs. 87%), service use (2 years vs. 3.5 years), and other measurements such as use of medication, global function, and vocational status (Bateman & Fonagy, 2008). Analysis of participants' healthcare use suggested that day hospital treatment for BPD was no more expensive than general psychiatric care and showed considerable cost savings after treatment (Bateman & Fonagy, 2003).

Two well-controlled single-blind trials of outpatient MBT have been conducted. One study involved adults with BPD (Bateman & Fonagy, 2009) and the other involved adolescents presenting to clinical services with self-harm, the vast majority of whom met BPD criteria (Rossouw & Fonagy, 2012). In both trials MBT was found to be superior to treatment as usually in reducing self-harm, including suicidality, and depression. Importantly, even though the control group in the Bateman and Fonagy trial received structured clinical management, an established and effective treatment, MBT appeared to be superior, particularly in the long run and in severe cases (Bateman & Fonagy, 2013).

Three more recent studies provide further support for MBT in patients with BPD. A Danish RCT investigated the efficacy of MBT versus a less intensive, manualized supportive group therapy, both delivered in combination with psychoeducation and medication, in patients diagnosed with BPD (Jorgensen et al., 2013). Both the combined MBT treatment and the less intensive supportive therapy brought about significant improvements on a range of psychological and interpersonal measures (e.g., general functioning, depression, and social functioning) as well as the number of diagnostic criteria met for BPD. The MBT condition was superior to the less intensive supportive group therapy only on therapist-rated Global Assessment of Functioning (GAF). An 18-month naturalistic follow-up study reported that the treatment effects at termination were sustained at 18 months. Half of the patients in the MBT group met criteria for functional remission at follow-up, compared with less than one-fifth in the supportive therapy group, but three-quarters of both groups achieved diagnostic remission, and almost half of the patients had attained symptomatic remission (Jørgensen et al., 2014). In another Danish study , a cohort of patients treated with partial hospitalization followed by MBT group therapy showed significant improvements after 2 years on a range of measures including GAF, hospitalizations and vocational status with further improvement at 2 year follow-up (Petersen et al., 2010).

A naturalistic pilot trial studied the feasibility and effectiveness of an inpatient adaptation of MBT in 11 female adolescents (aged 14–18 years) with borderline symptoms. One year after the start of treatment, significant decreases in symptoms, and improvements in personality functioning and quality of life were observed (with medium to large effects) (Laurenssen et al., 2013).

More recently, a quality improvement study examined the outcomes for BPD patients treated in an MBT program in a Norwegian specialist treatment unit compared with a former psychodynamic treatment program. The transition from traditional psychodynamic therapy to MBT led to a reduction in unplanned discharges (MBT had a low drop-out rate of 2%) and greater improvements in symptom distress and interpersonal, global, and occupational functioning (Kvarstein et al., 2015).

Encouraged by the successful implementation and studies on the effectiveness of MBT for adults, a separate group in the same treatment center decided to implement an inpatient MBT program for adolescents (MBT-A). However, the implementation process was rather problematic, which soon caused the termination of this program. The failure of the implementation of the inpatient MBT program for adolescents had a great impact on the organization, staff and patients. Consequences included threats to patient safety, high staff sick leave and turnover, temporary curtailment of the program, high level of patient and parent dissatisfaction, safety risks for staff, negative publicity and huge financial loss for the institution. This confrontation lead us to realize that it is one thing is to investigate the efficacy of a treatment, but quite another issue to implement and/or adapt the treatment program effectively and maintain its efficacy. This realization shifted the initial focus of this dissertation on effectiveness of MBT towards a focus on barriers and facilitators of implementation. In addition, we observed that even when a treatment program had been successfully implemented in a given setting, the quality of treatment delivery could vary substantially over time. We realized that contexts, organizations and teams are dynamic entities. For instance, in the past decade, the Dutch funding system was subject to some profound changes, the Viersprong underwent some major reorganizations, stability and continuity were influenced by turnover of personnel, and leading managers and experts shifted jobs. According to our impression, treatment effectiveness was affected by these changes and dynamics. These impressions gave rise to a focus on maintenance (sustainability) of quality of care as the last issue of this dissertation.

AIMS OF THIS DISSERTATION

The overall aim of this dissertation was to investigate the implementation of MBT in the Netherlands. The following research questions were addressed:

1. *Can day hospital MBT be effectively transferred to the Netherlands?*
    a. Does day hospital MBT in the Netherlands produce comparable beneficial treatment outcomes like the original UK studies? (Chapter 4)
    b. How does the effectiveness of day hospital MBT compare to other specialized psychotherapies? (Chapter 5)

2. *What are important barriers and facilitators to successful implementation?*
    a. What are lessons learned from a problematic implementation of MBT? (Chapter 6)
    b. How successful is implementation of MBT in the Netherlands and what are important determinants affecting the implementation trajectory? (Chapter 7)
    c. What is the impact of major organizational changes on the sustainability of MBT implementation? (Chapter 8)

OUTLINE OF THIS DISSERTATION

This dissertation includes five studies and two chapters organized in four parts.

Part A of the dissertation includes two chapters introducing Mentalization Based Treatment (see Box 1). *Chapter 2* describes the structure of MBT in a partial hospitalization setting and important aspects in organizing treatment. The paper in *chapter 3* complements the existing literature on MBT with a case study describing the 'archetypical' treatment process of a patient with a severe BPD in MBT.

Part B includes two studies on the effectiveness of MBT in the Netherlands (see Box 3). The naturalistic cohort study described in *chapter 4* investigated the applicability and treatment outcome of manualized day hospital MBT in a clinical population of Dutch patients with severe BPD with a wider range of psychiatric comorbidity (research question 1a). The matched control study in *chapter 5* compared the clinical benefits of day hospital MBT, as well as the 36 month follow-up after an additional 18 months of a maintenance regimen, to those observed in a more stringent comparison condition (i.e., diverse specialized psychotherapy programs) (research question 1b).

In **Part C** the topic of this dissertation shifted from the effectiveness of MBT towards barriers and facilitators of implementation. *Chapter 6* describes a case study of the problematic implementation process of MBT-A. The encountered problems are analyzed and the lessons learned are reported. In the resulting article we proposed a new comprehensive heuristic model of treatment fidelity (research question 2a). This new model included organizational, team and therapist adherence to the treatment model as necessary components in the implementation of complex interventions. We realized these findings and this model were based on one single case study and could therefore not exclude the possibility of selection bias. Therefore we conducted the study in *chapter 7* in which we explored the generalizability of our findings to other institutions and contexts (research question 2b). First we investigated the success or failure of implementation of seven MBT programs in the Netherlands, including an exploration of important determinants influencing the (quality of) implementation and the course of the implementation trajectory (phase 1 of the study). Second, we explored the hypothesis that success or failure in the implementation of MBT involves multiple causes at organizational, team and therapist level and we attempted to identify the crucial barriers and facilitators of implementation (phase 2 of the study). In *chapter 8* we explored the importance of the sustainability of implementation of evidence-based treatments for BPD by addressing the influence of a major organizational change on the implementation and efficacy of MBT (research question 2c).

In *chapter 9* of **Part D** the main findings of the two chapters and five studies will be summarized. In *chapter 10* research questions will be answered, methodological strengths and limitations of this dissertation are summarized, followed by a discussion. The chapter ends with recommendations for policy makers and for future research.

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Chapter 2

Mentalization Based Treatment in Partial Hospitalization Settings

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Bateman, A.W., Fonagy, P. (red). (2012). Handbook of Mentalizing in Mental Health Practice. American Psychiatric Publishing, Inc. Hfd. 8; 197-227.

The original randomized controlled trial of mentalization-based treatment in a partial hospitalization setting (MBT-PH) showed that effects were discernible 5 years after treatment was completed (Bateman and Fonagy 1999, 2001, 2003, 2008b). In 2004, the De Viersprong Center of Psychotherapy in the Netherlands decided to try to replicate the partial hospitalization program developed in the United Kingdom to determine whether the favorable outcomes could be repeated by an independent institution in a naturalistic setting outside the United Kingdom. In an initial cohort study, we showed that this was possible (Bales et al., in press). By 2010, we had developed a well-structured mentalization-based treatment (MBT) unit, staying as close as possible to the original programs and offering MBT-PH and MBT as an intensive outpatient program. After successfully implementing MBT in our service, staff have begun offering training to other units and assisting them in implementing MBT. In this phase, we have found that attention to certain organizational aspects of developing MBT programs can be helpful. In this chapter, we consider some of these issues and describe how treatment can be organized to create the optimal context within which interventions enhancing mentalization can be delivered.

PATIENT POPULATION

Borderline personality disorder (BPD) is a heterogeneous condition with large variations in comorbidity, social function, and severity. The De Viersprong Center of Psychotherapy is an institution offering specialized outpatient, partial hospitalization, and inpatient treatment for patients with personality pathology. Currently, the Viersprong Institute for Studies on Personality Disorders has 10 different treatment programs for patients with BPD, varying in treatment orientation, intensity, and duration. Within the center, the most severely affected patients with BPD are referred for MBT. For research purposes, DSM-IV-TR (American Psychiatric Association 2000) diagnoses are obtained via structured interview ratings (Structured Clinical Interview for DSM-IV Axis I Disorders [SCID-I; First et al. 1997b], Structured Clinical Interview for DSM-IV Axis II Personality Disorders [SCID-II; First et al. 1997a], or Structured Interview for DSM-IV Personality [SIDP-IV; Pfohl et al. 1997]), combined with expert opinion. The most complex patients with BPD as a primary diagnosis are included. In these patients, 80% have more than one Axis I diagnosis, with anxiety, mood, eating, and substance abuse disorders being most common; 70% have more than one full Axis II disorder beyond their BPD diagnosis, with paranoid, avoidant, dependent, and antisocial personality disorders being the most common; and 70% have substance abuse and dependency problems, further indicating the severity of the condition in the population. Patients with severe self-destructive and acute and chronic suicidal behavior are included and are often a danger to themselves or others during

the initial phase of treatment. All patients have a history of several failed treatment experiences and hospital admissions. According to Kernberg's criteria (Kernberg et al. 2002), the patients have a low-level borderline or psychotic personality organization. BPD patients with a mid- to high-level borderline personality organization, less acting-out behavior, and no drug dependency issues are referred to other programs (mainly schema-focused therapy).

PRINCIPLES OF SERVICE DEVELOPMENT

Several principles should be considered when developing MBT-PH programs within mental health services. In reviewing the literature, Bateman (2000) concluded that effective treatments share several common features. These are summarized in -Table 8–1. Many of these features are included in guidelines for treatment of BPD (-National Institute for Health and Clinical Excellence 2009b; Oldham et al. 2001) and overlap with features associated with well-organized research programs.

We now describe some of the essential features of a well-organized partial hospital treatment program, which acts as a framework for the application of more specific MBT interventions.

Table 8-1. Common features of effective treatments for borderline personality disorder

- Well structured
- Devote considerable effort to enhancing compliance
- Focus sharply on specific problem behaviors such as self-harm or problematic interpersonal relationship patterns
- Offer a coherent conceptual framework that patients and therapists can share
- Encourage a supportive attachment relationship between therapist and patient, consistent with the therapist's adopting a relatively active rather than a passive stance
- Relatively long in duration
- Well integrated with other services available to the patient

Source. Reprinted from Allen JG, Fonagy P, Bateman AW: *Mentalizing in Clinical Practice,* p. 284. Washington, D.C., American Psychiatric Publishing, 2008. Copyright © American Psychiatric Association. Used with permission.

TREATMENT GOALS AND TREATMENT PLANS

The central thesis of MBT is that the phenomenology of BPD is the consequence of several factors. These are outlined in Table 8–2. The developmental model on which MBT is based suggests that environmental adversities and neurobiological vulnerabilities are intertwined. This is consistent with the complex etiology and symptomatology of BPD. Within this conceptual framework for BPD, precarious mentalizing is seen as the core problem; thus, in MBT, interventions are considered effective if they enhance a mentalizing process. The overall aim of MBT is to develop a therapeutic process in which the mind of the patient becomes the focus of treatment. The objective is for the patient to find out more about how he or she thinks and feels about him- or herself and others, how that dictates responses to others, and how "errors" in understanding self and others lead to actions in an attempt to retain stability and to make sense of incomprehensible feelings. The therapist has to ensure that the patient is aware of these -objectives, that the therapy process itself is not mysterious, and that the patient understands the underlying focus of treatment.

Table 8-2. Symptoms of borderline personality disorder

Borderline personality disorder symptoms are related to:
• Attachment-related inhibition of mentalizing
• Reemergence of modes of experiencing internal reality that antedate the developmental emergence of mentalizing
• Continual pressure for projective identification
• Reexternalization of the self-destructive alien self

By enhancing mentalizing capacity about self, others, and relationships, all patients work on five general treatment goals. These are summarized in Table 8–3. Each of these goals is incorporated into the patient's treatment plan along with a mentalizing formulation that is developed in the individual sessions. In the treatment plan, goals are personalized by summarizing the joint understanding developed between patient and therapist of the underlying causes of the patient's problems in terms of mentalizing, their development, and their function at present. The goals are linked to the components of the program within which the patient and the therapist think most of the work will be done to achieve them. All team members treating the patient need to understand the treatment plan and its implications for their work with the patient. In the treatment reviews with each patient, the patient is asked to report his or her views on the issues described in the treatment plan and current progress toward goals. In the reviews,

different views are integrated into a coherent set of ideas together with the patient. The reviews in themselves stimulate the mentalizing process of patient and staff, helping the patient to develop a coherent interpersonal and developmental narrative.

Table 8-3. Five general treatment goals of mentalization-based treatment in a partial hospitalization setting

1.	Engagement in therapy
2.	Reduction of psychiatric symptoms, particularly depression and anxiety
3.	Reduction of self-damaging, threatening, or suicidal behavior
4.	Improved social and interpersonal functioning
5.	Stimulation of appropriate use of general or mental health services (including prevention of reliance on prolonged hospital stays)

STRUCTURE OF MENTALIZATION-BASED TREATMENT IN THE PARTIAL HOSPITALIZATION SETTING

Structure refers to the way the program is put together from different components, how these are implemented on a daily basis, and how the program is organized over the longer term. The organization of the program in the Netherlands falls into three parts:

1. Pretreatment: pretreatment group introducing MBT; course-explicit mentalizing (CEM) on addiction; CEM for caregivers
2. Treatment: day hospital treatment (partial hospitalization); outpatient treatment MBT caregiver program
3. Posttreatment: stepped-down part of partial hospitalization treatment; individual therapy

Each component requires a different approach from the therapist and the team.

Pretreatment Program

Inevitably, many patients will be referred rapidly from mental health services while a service is being developed, leading to a waiting list. The general rule is that the first 50 patients are those whose other treatments have failed and who have demoralized the referrers. Because our MBT-PH program was the only program for BPD in the Netherlands with few exclusion criteria, a waiting list for patients developed rapidly. To ensure that the patients began engaging in treatment immediately, a pretreatment program was developed (Table 8–4). All patients referred for MBT, either for partial hospitalization

or for the intensive outpatient program, enter the pretreatment program until a place becomes available in one of the MBT programs. It has been reported that some patients experience increasing distress when they start treatment and that this might drive them to seek alternative treatment elsewhere. In our experience, this can be avoided by use of a pretreatment program in which the main focus is engaging the patient in treatment.

Table 8-4. Components of pretreatment program of mentalization-based treatment in the partial hospitalization setting

•	One day per week, introduction to mentalization-based treatment, writing therapy
•	Individual session
•	Telephone accessibility
•	Home visits if necessary
•	Psychoeducation
•	Crisis plan
•	Stabilization of social and behavioral problems (e.g., drug or alcohol misuse)
•	Medication review

Lack of motivation and failure to develop commitment are exclusion criteria for many psychotherapies. Only motivated patients are taken into treatment. MBT, on the contrary, was developed to treat a less motivated population. In the De Viersprong program, most patients showed variable motivation for treatment, which is unsurprising given their fragmented and unstable sense of self. Ambivalence about change is central to the borderline structure, leading to oscillations between demands for help and sudden rejections of it. Progressively engaging the patient in a constructive relationship is a core aspect of successful treatment. Even when patients seem motivated, their commitment can rapidly change, sometimes within the course of a day, and this makes it very important to maintain a focus not only on engaging them but also on keeping them in treatment.

To understand shifts in motivation and further reduce the dropout risk, patients are offered individual sessions in the pretreatment phase, in which time is spent searching for dominant relationship themes and tentatively linking them to therapy and the treatment process (transference tracers). Time and effort are spent on outreach work: telephone calls, house calls, and active pursuit of the patient to build up the therapeutic alliance and to repair ruptures. Another task of the individual sessions is to make sure the patient understands the focus of treatment and how it will help him or her. Specific information includes explaining and discussing the diagnosis, providing

psychoeducation about mentalizing and personality disorder, starting the mentalizing formulation and identifying the treatment plan with a hierarchy of therapeutic aims, reviewing medication, and defining a crisis pathway with the aim of agreeing on a 24-hour crisis plan (see Figure 8–1 for an outline). Social and behavior problems that are most likely to interfere with effective treatment, such as drug abuse and unstable social conditions (financial problems, homelessness), are targeted early.

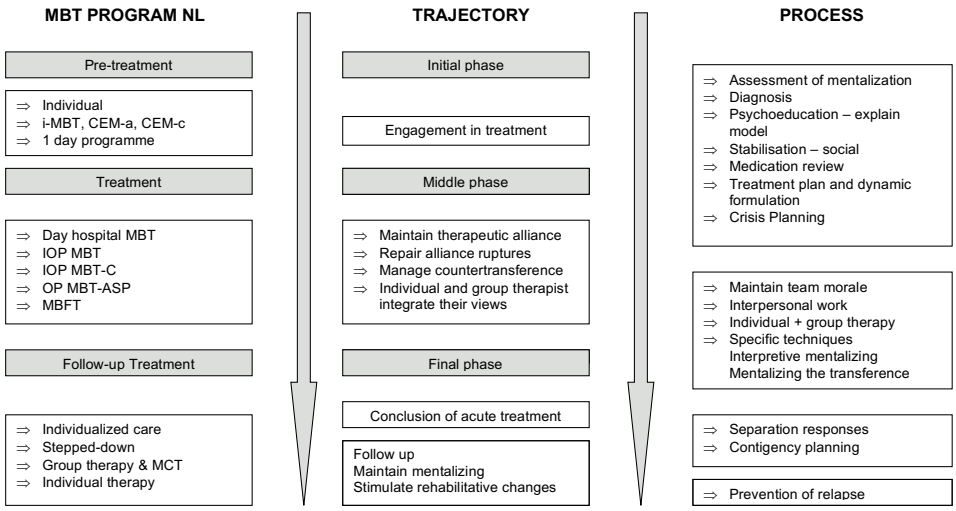

Figure 8-1. Structure of the mentalization-based treatment hospitalization unit in the Netherlands.

CEM= course-explicit mentalizing (a=addiction; c= caregivers); MBT=mentalization-based treatment (A = adolescent; C = caregivers; i-MBT=introductory MBT group; IOP = intensive outpatient; OP = outpatient); MBFT = Mentalization-Based Family Therapy; MCT = mentalizing cognitive therapy; NL = Netherlands.

Implementation

The pretreatment program consists of an individual session, an introductory MBT group, and a writing therapy or mentalizing cognitive therapy (MCT) group organized around themes related to social and behavior problems. In addition, patients can sign up to see the psychiatrist individually during a psychiatric medication consultation hour (described in the Medication Hour subsection later in this chapter). On other days, patients may call the unit. Staff members have a group reflection at the end of the day to discuss adherence to the model. Every week, the staff members discuss the patient's treatment plans.

Telephone accessibility

At the beginning of treatment, patients are given the unit telephone numbers and informed that a staff member will be available by telephone for urgent matters. The unit telephones have an answering machine, and if messages are left outside office hours, a team member will return the call by 11:00 A.M. the next working day. Telephone discussions are kept short, are not therapy, and should not be used in this way by either the patient or the therapist. The aim in any telephone discussion remains to rekindle mentalizing if it has been lost. Accessibility is seen as an important supportive aspect of treatment throughout the whole treatment trajectory, however. For some patients, the confirmation that staff continue to "have them in mind" through a telephone call can help stabilize them; outside office hours, the answering machine can serve as a reminder that they continue to be held in mind.

Outreach work

Therapists contact and may visit the patient as a part of the engagement process or to enhance or repair the therapeutic alliance. Initially, telephone contact or a letter may be enough to help a patient reengage, but at times a visit to the patient's home may be necessary. Generally (but depending on treatment phase and on what the staff think), therapists call the patient when he or she has missed several consecutive sessions. The number of missed sessions before contact is made depends on the assessment of the patient's crisis or dropout risk. If contacting the patient fails and the staff still have not been able to reach a patient after 2 weeks, the therapists write a letter explicitly stating their concern and inviting the patient to an individual session, stating that they want to try to understand the rupture in alliance. If the patient still does not attend, then a therapist goes to the patient's home.

Introductory MBT group

In the individual session, information is given about mentalizing and MBT, the program itself is discussed, and patient and staff responsibilities and rules are outlined. Further details of the initial individual session are given in the following subsection. The introductory MBT group is a slow open group that uses the principles described by Allen and colleagues in Chapter 7 of this volume. It is an explicit mentalizing group that introduces mentalizing and MBT. It educates the patient as part of the preparation for the partial hospitalization or outpatient psychotherapy, but is not "educational" in the sense of telling the patient what he or she needs to know or how to deal with problems. It is instructive insofar as it stimulates the patient to consider the overall process of

mentalizing, its relation to his or her difficulties, and its contribution to his or her success or failure in managing emotional interactions, which are the primary aims of the group. The group follows a structured 12-week program, with each session lasting 90 minutes.

Individual therapy session

At the beginning of therapy, it is important to extensively explore the patient's relationships, (self-) destructive behaviors, and previous treatments. Recognizing mental states and patterns will help the therapist know which types of interventions need to be used and indicate the form of the relationship that is likely to develop between the patient, the therapist, and the treatment staff. Once these patterns have been identified, they are discussed with the patient and incorporated into the mentalizing formulation and treatment plan. They offer an important opportunity to use transference tracers with the tentative suggestion that some of the relationship patterns may be repeated within the treatment itself.

Crisis plan

Nearly all patients will experience a crisis at some point during treatment. Often self-destructive acts in crisis are a result of overwhelming feelings and panic. Failure by mental health professionals to understand the role of self-harm in coping with unmanageable emotional states may lead to inappropriate use of medication and unnecessary hospital admissions. Both responses remove responsibility from the patient for addressing painful affects and are potentially iatrogenic.

Agreeing on and documenting what to do in the event of a crisis is one of the very first issues discussed in the individual session during the pretreatment phase. Such a crisis plan has two parts: the individualized (process) part and the practical part (as written up in Bateman and Fonagy 2006a). From a mentalizing perspective, it is not fitting to give the patient a plan, telling him or her what is best at what time. It is more in keeping with the model to stimulate the patient to think about what situations and accompanying mental states could lead to a crisis and what might be helpful to restabilize him or her.

In the crisis plan, ways of managing difficult emotional states related to self--destructive acts that interfere with therapy or endanger life are identified. The first part of the crisis plan, the mentalizing functional analysis (see Mentalizing Functional Analysis section of Kjolbe and Bateman, Chapter 9 in this volume), is collaboratively developed between patient and therapist by stimulating discussion about different stages of mental states that precede the crisis.

Each of the following stages is defined:

- 0 = feeling in control
- 1 and 2 = patients define these stages themselves
- 3 = in crisis or out of control

Patients try to identify their mental states and behaviors in each of the separate stages. The therapist uses clarification and affect elaboration techniques, frequently coaxing the patient to rewind mental processes to points prior to the loss of control, thereby helping the patient to identify feelings and to place them in a context. Overwhelming, undifferentiated feeling states are microsliced into smaller, more specific mental states by using moment-to-moment exploration of the episode leading up to self-harm. The emphasis is on examining feeling states and on identifying possible misunderstandings or oversen-sitivity. The patient is helped to identify when he or she could have reestablished self-control and what could have prevented the patient from moving on to the next stage toward a crisis. Strategies that have been helpful in managing emotional crises in the past are identified, suxch as leaving a provocative situation, telephoning someone if trapped in a feeling of loneliness, or distracting the mind by engaging in a behavioral task such as cooking. The therapist also tries to stimulate the patient to reflect on how others might observe each stage (signals for others) and what others could do or should not do that might be helpful. Significant others are invited to sessions to collaboratively work out this part of the crisis plan.

In the beginning of treatment, this part of the crisis plan is tentative. Patients often have no idea about their different mental states and about the behaviors that result from a failure of mentalization, only stating, "It happens at once, and there's nothing I can do." The plan is a work in progress, and each time certain aspects become clearer, they are added to the plan. The therapist is required to revisit the crisis plan whenever a crisis occurs. When the actions already identified in the plan fail to work, it can be helpful to stimulate the patient to think about what is missing in the plan, what mental state might not be described, what did not help, and why it did not help. In this way, the therapist is continuously pointing out the patient's own responsibility for dealing with painful and possibly overwhelming affects. At the same time, it helps to reduce the patient's perplexity about his or her emotional states, and continual clarification reduces the likelihood that feelings will need to be managed through self-harm or other such actions.

In addition to such patient-specific plans, in the second part of the plan, the therapist outlines the emergency system that is available to the patient. During working hours, the patient can contact the unit but only if other ways of managing the emotional states have failed or have been deployed with limited effect. The use of emergency services

outside working hours is also discussed, emphasizing that emergency teams will have access to the crisis plan and will attempt to help the patient manage an acute situation until he or she is able to discuss the problem in therapy on the next working day.

Stabilization of social and behavior problems

Social and behavior problems that are most likely to interfere with treatment are identified, and ways of addressing them are organized during the pretreatment period. The stabilization is *not,* however, a condition of entering treatment; it is more a focus of the pretreatment period and may overlap with treatment itself.

Patients start MBT as soon as an appropriate treatment program has availability, regardless of what has been accomplished at that moment in the pretreatment phase. The staff members take over aspects of care described earlier. In our unit, patients have several possibilities: the MBT-PH program, the MBT as an intensive outpatient program, the pilot intensive outpatient treatment program for caregivers, and the pilot outpatient treatment program for antisocial personality disorder. In this chapter, we describe only the partial hospitalization program.

Treatment Program

Most patients starting MBT-PH have nearly completed their initial phase and are starting on the *middle phase* of treatment. By this point, they usually have fewer crises, less fluctuating motivation, and greater engagement in treatment. The initial phase is often the hardest work for the therapists, whereas the middle phase tends to be the most difficult for the patient. During the middle sessions, the aim of all the active therapeutic work is to enhance mentalizing capacities.

The De Viersprong Center of Psychotherapy was the first to offer a formal MBT-PH day program in the Netherlands. Treatment consists of a maximum of 18 months of partial hospitalization (average of 15 months) followed by follow-up treatment in an individualized, stepped-down mentalizing maintenance program. The highly structured 5-day program combines individual and group psychotherapy, focusing on implicit mentalizing processes with expressive therapies (art therapy, writing therapy, MCT) and promoting skills in explicit mentalizing (see Figure 8–1).

In implementing MBT-PH in the Netherlands, the first author (D. B.) drew on her experience of training in the United Kingdom at the Halliwick Day Unit, St. Ann's Hospital, London, where the original research was carried out, which enabled her to learn the

structure and method of each component of the complex program. Even though the specificity of the therapeutic activities is variable, a description of each component gives a focus for others attempting to implement MBT-PH.

MBT-PH consists of small and large groups. Each small group has eight or nine patients with two therapists. The large group is formed by joining the two small groups. The patients of two small groups running in parallel share certain rooms (e.g., living room, computer room, kitchen) and interact in between therapy sessions. The large group allows the patients to focus on mental states of self and others in the immediacy of the contacts they have all week. Furthermore, both small groups may be struggling with similar problems, and these can be shared within the large group.

MBT-PH groups are led by two therapists. Clearly, this is more costly but often necessary with this patient population. Many of the patients can be very aggressive, particularly in the initial part of the middle phase of treatment, in reaction to perceived threats to the stability of the self. In these phases of treatment, they are often very angry, feeling victimized, rejected, and distrustful. Their aggression may be verbal but can also become physical and can be easily provoked. The therapists' task is to keep the arousal at an optimum level, not allowing sessions to become uncontrolled. To do this, therapists must continually monitor the mental states of the other group members and tailor their interventions appropriately. When a patient shows aggression directly toward one of the therapists, it can be very difficult for that therapist to keep mentalizing. In such situations, the second therapist can take over, giving the other therapist time to recover his or her own mind. If several patients are highly emotionally aroused and functioning in the psychic equivalence mode, the therapists may have their hands full controlling the session, and it can be very helpful for them to split their roles, ensuring that different patients receive enough support and empathy to lower their arousal and help reinstate mentalization.

Combined or Conjoint Model for MBT-PH?

We use a combined model of group and individual psychotherapy with the group therapists offering the individual therapy. When starting the program, we had no choice simply because of staffing levels. At a later stage, with more patients, groups, and staff, we could have changed the arrangement to a conjoint model as used in the United Kingdom. However, we found that the use of a combined model had advantages. First, working individually with group patients allows therapists to limit the number of patients they must keep in mind. Most of our therapists work in not only the MBT-PH program but also the pretreatment program (introductory MBT group) or the follow-up program. Second, consistency of treatment is ensured, although a patient could receive

consistently poor treatment from only one therapist. However, this is addressed through a system of supervision and case discussion. Third, the potential advantage for patients of being able to discuss a problem with one therapist or with another in a conjoint model is also, on reflection, a possible disadvantage to the extent that the opportunity for mentalizing the transference can be lost. When problems arise, assistance from the other group therapist or group members may be more useful than a discussion with another individual therapist. Fourth, not offering conjoint treatment builds constancy and continuity. What happens in the group can be discussed easily in the individual psychotherapy. Finally, because the individual therapist is the same person as the group therapist, splitting of transference becomes less likely, and the risk of idealizing one aspect of treatment and denigrating the other is minimized.

Intensity

Attending a program on a daily basis presents problems for people with personality disorder because it requires commitment and personal organization. It is important to ensure that the intensity of interpersonal interaction is moderated and that patients have adequate time between sessions to reflect, to rest, and to distract themselves, if they are to manage the emotional stimulation. The intensity is moderated by allowing time in between treatment components; we choose to have 1–2 hours of time in between the morning and the afternoon program. This has several advantages for severe borderline patients who often get aroused in situations that require high levels of interpersonal interaction. Many patients tend to become overinvolved, whereas others feel more trapped in their isolation within the group. Because of their unstable sense of self, they often seem to need this time between program components to restabilize.

Description of Therapy Components

The main aim of MBT is to enhance patients' mentalizing capacity. Even though partial hospitalization has different therapy components, they all share this aim, which can be specified further into the following shared components:

- To promote mentalizing about oneself
- To promote mentalizing about others
- To promote mentalizing of or about relationships

Throughout the whole program, this aim is accomplished by

- Identifying and working within the patient's mentalizing capacities
- Focusing on internal states in the therapist and the patient
- Representing these internal states to the patient
- Sustaining this focus in the face of continual emotional challenges by the patient

All program components are highly structured (in time, content, method, therapists) and thus predictable for the patients. An essential element within MBT-PH is the link between all components. The themes within the small group partially determine the topics used within the expressive therapies, and overlapping issues from the small mentalizing groups form the focus of the large group therapy. The task of the therapists is to establish continuity between sessions, to link different aspects of the program, and to help the patient recognize and mentalize about any discontinuity. This integration is essential in stimulating the formation of a coherent sense of self.

Mentalizing group psychotherapy

Mentalizing group psychotherapy is one of the most important components of the partial hospitalization program. It is a powerful context in which patients can focus on their own mental states and those of others in the immediacy of peer interaction. Group therapy stimulates highly complex emotional interactions, which all patients can use to explore their own understanding of the motives of others. Patients have to describe what is in their mind while reflecting on their own motives and attempting to understand those of others. For many patients, this feature of the program is one of the most difficult aspects of treatment in that they have the task of monitoring and responding to eight or nine minds rather than being able to focus on only two, as in individual therapy.

The daily mentalizing group therapy lasts 1 hour and is led by two therapists. The group starts with a therapist or patient informing the group about absences or other relevant issues related to the group (e.g., messages from other patients, introduction of a new patient or therapist). After this, the patients are responsible for deciding what -issues will be discussed. It is important that patients are not left in silence for long -because unhelpful anxiety will result. Therapists must be prepared to stimulate -mentalization within or about the silence, to bring up issues from previous sessions (e.g., actively bringing up a conflict between group members that has not been fully considered in other sessions), or to focus on current problems or positive aspects of the overall program.

The therapist's task is to stimulate mentalizing and constructive interaction between as many patients as possible. In doing this, the most difficult task is maintaining an optimal arousal level. If arousal is too low, the session may become meaningless, further stimulating pretend mode. If arousal is too high, patients' attachment systems will become overstimulated because of anxiety, and rigid schematic representations of others will be mobilized, leading to action rather than reflection. These possible iatrogenic effects must be minimized.

For further discussion of group therapy intervention, see Karterud and Bateman, Chapter 4 in this volume.

Mentalizing cognitive therapy

MCT is an explicit mentalizing group focusing on a wide range of mentalizing processes. In MCT, cognitions, but also other aspects of mental states, are explored in a structured way. Cognitions are a key element of working within MBT, as in all psychosocial treatments. MCT uses some aspects of the structure and strategies of cognitive-behavioral therapy (CBT). The structured form of the MCT session is very similar to cognitive therapy, but there are some essential differences. CBT has its roots in social learning theory, and its model of behavior does not include dynamic determinants. Thus, it is less process- and more content-oriented. The MBT therapist is encouraged to think dynamically about the patient's experience. It thus becomes more process- and less content-oriented. This allows consideration of pre- or unconscious thoughts, feelings, wishes, and desires and patients' struggles with these complex mental experiences in the context of the interpersonal pressures of their lives, particularly attachment relationships. The cognitive therapist focuses on changing maladaptive cognitions; the MBT therapist is less interested in restructuring the content of the cognitions and more interested in changing the process by reinstating mentalization.

MCT, unlike many forms of CBT, involves no specific use of problem-solving skills or teaching of fundamental communication skills; no attempt to delineate cognitive distortions outside the current patient-therapist relationship or to focus on behavior itself; no explicit work on schema identification; and no homework.

MCT consists of a small group that meets for 75 minutes once a week. A patient describes a situation in which he or she experienced (or is currently experiencing) overwhelming emotion or engaged in (self-) destructive behavior. The situation is represented on a whiteboard. The patient's mental state (but also the possible mental states of others if involved) and behavior are explored, and components of the event and the associated feelings are written down. The therapist focuses on exploring the mental states broadly rather than using precise and detailed identification of thoughts, feelings, or wishes. The main focus of the session is the mentalizing process, with much less focus on the end product or content of the events and interaction. If the patient wants to explore his or her (self-) destructive behavior, the therapist's main focus is to help the patient "tidy up the behavior" that has resulted from a failure of mentalization, tracing action back to feeling, and thus stimulating mentalizing about the (recent) past. The therapist helps the patient take his or her mind back to the problematic experience, from the safety of emotional distance. In the case of overwhelming emotion, the therapist tries

to help bridge the gap between the primary affective experience and its symbolic representation by helping the patient understand and label the emotional state and place it within the current context, sometimes further exploring linking narrative to the recent and remote past.

When the events and interactions have been clarified, the therapist and group help the patient by bringing in alternative perspectives. The difference from CBT is that here the alternative perspectives are not a result of a Socratic dialogue or of disputing "-irrational or maladaptive" cognitions but are just alternative perspectives brought up by other patients. This helps patients question their assumptions. Sometimes problematic interactions within the group are identified and explored in a structured way with the mental states of several group members highlighted, focusing on different perspectives about a turbulent issue in the group.

Creative/art therapy

The aim of art therapy in MBT-PH is to offer an alternative way of promoting mentalization—sometimes conceived of as external mentalizing (Allen et al. 2003). The use of art allows the internal to be expressed externally, through an alternative medium and from a different perspective. Experience and feeling are placed outside of the mind and into the world to facilitate explicit mentalizing. Under these circumstances, mentalizing becomes conscious, verbal, deliberate, and reflective. Patients produce something that is part of them yet separate. In this way, the therapy creates transitional objects, and the therapists have to work at developing a transitional space within the group in which the created objects can be used to facilitate expression while maintaining stability of the self.

Creative therapy differs from other program components because the patient makes a concrete "product." The product gives the opportunity for the group and patient to focus specifically on a certain area of reflection. For some patients, expressive therapies are less anxiety-provoking than directly reflecting about themselves in relation to others. With their product made, an aspect of the self is outside and is therefore rendered less dangerous, less controlling, and less overwhelming. Feelings become manageable, and the understanding of oneself and others is more tolerable because of the distance created. Other patients, particularly those who function predominantly in psychic equivalence mode, can be more anxious during creative therapy. The product they make, now also visible on the outside and to others, makes that aspect of themselves too "real," and they become overwhelmed. Therefore, the art therapist must tailor her or his work individually with different patients at different phases of their therapy.

Art therapy is done in a small group twice weekly for 75 minutes. The form varies from working individually on personal goals in the group, to working individually on a group theme, to making a group project. At the start of each session, patients are helped to focus on how they are feeling at the moment and what they would like to work on. Sometimes a prominent issue in the group is brought in by the therapist or the patients. Once the form of the session (e.g., theme, individual vs. group work) is decided, the patients choose where in the room they want to work on their project for 30 minutes.

After completing their work, the patients gather again for group discussion of one another's work. In this discussion, as in all program components, the therapist's task is to promote mentalizing by focusing on the expression of affects, their identification, and their personal and interpersonal contexts. The therapist also should ensure that patients consider the meaning of the expressive efforts of others and can help patients recognize that others may see their work in a different way from the way they see it, helping create alternative perspectives. The standard of the art is not important; the process of expression and discussion of the work is significant.

Therapists must continually bring the discussion back to the agreed focus rather than follow other avenues of exploration as they might in a mentalizing group or individual therapy. This technique is necessary to increase the patients' ability to attend to a task without being diverted by other themes to increase effortful control.

Writing group

Writing down one's experiences, feelings, and emotions helps to bridge the gap between primary experience and representation and its symbolic representation, which allows the reflective process to develop and strengthens the secondary representational system. Through writing, implicit mentalizing becomes explicit mentalizing. Writing allows for reflection without the interference of other minds and with distance in time if the patient has written about an earlier event, so less arousal occurs.

Writing therapy takes place in a small group once a week for 90 minutes. To begin, all the patients and the therapists write on a piece of paper a theme that they feel is a prominent issue in the group or on the unit. All the papers are placed in a box. One of the patients picks out a paper at random, and all the patients write down the chosen theme. They then have 30 minutes to write about the theme, especially its personal meaning. Next, each patient reads out loud what he or she has written, and together, led by the therapists, they explore the similarities and differences between their essays. Again, the therapists aim to promote mentalizing by helping the patients to create

alternative perspectives on what they have written. As in art therapy, what is written on paper is less important than the process of developing the theme, writing about it, and discussing the personal essays.

Unit meeting

When groups of people are together in a unit, consideration of others is important. Arguments can occur about the use of the kitchen, failures to wash up, the disappearance of items of cutlery, the seating area being left untidy, and so on. A brief meeting occurs weekly to deal with these practical problems. The meeting is run by the staff. Individual or interpersonal issues are not addressed in this meeting; if they are brought up by the patients, staff members suggest that they take the problem to their group or individual therapy.

All patients from the unit and one or two staff members meet once a week for a maximum of 30 minutes. The time frame depends on the number of issues to discuss; often, this meeting may take as little as 10 minutes. Patients can bring up any unit housekeeping issues, such as the use of the kitchen, broken utensils, groceries, or an activity they want to plan (e.g., a Christmas lunch).

Social hour

Patients often experience crises during the weekend, when contact with the unit is not possible. It is important not to end the week with a component that might induce too much arousal, leaving patients to go home in nonmentalizing states. For this reason, the weekly program ends with a social hour—a relaxed, low-arousal interaction between patients and staff. Patients and two staff members choose and play games together.

Medication hour

In MBT, medication is viewed as an adjunct to psychotherapy. It enhances the effectiveness of psychotherapy, improves symptoms, stabilizes mood, and may help patients attend sessions. Prescription of medication needs to take transference and countertransference phenomena into account and therefore needs to be integrated into the program itself.

Before the start of treatment, the unit's psychiatrist carefully identifies the patient's psychiatric symptoms, current medication, and history of medication. Two medication hours are available each week, during which all patients from the MBT unit can sign in for an appointment. Therapists can advise patients to see the psychiatrist, but it is each patient's own responsibility to go or not. During treatment, the patient is responsible for his or her own medication. Changes of medication are discussed with the treatment team

before being prescribed to ensure that possible transference or countertransference aspects are considered. Medication should rarely be prescribed during a crisis and never to help manage staff anxiety.

Mentalization-Based Family Therapy module

Recently, our unit implemented Mentalization-Based Family Therapy (MBFT; see Asen and Fonagy, Chapter 5 in this volume) as a module that patients from the different MBT programs can be referred to with their families. MBFT addresses mentalizing processes within the family context rather than focusing on specific symptoms. Its aim is to provide the family members with the tools that will enable them to initiate a self-healing process. Improved understanding within a family will improve the quality and supportiveness of family attachment relationships and strengthen the family's capacity to control and manage problems. This can facilitate the patient's further progress in treatment.

Final phase

The final phase of treatment in the MBT-PH program commences at 12 months. It is very important for the therapist to be mindful of time because a lot of work still must be done in the final phase to ensure consolidation of therapeutic gains. In this last phase of active treatment, the patient's responsibility to develop independent functioning is increased as earlier work is integrated and consolidated. The focus of the last 6 months is the patient's feelings about the loss of an intensive treatment and about reintegrating into society. Collaborative development of a follow-up treatment plan individually tailored to the patient's needs is an essential task in this final phase of treatment.

Posttreatment Program

After 18 months of treatment, it is unlikely that patients with severe personality disorders, who often have histories of failed treatments, multiple hospital admissions, and inadequate social and relational stability, will be able to adapt and reintegrate to their new lives without further support. This is usually the case, no matter how successful the treatment has been. Individual, tailored follow-up treatment with stepped-down care is therefore offered.

Goals in follow-up treatment are summarized in Table 8–5. Two programs are organized. The first is a 1-day-per-week program with intermittent follow-up appointments. The second is continuation of individual sessions but with the frequency reduced over time, the trajectory of which is negotiated toward the end of MBT-PH. Some patients leaving

MBT-PH will choose the 1-day follow-up treatment program combined with intermittent individual follow-up appointments. Others prefer to have only individual follow-up sessions with their individual therapist, with the frequency gradually reducing.

Table 8-5. Goals of follow-up mentalization-based treatment in the partial hospitalization setting

1	To prevent relapse
2	To maintain (and further enhance) gains made in mentalizing capacity
3	To stimulate further rehabilitative changes and reintegration

The 1-day follow-up treatment program consists of group therapy and a writing group. In the follow-up groups, the emphasis is on topics related to reintegration with society. During individual follow-up appointments, the therapist continues to use mentalizing techniques to explore the patient's underlying mental states and to discuss how understanding oneself and others leads to resolution of problems, helping to manage both problematic areas of interpersonal or intimate relationships and the process of returning to education or employment.

In the follow-up trajectory, the time between appointments is increased over a 6- to 12-month period to encourage greater patient responsibility. The therapist and patient decide together how long the patient will continue to be seen in this way. The intensity and frequency of appointments in the follow-up contract are flexible, and the patient can request an additional appointment if he or she has an emotional problem that is difficult to manage. We find that it is very helpful to offer patients this possibility; some come back after many months or even years when they feel they are relapsing, and often only a few sessions are necessary to reinstate mentalization and help them restabilize. This continual follow-up with permission for self-referral means that patients experience continuity over a prolonged period. Some patients choose to be discharged after MBT-PH knowing that they may call to request an appointment at any time in the future. Others plan only a few appointments but set them far ahead with a 6-month interval; this assurance that we continue to have them in mind seems to give them greater confidence and self-reliance about their ability to reintegrate.

MENTALIZING ENVIRONMENT

An important factor within the MBT-PH program structure in daily practice is how well staff function, how predictable they are, how consistently they implement treatment, and how clear boundaries are in terms of roles and responsibilities. Inconsistency, lack of coordination, incoherence of response, unreliability, and arbitrariness are all antithetical to structure. We discuss some of these issues.

Important nonspecific aspects, such as the interrelations of the different aspects of the MBT program, the therapists and their working relationship, the continuity of themes among the groups, and the consistency and coherence with which the treatment is applied over time are likely to be key factors in effective treatment of severe personality disorders. Within MBT, this essential integration is achieved through a focus on mentalizing. How, then, does one create a framework in which mentalizing becomes and remains the focus?

Creating a Mentalizing Environment

The partial hospital treatment program requires patients to attend over a long time and involves considerable interaction between patients. The atmosphere created, the character of the building, and the staff and their functioning all need to be conducive to the orientation and focus of the treatment. This is the therapeutic milieu, which Janzing and Kerstens (1997, p. 246) defined as "an organized treatment unit, in which a situation is created in which a patient is offered relationships with a group of patients and staff. These relationships offer the patient the opportunity, within his capacities (and deficits), to work on a solution to his problems." Within MBT-PH programs, the milieu is not a treatment method in its own right as it might be in therapeutic communities. However, establishing the best possible environment for MBT is a very important consideration when treatment is being organized. Material aspects of the milieu include the building, the location, the entrance, the style of written information, and the available therapy rooms, whereas the nonmaterial aspects include the staff, the quality of their working relationship, their attitude toward patients and one another, the consistency and coherence of the approach, and the management support of the program.

In creating an optimal treatment milieu, treatment orientation and focus are the primary considerations. Within MBT, the milieu should stimulate mentalizing about self, others, and their interactions; that is, a mentalizing environment. An open, responsive, mentalizing atmosphere is not only needed for patients but also essential for the staff. A well-functioning team will create a secure atmosphere within the treatment milieu. This allows disagreements between therapists and patients to be used constructively;

facilitates an inquisitive, curious, and open-minded culture; and encourages attempts to understand differences, generating and accepting alternative perspectives. A mentalizing milieu encourages thought over action: every action beyond protocol is first checked out with other staff members to identify possible underlying transference and countertransference processes. In our experience, 75% of such intended actions are unnecessary and possibly even antitherapeutic.

To offer a safe and supportive environment, strong feelings engendered in staff need to be contained without either using excessive protection or overstepping (therapeutic) boundaries and becoming overly permissive. When staff are able to keep mentalizing in the midst of strong emotions and confusion and can do what is necessary to reinstate mentalization in patients and groups, patients will experience their own emotions as less frightening and dangerous. This will ensure that patients are less likely to become overwhelmed and destabilized. Predictable and consistent staff members who are thoughtful and patient in their approach will add further stability to the system. Last, but certainly not least, setting clear boundaries in a respectful way without removing patients' own responsibility is essential to contain strong emotions and thus is a vital part of a mentalizing milieu.

Rules or Recommendations?

Rules are part of the boundaries of the mentalizing environment. In explaining the rules, it is important to maintain a mentalizing stance. First, the rules need to be stated and explained in a straightforward manner, making sure they are as clear and comprehensible to the patient as they are to the therapist. The reasons for the rules should be explained, and the patient's responses should be explored. In our view, the approach in giving the rules should be one of discussing recommendations rather than directly giving rules. This does not mean that if a recommendation or rule is not followed by a patient, the therapist will not take action. For example, a therapist will end a session if the patient is under the influence of drugs. We recommend that patients do not attend the unit under the influence of drugs or alcohol because they cannot participate effectively in treatment. If they do take drugs, they are asked to leave and not to attend until their mind has cleared to discuss what made them engage in a self-destructive and therapy-destructive behavior (see subsection Drugs and Alcohol later in this chapter).

MBT-PH includes only rules that are necessary to secure a safe environment. Too many rules may lead to an ultraprotective and controlling environment, which is antithetical to mentalizing. Furthermore, abiding by many rules is very difficult for most patients; they are unable to enter into binding contracts because they cannot predict their future behavior. Introducing extra rules or individualized contracts about attendance,

self-harm, and suicide, for example, would be asking the patient to control the very behavior for which he or she is seeking treatment. We see it as essential to treatment that disorganized and destructive behavior outside treatment is explored within treatment, so that actions can be traced to feelings by rewinding the events. Patients then can give meaning to the behavior that has resulted from a failure of mentalization. Behaviors that are inherently threatening to patient or therapist safety and block mentalizing are seen as antitherapeutic and thus possibly interfering with treatment of all parties involved. Violence, drugs and alcohol, and sexual relationships are such behaviors. The three essential rules concerning these behaviors are discussed in the following subsections.

Violence

It has to be very clear that neither physical nor verbal violence to others in the unit will be tolerated. Threats to people outside the unit are a different matter (although the individual who makes them is considered responsible for them) and may become a focus of therapy rather than a reason for discharge. Depending on the severity of physical violence or the recurrence of it in the unit, the person responsible may be discharged and the police involved. In other cases, the person may be given a time-out, the length of which is decided by a minimum of two members of the staff team (a mentalizing perspective on violence is discussed in Bateman and Fonagy 2008a, and an outline can be found in their Chapter 12 in this volume). Patients often describe high levels of arousal with problems understanding the intentions of the other person or describe feeling threatened by collapse of their own state of mind—"I just lost it." Threatened, actual, or perceived humiliation and disrespect can then lead to a threat to the stability of the self. Aggression becomes an attempt to restabilize the self.

Individual therapy is often continued during time-out from the rest of the MBT-PH program, in order to try to reinstate mentalization. Before the patient can continue in treatment, the patient (and staff) must explore the incident fully, gaining some understanding of the processes that led to the violence; the patient must have better control over impulsivity; and the staff must feel safe. Only then may the patient return to the MBT-PH program. The patient group members are kept informed about what is happening. During the patient's time-out, the therapists actively bring the aggression or violence issue to the group therapies to ensure that participants throughout the whole system of treatment consider what has happened.

Drugs and Alcohol

In a population of patients with severe personality disorder, approximately 70% have drug or alcohol abuse problems. Drugs and alcohol alter mental states and interfere with the exploration of mental states, negating the overall aim of treatment. Thus, the

rule is that patients under the influence of drugs or alcohol are not allowed to remain in a group or an individual session. When asked to leave, some patients may challenge the therapists and may demand proof (i.e., by testing of their blood or urine samples). We do not test blood or urine. At the beginning of treatment, patients are told that if two members of staff believe that a patient appears to be under the influence of drugs or alcohol, they are empowered to ask the patient to leave and to return only when his or her mind is not altered by drugs or alcohol. We are very transparent about our motivation to work this way and are clear that patients will not necessarily be excluded from therapy because of their addictive problems. Furthermore, in our experience, because of the open discussion and enhanced mentalization about drug and alcohol issues during group therapies, other patients who are often more quickly aware than the therapists that someone is under the influence of drugs will ask that patient to leave and to return only when not under the influence of drugs.

Sexual Relationships

It is impossible to prevent patients from meeting during the evening and on weekends. It is understandable that they do meet outside of the day-hospital treatment, which is such an important and, for a time, such an extensive part of their lives. Some may meet by chance because they live locally, whereas many feel isolated and lonely and so seek out contact, viewing other members of the group as kindred spirits. The dangers of regular outside contact are discussed at the start of treatment. Contact between patients outside treatment interferes with the treatment of the individual and influences the whole group. Patients are encouraged not to keep their meetings a secret but to discuss them within the group and individual sessions. Sexual relationships between patients are strongly discouraged. Sexual relationships (and friendships to some extent) involve "pairing" of minds, which alienates others within the group. Patients frequently underestimate the effect of these dangers.

A Consistent and Coherent Approach

Patients with BPD are very sensitive to inconsistency. Inconsistent responses from an individual or from different members of a team confuse them, making them suspicious and anxious. Fear and anxiety lead to instability in their representational system and undermine their mentalizing capacity, leading to destabilization of their sense of self. Thus, it is very important that all therapists on a team are consistent in their interventions; for example, they should be consistent in the way they deal with absences, in their reaction to aggressive behavior, in their management of crises, in their responses to patient demands (for more, longer, or extra sessions, for instance), and in the discussion of verbal insults. For therapists to be consistent, they all need

to understand the theoretical basis of MBT and integrate this understanding in their interventions. Only then will they be able to think quickly and effectively during treatment and tailor interventions, within a coherent framework, to the uniqueness of each and every clinical situation.

Therapists have to work together to ensure that they all understand the process of treatment, the reasons for interventions, and how to implement them. A lot of emphasis is placed on developing a secure, open, and cohesive team (see subsection Team Functioning later in this chapter) and making sure every team member is communicating in the same way, remaining consistent in his or her approach, and thus adhering to the MBT model.

TRAINING, ADHERENCE TO THE MODEL, AND TEAM SUPERVISION

All team members at the MBT unit work only with MBT to ensure that no confusion arises in the theoretical framework being used and that their interventions remain -focused on mentalizing. Reading the MBT manual and practical guide alone is not enough to grasp the concept of mentalization and its translation into clinical interventions that enhance mentalization; training and supervision are necessary. All staff members are trained (minimum of the basic course, advanced course, specialist course, individual supervision, and team supervision) in MBT, but basic training is not enough to ensure adherence to the model in practice. Staff group reflection and team supervision are integrated into the program to enhance adherence. Both aim to ensure that therapists keep to the MBT model and apply it appropriately and with fidelity. In both the group reflection and the team supervision, the therapist should feel free to discuss the major evolving transference themes along with his or her countertransference responses to the patient.

On a daily basis, after working with a treatment group, the therapists have a *postgroup reflection* to discuss which interventions stimulated mentalization and which interventions were not effective. Once a week, the therapists discuss their adherence by completing adapted scales currently in development. Two to three times a year, the group and individual therapists are supervised by senior team members who complete and discuss the adherence scale. These discussions can become quite critical of certain styles of interventions, but when the group manages to maintain a mentalizing stance, the discussion can be fruitful about what makes the therapist move off model.

Once every 2 weeks, the whole staff participates in *team supervision*. One (alternating) member of the staff group prepares this session by selecting literature on a topic related to MBT (often a "hot" topic in the unit, for example, on dealing with crises, aggression, pretend mode) and preparing a patient-therapist role-play. In the team supervision, 15 minutes is spent discussing the theory, and an hour is spent role-playing.

STAFF SELECTION AND TEAM FUNCTIONING

MBT-PH involves a fully integrated team in which all aspects of treatment—psychiatric, psychological, social, and expressive—are integrated into a coherent whole. The team thus includes mental health professionals with different skills, including psychiatrists, psychologists, nurses, and art therapists. One of the many advantages of a fully integrated team is that transferences are split between members of the same team rather than between independent practitioners. In a well-functioning, cohesive, and coherent team, split transferences will arise and be discussed, understood, and integrated within the team before beginning to discuss them with the patient. Powerful countertransference feelings also can be contained and understood in an open and -secure team, often preventing the all-too-common situation of an independent -pro-fessional being pushed into inappropriate enactments. Staff selection, training, group reflection and supervision, intervision, and team support all contribute to a well-functioning, cohesive MBT team.

Staff Selection

Increasing evidence indicates that who treats the patient in psychotherapy is important. Some state that a therapist's qualities may be as important as the characteristics of the treatment itself in determining good outcomes. Not all therapists are able to treat BPD. Bateman and Fonagy (2006a, p. 126) suggest:

> [Therapists treating BPD patients] need a high degree of personal resilience and qualities that enable them to maintain boundaries whilst offering flexibility, survive hostility without retaliating, and manage internal and external conflict without becoming over-involved. They must be effective "team players" and comfortable with working in a multi-disciplinary group without insisting on strict, professionally determined demarcation of tasks. The rigid, narcissistic, self-protective, defensive professional is positively harmful to a team approach. The flexible, reflective, communicative, considerate individual who is clear about personal and interpersonal boundaries and who can tolerate and withstand the emotional impact personality disordered patients have on himself and a team is a bonus.

According to Gunderson (2008), therapists who do well (with borderline patients) are usually reliable, somewhat adventurous, action oriented, and good-humored. This translates into being active and responsive. We agree with Gunderson's description and would explicitly add that the therapist should be neither too anxious nor too avoidant, should be able to maintain mentalizing when arousal is high, and should not withdraw when patients are becoming verbally aggressive but instead should dare to stay active and responsive, setting clear limits when necessary.

In implementing MBT in several already functioning teams, we have encountered problems when some members of staff were reactive instead of proactive, slightly avoidant rather than personally engaging, and more passive than active and expressive. When patients experience overwhelming affect, such staff members avoid grasping the patients' strong feeling states and fail to help patients understand and label the experience. The patients are left anxious, overwhelmed, and confused. This engenders severe acting out and boundary violations. The staff members then become more anxious and feel helpless and incapable, further losing control in the group, with obvious negative effects on patients and staff. Management of these harmful effects needs effective leadership.

Leadership

The team leader or manager plays a crucial role in developing, implementing, and delivering a coherent and consistent MBT-PH program and in managing a group of therapists treating this complex group of patients. Therefore, a team leader must have excellent communication and leadership skills, the capacity to select employees with proven affinity with the target population, and the competence to build teams and to manage staff openness and psychological safety effectively.

Because of the complexity of patients with severe personality disorder, MBT programs need to be well embedded in the organizational structure of the psychiatric services. It is important that the team leader maintain a constructive alliance and sufficient political influence within higher levels of the organization. At the highest levels, if the institution's board members are to facilitate MBT teams, they need to recognize the risks concerning patient security, such as the dangers of suicide and aggression to others. The team leader needs to have a thorough understanding of the theoretical basis of MBT and to keep a mentalizing stance in leading the team. It is essential that the leader maintain an overview of the unit and its place within the organization, being able to mentalize about parallel processes in the patient group, the staff, and possibly the organization as a whole. He or she needs to keep a distance from transferential processes in the team

and have enough leadership qualities to be able to help reinstate mentalizing in the staff when necessary and to develop a "critical, self-reflective culture," for example, to prevent staff from acting in reaction to a teleological demand from patients.

Alongside the team leader, at least one other leading staff member is needed, often the most experienced and senior professional who is naturally respected by all staff, to help maintain the structure of the treatment program, to support the staff, and to supervise on an everyday basis.

Team Size

How many staff members are needed to create a well-functioning, stable team? (This issue is also addressed by Kjolbe and Bateman in Chapter 9 in this volume.) In our experience, a minimum of two partial hospital patient groups consisting of 8 or 9 patients, each working in parallel, or one partial hospital group combined with one introductory MBT group is necessary for the unit to be feasible in terms of staff numbers and cost-effectiveness. It is generally believed that the minimal critical mass for establishing a functioning team is about 6 people. However, a team of this size is probably too small; problems will arise with vacations, sick leave, or maternity leave. It would be impossible to maintain a program in which MBT is applied consistently and coherently with a team of this size. A team of 8–12 members is probably a better size. This number also depends on the amount of full-time and part-time employees. The United Kingdom MBT-PH program initially was run by only full-time therapists, which has many advantages in that continuity and consistency are easier to maintain. In the Netherlands, it is nearly impossible to recruit only full-time staff, so the staff complement has to be larger, and more effort is necessary to keep all the program components linked.

The size of the team also depends on the stage of development of the MBT unit and the number of patients being seen in different MBT programs. Early in development of a unit, a small group of staff makes training easier and facilitates the development of a coherent mentalizing culture. When the team is mature, it can be larger. It becomes increasingly difficult to coordinate care and to share information safely with more than 12 therapists, and the risks of inconsistency increase.

Another important aspect is staff support to ensure that a relatively stable team feels confident to provide an open, secure, and supportive culture for patients. Frequent staff changes are unsettling for all patients and for some staff members. Borderline patients, by definition, are very sensitive to abandonment. Staff changes can lead to ruptures in a therapeutic alliance, a breakdown in trust, and possibly even a decision to drop out of treatment.

Team Functioning

Developing a secure, cohesive team is essential for effective teamwork and a well--functioning MBT unit. Keeping a healthy morale in treating severe personality disorders can be challenging for several reasons. First, borderline patients are emotionally challenging, at times picking on staff members, finding their weak spots, and undermining their therapeutic zeal. Second, change in personality disorder is slow. Third, splits within the team, whether arising from problems within the patient or in the team itself, commonly manifest themselves as disagreements that may become polarized, making it hard for individuals not to blame one another for management or treatment difficulties. Fourth, the fluctuating nature of the problems of the borderline patient and the intermittent crises can lead to an onerous workload and constant anxiety about risk. Finally, a patient's suicide has a profound effect on not only the individual caring for the patient but also the whole team.

Sustaining and maintaining a secure, cohesive team with a healthy, enthusiastic morale can be achieved through a mixture of intervision, team supervision, and group reflections and the development of a secure atmosphere within the mentalizing milieu.

Intervision

The team's cohesiveness can be enhanced through staff mentalizing about themselves and one another—"practicing what they preach." This is known as *intervision* in mainland Europe and among staff groups in the United Kingdom. Once every 2 weeks (alternating with team supervision), the treatment staff have "intervision," in which a broad range of team issues can be discussed. These issues are often more personal than in the team supervision, which is more theoretically and practically oriented. For the team to be able to work together effectively, it is very important that all members feel secure enough to talk openly with one another about their own personal emotional responses in working together and in treating the patients. This can be more important when disagreement occurs in the team, which is a danger to effective treatment because it will cause inconsistencies and undermine patients' (and therapists') mentalizing capacity.

Disagreements in the team, often conceived of as "splitting," can have several causes. When they occur, the most important point is to try to establish their meaning. Possible causes include the internal processes of the patient, poor team communication ending in fragmentation, team members' own personally unresolved transferences, and difficulties experienced by the staff. Sometimes they have little to do with the patient. Often, it is a mixture of factors. Parallel processes become transparent, needing to be dealt with in intervision. Parallel processes are elements of longer-lasting processes found in the patient group that at the same time are found in the staff and sometimes simultaneously

in the organization. It is often unclear where the process first originated, within the patient group or within the staff. Reinstating mentalizing about these processes and establishing meaning help to (re)integrate the team and enable the team to offer consistency in treatment.

Different causes of splitting need different interventions. Splitting arising in the context of unresolved transferences or because of poor communication needs teamwork (intervision) rather than patient work, but splitting caused by projections of the patient may need clinical discussion within the team (team supervision) followed by dialogue with the patient.

During a period when three members of staff were on maternity leave, a member of staff was on long-term sick leave, and new staff members joined the team because of service development, many changes occurred in the unit. The longer-employed remaining staff members had a lot of extra work covering for the staff absences and training new staff members. They felt overworked, frustrated that the therapists had all become pregnant around the same time, and tired. They started to isolate themselves and to describe themselves as "trying to survive," to ask for more time off, and to demand to take courses. This led to fragmentation and splitting in the team—the "committed" therapists and the "noncommitted" therapists–and less consistency and coherence in treatment. At the same time, patient attendance dropped dramatically, requiring more outreach work. The die-hard patients started forming a group aligned against the nonattenders, demanding that staff do something and set stricter rules around attendance.

In team supervision, the theme was the teleological mode. Staff practiced interventions with role-plays of patients demanding staff action—for example, discharging those patients who were not attending regularly. The team focused on these problems for several intervision sessions by discussing the frustrations, the splitting phenomena, and the parallel processes with the patient group.

It became apparent that the splitting and the parallel processes arose within the context of unresolved transferences and because of poor communication. Tracing these processes and discussing possible interventions reinvigorated the team and reinstated a more thoughtful approach to the problems in the unit and to managing the patient demands; a mentalizing team was restored.

RESEARCH

Implementing Research and Monitoring System

We find it important to study the effects of our different MBT programs continuously for research purposes but also to monitor individual patients' therapeutic progress. All patients are asked to participate by filling out questionnaires every 6 months until 3 years after starting treatment. Once a month, time is reserved between morning and afternoon sessions in their therapy program for this purpose. Patients receive an annual report with personal feedback on the outcome of their measurements. The results from research lead to new developments.

Research Findings on Mentalization-Based Treatment in a Partial Hospitalization Setting

Data have been collected on the program described in this chapter. In a naturalistic cohort study, 40 Dutch patients with severe BPD and a high degree of comorbid Axis I and Axis II disorders were assessed every 6 months during a maximum of 18 months of treatment (Bales et al., in press).

As we have described earlier in this chapter, the De Viersprong Center of Psychotherapy was the first to offer MBT-PH in the Netherlands. The MBT-PH program in the United Kingdom was replicated. The maximum duration of treatment was 18 months of partial hospitalization followed by a maximum of 18 months of maintenance mentalizing (group) therapy. Adherence to the MBT model was monitored by daily reflections within the staff, use of the adherence scale as described by Bateman (2004), and weekly team supervision. The team was trained by the developers of MBT, and in the first year, adherence was rated by Bateman's observation of group sessions.

Summary of Findings

This prospective cohort study (Bales et al., in press) was the first to show that MBT can be effectively disseminated outside the laboratory setting. Our findings were of considerable interest because they 1) were obtained by an independent institute, 2) were reported in a naturalistic setting outside the United Kingdom, and 3) did not involve exclusion criteria other than schizophrenia or intellectual impairment. The study population consisted of patients with severe BPD and a high level of psychiatric comorbidity (including paranoid and antisocial personality disorders, substance abuse and dependency, and bipolar disorders).

All treatment goals were achieved. First, because only 12.5% of the patients prematurely left treatment because of dropout or "pushout," it is fair to conclude that the vast majority of patients were effectively engaged in treatment. Second, self-reported quality of life, depression, general symptom distress, and borderline symptomatology all improved significantly within 18 months. Third, we observed a significant decrease in interpersonal problems and a significant improvement in interpersonal relationships and social role and personality functioning, all within 18 months of treatment. Fourth, all patients showed a decrease in self-harm and suicidal acts. Finally, we observed a significant decrease in the frequency of additional treatment needed, and no psychiatric hospitalizations were required.

FUTURE DIRECTIONS

Future research should address treatment processes and identification of the effective components of treatment. Although it has been suggested that the focus on stimulating attachment to the therapist while asking patients to maintain mentalizing capacity is the key element in effective treatments of BPD, no direct empirical support in favor of this theoretical claim has been found. Other potential key elements in effective treatments of BPD include the substantial amount of outreach work, the consistent application of a coherent approach, and the intensity and duration of treatment (Bateman and Fonagy 2000; Fonagy and Bateman 2007; Verheul and Herbrink 2007). The search for patient and therapist characteristics that influence treatment outcome, mechanisms of change, and key elements of effective treatments all may help to tailor treatments to individual patients and may thereby lead to more effective and cost-effective treatment.

CONCLUSION

This Dutch study (Bales et al., in press) showed that MBT can be applied effectively in other settings and countries and yields strong support for the clinical effectiveness of MBT-PH in patients with severe BPD and a high degree of psychiatric comorbidity. Our findings might stimulate clinicians and researchers to stretch the boundaries of psychotherapy even further, by including patients with severe comorbidities such as substance use disorders, bipolar disorder, and paranoid and antisocial personality disorders.

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Chapter 3

Discovering how the mind works: The journey of a patient in Mentalization-based Treatment

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ABSTRACT

Mentalization-Based Treatment (MBT) is an evidence-based treatment for patients with personality disorders, originally developed for the borderline personality disorder. The theoretical background as well as its (cost)effectiveness and practical implementation have been described in detail elsewhere. This paper complements the existing literature with a case study describing the 'archetypical' treatment process of a patient with a severe borderline personality disorder in MBT. The MBT trajectory and focus of the different phases of MBT are described, ranging from engaging the patient in treatment and crisis management to the struggles in working with the therapeutic relationship, gradually moving toward reintegration in society and finally the end of treatment. Typical MBT concepts and interventions are highlighted and discussed, aiming to help therapists translate general MBT principles to their own clinical practice.

1. INTRODUCTION

Mentalization-Based Treatment (MBT) is an evidence-based treatment method for patients with personality disorders, initially used to treat patients with borderline personality disorder (BPD). MBT has its origins in attachment theory (Bateman & Fonagy, 2004; Bales, 2012). In MBT, the vulnerability to loss of mentalizing is seen as the core problem in borderline personality disorder. Mentalizing is the capacity to understand actions by both other people and oneself in terms of thoughts, feelings, wishes, and desires; it is a very human capability that underpins everyday interactions. Earlier theoretical literature has described the development of the mentalizing capacity inside an attachment relationship and the link with BPD extensively (Fonagy et al., 2002; Fonagy & Luyten, 2009, 2016). The (cost)-effectiveness of day hospital and intensive outpatient MBT has also been described in multiple articles (Bateman & Fonagy, 1999, 2001, 2003, 2008, 2009; Bales et el., 2012; Jørgenson et al., 2013), as well as the way MBT is implemented in clinical practice (Allen, Fonagy & Bateman, 2008, 2016; Bales, 2012; Bales & Bateman, 2012; Bateman, Bales & Hutsebaut, 2012).This paper aims to complement the existing theoretical literature on MBT with a case study describing the treatment process of a "typical" MBT patient. First, some essential principles of MBT are discussed. Then we will describe the treatment trajectory of patient Simone[1], illustrating important concepts and MBT interventions of MBT. Keeping in line with mentalizing practice, we try to describe our understanding of her problems and the situations that occur in terms of (the limitations in) mentalizing capacity.

2. THE BASIC PRINCIPLES OF MBT IN A NUTSHELL

A basic principle in MBT is that BPD patients have a vulnerability to loss of mentalizing processes and are slower in recovering mentalizing, especially in high arousal often in the context of attachment relationships. A general principle is that mentalizing capacity in patients with BPD is inversely related to stimulation of the attachment system (Bateman & Fonagy, 2002, 2004; Fonagy & Luyten, 2016). So, for example an easily triggered fear for rejection or abandonment stimulates their attachment system, inhibiting mentalizing capacity, leaving patients lost in the turmoil of overwhelming, bewildering emotions or on the other end possibly completely detached from inner experience, empty, lost. Related thereto, BPD patients often have identity problems, experience incoherence and fragmentation in their feeling of self; patients have no idea what they want or feel, who they really are. Feelings are often so unbearable that the only way to stabilize the

1. Simone is a fictitious name.

self lies in self-destructive behavior or externalization in contact with others (see theory of *alien self*, Bateman & Fonagy, 2004). The incapacity to see themselves and others as individuals whose behavior is determined by feelings, thoughts, desires, results in major misunderstandings in relationships. From the MBT perspective, these problems in emotion regulation, relationships, identity and impulsive and destructive behavior are seen as the consequence of a failing mentalizing capacity. When mentalizing fails, patients fall back on non-mentalizing ways of thinking that are very similar to the ways in which young children think and behave before they have developed full mentalizing capacities, so called *pre-mentalizing modes* of subjectivity. These modes of experiencing self and others are termed psychic equivalence mode (mental reality = outer reality; thoughts and feelings become too real; concreteness of thoughts), the pretend mode (where there is no bridge between inner and outer reality; feels empty, meaningless, inconsequential) and the teleological mode (understanding of self and others in terms of physical behaviors; overreliance on what is physically observable; extreme external focus) (see for more extensive explanations Bateman & Fonagy, 2004, 2016). In this paper we illustrate Simone's non-mentalizing way of experiencing, how to recognize the modes and possible ways to intervene.

The overall aim of MBT is to develop a therapeutic process in which the focus of treatment is the patient's mind. The objective of MBT is to enhance mentalizing: restoring mentalizing when it is lost, maintaining it when present, ultimately increasing the resilience of the individual's capacity to keep mentalizing going when it would otherwise be lost. Consequently, the MBT therapist is continuously focused on identifying current mentalizing capacity in the session. Listening and focusing on the patient's nonmentalizing modes and on imbalance in mentalizing dimensions help guide interventions. Managing in-session arousal is essential. An absence of arousal could be a sign of the session becoming too cognitively organized, or of pretend mode; in both the patient is detached from the relational process in the session, possibly leading to a meaningless session. Excessive arousal undermines mentalizing, exactly the opposite of the aim of MBT, leading to non-constructive sessions, possibly even iatrogenic interaction. However, the loss of the mentalizing capacity of the patient (and therapist!) during sessions is inevitable. Continuous focus in treatment is managing the patient's and therapists own arousal, keeping it neither too low nor too high, recovering mentalizing capacity when lost and repairing consequential possible ruptures in the therapeutic relationship. MBT has a spectrum of interventions helping guide intervention to regulate the arousal level and enhance mentalizing (see Figure 1). This is done by interventions such as empathic validation, clarification, exploration, challenge, affect identification and affect focus and relational mentalizing (Allen e.a., 2008; Bateman &

Fonagy, 2006, 2016; Bales, 2012). In our case study, examples of interventions aimed at managing arousal and enhancing Simone's mentalizing will be explained within the MBT framework.

Figure 1: Spectrum of interventions

- Empathic validation – including reassurance, support & empathy
- Basic Mentalizing - Clarification, Exploration and Challenge
- Basic Mentalizing – Affect identification and Affect focus
- Mentalizing the relationship

As we have stated earlier, for people with BPD the key area of vulnerability to losing mentalizing is the interpersonal domain, so the therapist-patient relationship is a significant area to explore. Within MBT, the therapeutic relationship is collaboration in which mental process of *both* patient and therapist are important in working together to enhance mentalizing. As we also know, nonmentalizing begets nonmentalizing, so one of the first principles in MBT is that the therapist needs to keep monitoring him/herself carefully to maintain or regain mentalizing. We hope that the active, authentic, responsive, humble, curious and not-knowing attitude of the MBT therapist, who is constantly focused on the patients mind as well as his own mind, will be recognizable throughout the case description.

It is important to realize that increasing the resilience of a patient's mentalizing capacity is not achieved by arbitrarily grasping what is presented. MBT is a structured treatment, including clearly structured treatment programs, clear treatment trajectories (initial, main and final phase) over the 12-18 months and a clear structure within sessions. The focus of the mentalizing is determined by the phase of treatment and by the personalized therapeutic aims described in the treatment plan. Figure 2 describes the Simone's treatment trajectory, the different phases in terms of focus, dosage and duration.

INITIAL PHASE	MAIN PHASE	FINAL PHASE
The focus of the initial phase is on assessment, reducing self-destructive behavior and crisis (crisismanagement) and engaging the patient in treatment (commitment work). Interactional patterns which may cause ruptures in the working alliance , possibly threatening the engagement in treatment are mapped (Commitment themes)	The aim of all work in the middle phase is on stimulating a more robust mentalizing ability within the context of emotional arousal and attachment relationships. The focus is on interpersonal functioning, mentalizing the relationship between patiënt and therapist and significant others.	The focus of the final phase is on the interpersonal and social aspects of functioning and on integrating and consolidating gains in mentalizing function. Important goals are increasing patients responsibility and independent functioning, focussing on affective states associated with loss and ending of treatment.

Pre-treatment ***2 months***	**Treatment (maximum 18 months)** ***15 months***	**Individualized Follow-up** ***9 months***
· Psychiatric examination & medication review · Psychoeducation: MBT–introductory group: 12 sessions · Individual therapy assessing mentalizing and personality function and setting up a treatment plan · Individual sessions setting up signaling and crisis plan.	· 1-2 times weekly group psychotherapy · weekly individual sessions · First two months of weekly individual sociotherapy aimed at finalizing signaling and crisis plan and on increasing social functioning (goal 5) · Simone regularly consulted the psychiater regarding her antidepressants. Halfway through treatment she started slowly decreasing and ended up with no medication.	· Stepped-down care, Individual sessions focused on individual's follow-up aims and on preparing the ending of treatment. · Individual sociotherapy ceased after 4 months when Simone's functioning at school was stable.

Figure 2. **Simone's journey through MBT.** The phases and general treatment goals are uniform in MBT treatment programs for BPD. The duration and dosage of the treatments trajectories differ per program, setting (day hospital vs. out patient), and patient.

Referred patient: Simone

Simone is a 25 year old female with a striking appearance; sexy clothes, masklike make-up, lots of jewelry. She seems indifferent, mostly acting like nothing matters, alternated with moments of suspicion, presenting 'on guard'. She was referred from a crisis unit after being hospitalized following a suicide attempt for the third time in a year. Simone's relationships are unstable, the largest part of her social circle consisting of drug users. Simone hasn't completed any formal education, nor been able to keep a job. Currently she doesn't have any structured daily activities. Her treatment history includes 4 unsuccessful,

uncompleted treatments. Simone was diagnosed with BPD, with comorbidity on DSM-IV-R axis I criteria(cocaine dependence in partial remission, alcohol abuse, dysthymic disorder) and axis II (avoidant personality disorder, traits of the paranoid and dependent personality disorder). She shows destructive behavior towards herself and others and problems in interpersonal functioning that have previously interfered with the therapeutic alliance. Simone is a typical case of the target group treated with MBT: complex borderline personality pathology with a history of unsuccessful treatment attempts.

3. THE TREATMENT

3.1 The initial phase

The *initial phase* starts right after the referral and focuses on the assessment of the patients' mentalizing capacities and personality function, crisis management, engaging the patient in treatment and identifying problems that might interfere with treatment. An important process during the first weeks in the initial phase of the treatment is collaboratively setting up an individual treatment plan (see frame). In the dynamic formulation (frame, part I) a joint understanding that has developed between patient and therapist is described, with a focus on the underlying causes of the problems of the patient in terms of loss of mentalizing, the origin, development and the impact in the here and now. The five general MBT treatment goals are individualized (frame, part II). Simone started in the MBT-Introductory group (MBT-I) (Bateman & Fonagy, 2016), 12 structured weekly sessions helping her understand what mentalizing is, how problems in mentalizing capacity are linked to her personal problems and BPD, what MBT is, how the treatment is structured, mutual expectations and how MBT might be helpful to her. MBT-I is an important part of the initial phase, introducing the treatment and socializing Simone to the model ensuring that she has a reasonable understanding of the process she is engaging in and that she is aware of the focus of treatment.

In the individual sessions, the therapist and Simone first focused on identifying problems that might interfere with treatment (in her case, commitment issues, alcohol and drug abuse and crisis). One of the concerns was her history with 4 uncompleted treatments. Stimulating mentalizing about Simone's previous unsuccessful treatments, helped identify possible crucial mental states and interpersonal patterns that were predicted to interfere with the treatment process and which both patient and clinician needed to watch for. This led to a joint description of two important commitment themes in the

treatment plan (1.1 and 1.2). The aim of these is to help Simone and the therapist signal possible dangerous moments in therapy (transference tracers, Bateman & Fonagy, 2016) and to guide interventions that might be helpful to re-engage Simone during ruptures in treatment.

Individual treatment plan Simone[2]

I. DYNAMIC FORMULATION

Simone agrees to treatment after a long history of unsuccessful and often prematurely ended treatments. Simone has suffered from feelings of depression, loneliness, meaninglessness, and emptiness since she was a child. She experienced little responsiveness and involvement in her life from important people; her mother suffered from severe depressions and was emotionally absent for her, her father was often away working. When her father was at home his behavior was unpredictable; Simone could never know if she could count on him to support her, of if he would 'turn' and react aggressively. Simone was emotionally and physically abused by her father and witnessed the abuse of her sister and mother. Her extreme 'alertness' as a child and adolescent, that is being 'on guard' to protect herself and to cope with her situation at home, remains recognizable in her interpersonal functioning now. She's very sensitivity to small changes in relation to others, is scared the other will become aggressive and often feels neglected, afraid the other will ultimately leave. Since childhood Simone hasn't experienced much validation of *her* personal experiences and feelings, often leaving her feeling unimportant, worthless. Being a sensitive child, in this context she was often overwhelmed, engulfed in emotional turmoil. Recognizing and dealing with emotions has remained hard. Often Simone doesn't know what she feels; either she feels nothing, an unbearable emptiness, or she feels overwhelmed and anxious. Her only way to deal with the emotional turmoil was to withdraw, physically and emotionally. When Simone doesn't feel anything, she tries to stabilize herself by cutting herself. Physically feeling something helps her to feel a connection with herself again. When overwhelmed Simone starts drinking, hoping the feelings will be numbed.

Since adolescence Simone's environment has consisted of drugs, criminality and 'bad men'. This world gives her some sense of belonging. This is where she started using cocaine, which she mostly uses to pep herself up when feeling worthless. In this

2. The treatment plan is dynamic and is developed and redeveloped throughout treatment. During therapy, mentalizing capacity will improve and reflecting on the development and the meaning of the presenting problems increasingly improves coherency in autobiographical history (life story), and accordingly in a more cohesive and robust sense of self, identity.

environment Simone continuously gets stuck in neglecting and abusing relationships, to her, confirming her feelings of worthlessness. Her fear of abandonment and 'truly' being left alone keeps her in these destructive relationships. Recently her (addicted) boyfriend left her for another girl leaving Simone once again feeling deeply alone, desperate, and completely worthless. This resulted in a severe suicide attempt. Her severe difficulties in managing emotions have stood in the way of completing her education or keeping a job.

II. TREATMENT GOALS

1. Engagement in therapy

1.1 Recognize 'dangerous' moments when I'm feeling worthless and want to withdraw

Simone's strong conviction of being useless is often triggered when she experiences others are not interested in her. This decreases her motivation and can result in her stopping (work, a relationship, therapy…). If therapists/friends for example don't explicitly invite her to join in a discussion, don't explicitly ask her how she is feeling, etc. this can leave her feeling 'invisible, completely uninteresting to others, a nothing'. Simone then tends to retreat, becoming quieter, after which she may stay away and give up. Therapists Simone will endeavor to be alert to when this could happen or is happening; and Simone will address this issue in group therapy and individual therapy, especially when the feelings start to emerge.

1.2 Withdraw less (less often or not as long) and re-engage

When Simone is feeling overwhelmed by her chaotic thoughts and feelings she tends to drink alcohol to numb herself, to not feel anything anymore, giving a 'false' (Simone's words) peace of mind. At the same time, the numbing leaves her feeling indifferent and unmotivated for anything, including therapy. Her nonchalant, indifferent attitude can irritate others, creating more distance, because they feel incapable of reaching her. This in turn can leave Simone feeling misunderstood and worthless, scared of aggression and ultimately of being left again. In both cases she has the tendency to not join in social or intimate contact anymore. Therapists will try to address this in therapy when it is/might be happening in her life and in treatment itself; Simone will address this issue in group therapy and individual therapy, especially when the feelings are present.

For the substance abuse, see 2.2.

2. Reduce general psychiatric symptoms

2.1 Short term goal: understand feelings of depression within your situation (longer term goal: reduce feelings of depression)
Simone often feels depressed and 'empty', completely not understanding (yet) why or what these feelings are related to; they seem meaningless, they 'all of a sudden are just there'. Exploring and trying to understand her feelings within the (current) context is an important focus in all therapy components.

2.2 Stop cocaine and alcohol use
Chaos of thoughts and overwhelming emotions increase Simone's anxiety of going crazy and numbing with alcohol is a way to stabilize herself temporarily, giving a false sense of peace of mind, later turning into feeling depressed, empty. This in turn, can be a trigger for Simone to use cocaine, temporarily helping her feel 'good' about herself. When the effects of the cocaine start to wear off, and other feelings begin to predominate, it can be a reason to start drinking again. Both the drinking and the cocaine use have a negative impact on being able to work feelings out, being able to finish school, work, therapy, etc. Simone will address these problems in concurrent relapse prevention program at the addiction center.

3. Improving interpersonal functioning

3.1 Build on self confidence
Simone has always felt alone; that she and what she feels or experiences isn't important. She often feels worthless and invisible, nothing more than 'air'. She is convinced that others don't like her and could never really like her, resulting in a continuous fear being left alone. These fears seem to be keeping her in destructive relationships for too long. To prevent the other person from leaving she completely focuses on the other person, doing exactly what she thinks they want, hoping to mean something to them this way. Being so focused on others, Simone barely knows who she is herself, what her feelings, needs, desires are, etc. Other people don't get to see much of who Simone really is, have a hard time getting to know her, and in turn tend to 'leave her be'. This can leave Simone feeling increasingly unimportant, worthless and lonely.

This might be an important dynamic in individual and group therapy and all will try to be alert to this and address it when possibly active.

3.2 Reduce anger outbursts
Simone's vigilance for, and sensitivity to, signals that others might not be interested, may have bad intentions, or might be become aggressive can be very stressful in therapy. When she gets this feeling, she often tends to withdraw (see 1.2), but can also appear cold, angry and threatening. Increasing paranoid thoughts (for instance: they are after me) can lead to 'sudden' outbursts of anger. These outbursts can be quite destructive, as others might

find Simone unpredictable and keep more distance, in turn leaving Simone again feeling worthless and lonely (see 3.1).

This might be an important dynamic in individual and group therapy and all will try to be alert to this and address it when possibly active.

4. Reduce/ stop destructive behavior

4.1 Reduce (the urge to) cut & eventually stop cutting
Not feeling at all, feelings of emptiness, 'being air, dissolving' can be so unbearable that they can lead to cutting in an attempt to feel alive again, feel that she does exist. In individual sessions a *mentalizing functional analysis* will help explore Simone's changing state of mind and its interdependent interaction with external circumstances. When doing this, we'll try together to identify points of vulnerability (earlier signs) and search for alternative possibilities to help stabilize. This will be incorporated in the crisis plan.

4.2 Reduce suicidal thoughts and prevent suicide attempts
Simone has attempted to commit suicide several times after she felt that someone significant to her lost all confidence in her or wanted to end the relationship. Ruptures in important relationships have triggered self-hatred and guilt, which seem to be the precursors to taking too many pills. In individual sessions a *mentalizing functional analysis* will help explore Simone's changing state of mind and its interdependent interaction with external circumstances. When doing this, we'll try together to identify points of vulnerability (earlier signs) and search for alternative possibilities to stabilize yourself. This will be incorporated in the crisis plan.

5. Improving social functioning

5.1 Keep appointments
Simone may give up too easily and not keep appointments when she has the idea that others are not interested or when feeling bad about herself. Her lack of confidence in herself, along with drug and alcohol abuse have often led to her impulsively quitting a job or just not showing up anymore. Keeping appointments in therapy and outside therapy is an important issue (also see 1.1 and 2.2.) to work on.

5.2 Short term goal: finding out what kind of daily activities and/or job are suitable (in terms of interest and abilities)
Simone's history without any completed education and many short lasting jobs haven't helped her feelings of confidence in herself. She doesn't really know what her capabilities are and what she herself would actually like to do. Focusing on exploring what Simone wants are important in individual and group therapy. A vocational and capacity test could help in a few months after drug and alcohol use are stabilized.

Engaging the patient in a constructive relationship is a core aspect of the initial phase of MBT. Ambivalence about change and therapy are central to the borderline structure, often leading to oscillations between demands for help and sudden rejections of it. Simone had a turbulent start in the initial phase, experiencing crisis after crisis. And although she saw the therapy as a last resort, she often found it hard to attend. Simone used a lot of drugs and missed a number of appointments due to being under influence of drugs or recovering from them. Simone would not answer her phone, or call back. The team had several weeks in which they didn't know exactly where she was, complicating out reach work. When Simone did attend, it was a real challenge for the therapist to engender any kind of collaboration. Simone would pose as completely indifferent, appearing to feel nothing; nothing the therapist would say seemed to affect her. Although she talked about horrible things that had happened to her in the last few days, the therapist had a hard time empathically validating any internal states. The therapist felt flat, didn't feel any contact. Recognizing her own lack of appropriate affect modulation as a typical counter-responsiveness state of mind along with Simone's indifference to the things that had happened to her, alerted the therapist to think about nonmentalizing modes, in this case *the pretend mode* (Bateman & Fonagy, 2016, p. 284). In this pre-mentalizing mode, the inner experience is disconnected from the external world and at the same time split off from the rest of the self, which can be experienced as 'too unreal' (Bateman & Fonagy, 2004). To the listener, the patient's story feels empty, meaningless, and inconsequential.

The core of MBT is to rekindle mentalizing when it is lost, to maintain it when it is present, and to increase the resilience of the individual's capacity to keep it going when it would otherwise be lost (Bateman & Fonagy, 2016). So in this case the therapist's first focus was on trying to enhance mentalizing. Sometimes probing, focusing in detail on the experience and affect will help patient regain mentalizing. Sometimes more creative interventions are needed, like a *challenge* (Bateman & Fonagy, 2006). The aim of a challenge is to bring nonmentalizing to an abrupt stop by surprising the patients mind, hopefully tripping her back into a more reflective process. The problem was that as soon as Simone was 'tripped' out of the pretend mode, she would tumble into the psychic equivalence mode, overwhelmed by feelings of loneliness, guilt and hopelessness. Shown here is the sometimes extreme difficulty, especially in the beginning of treatment, of regulating the arousal, maintaining it within a range that is neither too low nor too high. In Simone's case, when the arousal was too low shifting from cognitive to affective discourse in terms of mentalizing, challenging her, and increasing interpersonal reaction were all used, and when too high, quickly shifting to cognitive discussion, validating her experience and reducing the focus on interpersonal interaction a little (Bateman & Fonagy, 2016, p. 212). Several times when Simone could

be completely overwhelmed by loneliness and hopelessness, and feeling suicidal the therapists started feeling anxious, uncertain of what Simone would do. The therapist tended to *do* things like taking over too much responsibility, prolonging Simone's regular session time, advising, rather than maintaining the normal exploratory therapy process. After this had happened several times, and after team members had helped the therapist regain her own mentalizing capacity, she started to recognize her anxiety and wanting to do things as a sign of Simone possibly functioning in *teleological mode*. This pre-mentalizing mode is characterized by the patient's expectation of things being 'done'. Outcomes in the physical world determine understanding of inner state and only actions can change mental process (Bateman & Fonagy, 2016). Thus: 'what you do and not what you say' is important. In teleological mode for example, Simone experienced the therapist's not giving advice as 'proof' that the therapist was not truly interested in her, that she only did the work to get paid and that nobody really cared about her, leaving her feeling completely worthless, a nothing (treatment goal 1.1). Simone's rigid, set, fixed beliefs about her therapist resulted in non-attendance. The teleological mode of thinking is closely related to the psychic equivalence mode. In this third pre-mentalizing mode, inner and outer world are experienced as identical; reality is defined by self-experience, leaving no room for alternative perspectives. Experienced in psychic equivalent mode, Simone doesn't 'feel worthless and invisible'; she *is* worthless, both to herself and to others. Trapped in this experience, with no capacity to consider other possibilities, resorting to using cocaine was her only way to change something in reality, to stabilize herself (treatment goal 2.2).

A lot of *commitment work and outreaching work* was necessary to re-engage Simone in treatment. The starting point of commitment work was the therapists keeping Simone 'in mind', and contacting her when she was absent again without notice. Continuously the team reflected what might have happened, what Simone might be experiencing (dynamic formulations 1.1 and 1.2 are then very helpful) leading to her non-attendance. Depending on the ideas the team had of why Simone was absent, and on what action might be helpful, decisions were made on what to do to try to repair the rupture and to try to reengage her. Crucial was intervening to tackle nonmentalizing (in Simone's case it was mostly psychic equivalence and teleological mode) related to her absence, to restore contact, and to help reengage. Sometimes phone calls were made, emails were sent, and twice, after all failed to establish contact, a visit to her home was made. One example of when the team decided to call Simone was at the very beginning of treatment. She had been drinking heavily, but was finally sober enough to go to the group session. In the group other patients had been quite critical of her drinking and the therapists had not been able to manage arousal levels enough and reinstate mentalizing of the group about Simone. The team suspected that Simone had left

feeling very rejected once again and were concerned about whether she would come back to the group. They therefore chose to call her, a bit of physical 'proof' that they were thinking about her (*teleological action*). At the same time, they expressed their concern for Simone, giving their understanding of what might interfere with her return to the group. But it is important in MBT that the patient is not 'told' why they are not attending the group. The therapist offers his thoughts and worries and then asks the patient what her view is. In this case Simone, felt validated by the therapist opening a dialogue seeking alternative perspectives to her rigidly held conviction that all found her worthless and did not want her back in the group.

In the first session (group or individual) after each absence, time was taken to reflect on her absence; what was going on in Simone's mind (mentalizing about herself), how did it possibly influence others (mentalizing about others; in the beginning others were generally more worried, but later some were more irritated) and how did this affect the relationship (relational mentalizing): some found they couldn't count on Simone, others that they had no meaning to her, whist others were more irritated and felt 'blackmailed' into not being able to say what they would like to her; these reactions in turn often led to the others distancing themselves and Simone in turn feeling alone and worthless (treatment goal 1.1 & 3.1). The therapists insisted on working on these varied reactions to highlight the variability of reaction as a challenge to Simone's unidimensional view.

Commitment to therapy is an important part of the entire treatment, but requires the most active work in the initial phase. By the consistent intervening from the mentalizing of the therapist about Simone's internal struggles and validating her experiences demonstrates that the clinician has her 'mind is in mind'. As a consequence an ever safer attachment relationship develops that helps to keep Simone in therapy.

Another important focus in the initial phase is reducing (self) destructive behavior and crisis (treatment theme 4). Simone and her therapist worked on her 'signaling' and crisis plan (de Weerd, 2013; Bateman & Fonagy, 2016; Bales, 2012). By mentalizing the precursors of self-arm and suicidality, Simone was stimulated to reflect on situations and associated mental states that led to rising tension, loss of control and eventually self-harm or crisis. By exploring old and current crisis situations (mentalizing functional analysis, Bateman & Fonagy, 2016), mental states that preceded crisis situations became more differentiated and were described in her 'signaling' and crisis plan. Helpful actions by herself and others that were helpful to stabilize her were specified and incorporated in the plan. Simone's sister was an important person in several stabilizing actions. For example, she was the person Simone could call when she was feeling 'empty' and her sister knew what to do (in this case help her by having her stomp her feet, rub her legs

and by asking her what the last moment was that she still was feeling something). She helped Simone become alert to signals that indicated possible de-stabilization and insisted that she referred to the crisis plan when necessary.

When Simone began intensive treatment (the additions of group therapy to her individual sessions), a period of instability ensued. Just being in the group sessions felt unbearable to Simone. Her problems of mentalizing self and other, that is having difficulty recognizing her own mind states and separating them representationally from others mind states, led to emotional contagion; she was continuously overwhelmed by the stories people told; their emotions felt as her own. Feeling confused and destabilized, she withdrew more and drank more, trying to numb herself. The numbing helped her manage her distress, but in the group she was increasingly out of contact, gazing straight ahead and apparently indifferent. Group members started ignoring her and therapists had difficulty in engaging Simone in the group, often feeling dismissed by her non-response. Simone's attendance started to drop.

Simone's treatment plan, with the dynamic formulation of possible mental states leading to commitment problems (goal 1), helped therapists mentalize about Simone's absence and helped guide their interventions. Outreaching work (calling, mailing and ultimately a visit to her home) helped restore contact. But Simone didn't want to return to the group, understandably convinced that they 'drove her crazy and only made her feel worse'. By managing the mentalizing process in her individual sessions the therapist helped Simone reflect on what was going on. She started to understand and label her mixed up and confusing feelings and link them to the current context. She not only was angry about being ignored, she also was sad about her feeling misunderstood and being left out by group members and group therapists. Her fear of being rejected stopped her from trying to go back to the group, leaving her sad again, feeling her limitations. Feeling validated in her feelings, helped Simone free herself from being stuck in the 'reality' of her own view of 'being worthless' (primary representation and psychic equivalence). It also helped her experience that her feelings weren't 'just there all of a sudden', but that they had meaning and that they weren't always completely overwhelming. She could even start to understand how her gazing and indifferent attitude was affecting her relationships. These are examples of how managing mentalizing process adequately in (most ☺) sessions slowly helps free patients from their rigidly held views of self, others and relationships, increasing mentalizing capacity and affect regulation. The therapist and Simone agreed a date when she would return to the group. The therapist 'siding' (Bateman & Fonagy, 2016) with Simone when she re-started in the group was part of the agreement and they 'rehearsed' how Simone might explain her concerns to the group. 'Siding' with a vulnerable patient in MBT groups is an important intervention.

Essentially the therapist acts to support the patient's perspective, always decreasing any non-mentalizing elements in the patient's talk by injecting the therapists mentalizing into the dialogue.

Simone's attendance in group therapy increased. She started to try and share more of her thoughts, difficulties, etc. and began experiencing that others could be interested and understand more, helping her feel involved and less alone. In the group it was important that therapists kept this interpersonal pattern in mind (treatment goal 3.1 & 3.2), intervening when possibly present, but also Simone's difficulty in keeping her own thoughts and feelings separated from others (self vs. other dimension). Simone was increasingly able to open up and to engage in the group without getting completely overwhelmed. She experienced that she could have meaning to the group members (wasn't worthless). Drinking, triggered by her feeling overwhelmed (also continuously a topic in individual session), decreased rapidly hereafter.

Mentalizing the precursors of self-harm (making the 'signaling' and crisis plan) helped Simone reduce her self-laceration quite quickly, but the urge to do so wasn't completely gone. Even though she wasn't cutting any longer, her loneliness and emptiness could lead to cocaine abuse. Her periods of increased urge to use drugs were moments in therapy to revisit and redevelop the (dynamic) "signaling" plan. What was going on in her mind? What were the therapists missing in the "signaling" plan? Why weren't the actions helping enough? What did we need to adjust? All this helped Simone increasingly to recognize vulnerability moments and contexts, enhancing the likelihood of re-establishing self control.

3.2 The main treatment phase

After the initial phase of about 3 months of intensive treatment, in which Simone's commitment and motivation increased, her cutting stopped and her substance abuse decreased, she started the *main phase*. Her contacts with group members, and also more specifically the attachment relationship with the therapist, intensified. In the main phase, all therapeutic work is focused on stimulating a more robust mentalizing ability within the context of emotional arousal and attachment relationships. This phase especially is hard work for the patient. Because the focus shifts from management of behaviors to process and the interpersonal domain, goal 3, the described interpersonal patterns become more important. The primary task of the therapists is to repair ruptures in the therapeutic alliance and to sustain their own and patients motivation while maintaining a focus on mentalizing (Bateman & Fonagy, 2016). The combination of group and individual sessions is an essential feature of an MBT treatment. The group therapy offers a 'live' training ground where current emotional interactions and dynamics are used

to promote mentalizing about oneself, the other and the relationship in a complex interpersonal context. At the beginning of the main treatment phase the therapists had a period in which they noticed that even though they had a robust sense of Simone as a person in mind, they had a hard time identifying her present emotional state., They had little ideas about how she was feeling or what was going on in her life and mind. Although Simone attended her individual and group sessions it remained unclear, especially in the group sessions, what Simone herself was feeling or thinking. She said things but there was an impression that she was thinking something else. Simone was actively focused on group members, sometimes mentalizing others adequately, but often resorting to advice, opting for practical solutions to their problems (she seemed to be operating in teleological mode).

An example: in a group session, another group member K was in the middle of an emotional story about her boyfriend when Simone interrupted by advising her to stand up for herself and leave him. K snapped at Simone, telling her to 'quit telling her what to do and just listen!'. The tension in the session was high; in response Simone seemed anxious and shut down. The therapists took control, stopped the session, rewinding it to the moment in the session where the group members were still able to think about themselves and others constructively, even though possibly with more difficulty (during Kathy's emotional story about her boyfriend). They then *slowly* moved forward from that point, and explored the interaction from that point, step by step in slow motion (*stop-rewind- explore intervention;* Bateman & Fonagy, 2006), stimulating group members to mentalize about themselves, others, and the effect on others in the interaction that had just taken place. By supportively but also persistently insisting on reflecting on what she thought and felt at that moment, Simone discovered that when K was telling her story, she felt she had to 'do' something, being scared that if she didn't, she would be meaningless to K and that K would then reject her. She also realized how K's irritated reaction frightened her. K's experience was also explored and the effect of her reaction on others. K felt that Simone wasn't really listening to her feelings, leaving her feeling misunderstood. She did not get a sense of what Simone herself thought or felt about her pain. This left her feeling insecure about whether Simone really cared about her. MBT therapists have an active role in regulating the arousal and keeping the group on focus, exploring and validating the different experiences of everyone in the group when events like this occur. . In this way group therapy provides the perfect opportunity for patients to hear and understand a range of different perspectives, stimulating flexibility of thought process and generating alternative perspectives. In this session Simone's psychic equivalent experience of others not really liking her (she can only mean something to others if she is doing something for them, goal 3.1), was tackled.

Thus mentalizing about the self, the other and the relationship in current interactions is constantly enhanced during the sessions, with a focus on the themes identified in the treatment plan.

As mentioned, the relationship with the therapists, and, when appropriate, with other members of the group, increasingly become the focus of mentalizing (mentalizing the transference, Bateman & Fonagy, 2004, 2012; mentalizing the relationship, 2016). By stimulating the patient to focus on another mind, the mind of the therapist, and by helping the patient contrasting her own perceptions of herself with how she is perceived by someone else (the therapist), we aim at creating alternative perspectives. Insight is not the primary aim, but recovering the capacity to mentalize and in doing so giving up rigid, psychic equivalent, ways of experiencing self and others, is. During a period in which there were several conflicts between different group members, Simone became very mistrustful and in one of the sessions Simone became furious and left the session, slamming the door. In the very first individual session after this group session the therapist brought in the incident to reflect on. While doing so, Simone became increasingly aroused and the therapist found her threatening. Simone became emotionally 'colder' and distant and her posture stiffened. The therapist started feeling a bit anxious and avoidant, her questions and reactions becoming more vague and less to the point. Having this interpersonal pattern in mind (treatment goal 3.2) helped the therapist to quickly recognize that Simone may have become hypervigilant and feel that she was supporting others in the group and was not interested in her. She encouraged her to use this moment in therapy to mentalize the relationship – 'I have just realized that we might now be involved on one of those interactions in which you retreat and start to realize that I have no idea what is going on in you. Is this one of those times when you are listening carefully to work out if I am supporting the others in the group and am not interested in your side of the story?'.

In the mentalizing model, transference is seen as real and accurate, and within current experience, influenced by the actual context, and possibly by the past. This is in contradistinction to the classic approach where transference is seen as the process by which the patient transfers feelings from the past onto his therapist. Thus, simply stated, relational mentalizing in this case was encouraging Simone to think about the relationship she was in in with the therapist at that current moment. There are six steps in mentalizing the relationship (see Figure 1). Getting a mentalizing process going, and keeping it going, is essential while mentalizing the relationship. The focus can become intense, and the patient's (and therapist's) arousal in the session can increase quickly. So the therapist continuously has to monitor and manage the level of arousal, for example by validating patient experience, accepting responsibility, decreasing interpersonal

interaction and maybe briefly redirecting focus to more cognitive issues or relationships outside the current one (Bateman & Fonagy, 2006, 2016). While reflecting on what Simone was feeling and what had contributed to this feeling, it became clear that Simone felt increasingly anxious and distrustful in the session. The therapist's apprehension and vague questions and reactions gave Simone the feeling that the therapist wasn't interested anymore, was just 'playing nice', but was actually really sick of her. Empathically validating these feelings, linking them to the current context, was an important first step in ensuring that Simone felt that her experience was taken seriously, that it was real and legitimate (*step 1 and 2*). Only then could the therapist accept enactment (her own share in the interaction; *step 3*). Even though the therapist's intentions were different in this case, it was important that she took responsibility (agency) for the effect she had had on Simone: in this case it was her apprehension, her vague questions, and her change in attitude, which was experienced as 'fake' by Simone, engendering anxiety and mistrust. Then, ultimately aiming at arriving at an alternative/additional perspective (step 5) Simone and her therapist worked jointly on an exploratory process (step 4). In this joint venture the therapist, mentalizing about herself, was transparent about her own mental process in the relationship and recognized feeling less herself (being less authentic), more restricted in her thinking, and less clear, not because she wasn't interested in Simone, but because she was feeling a bit anxious because of how Simone was acting and because of the incident in the group only 2 days earlier. This in turn, surprised Simone and created room for her to consider other, newer perspectives than the only one she had (that she was worthless and that her therapist, was becoming sick of her). Monitoring Simone's reaction, in this case her sadness (that she had always been so sure that everyone would reject her true self, and that she might have been wrong, rejecting people that might have possibly cared) is an important last step in mentalizing the relationship (*step 6*).

Alternative perspectives and insight may be engendered, but most important is the joint journey, engaging the patient in the process of understanding how 'the mind' works. The therapist tried to arouse Simone's curiosity about shy she kept interpreting interpersonal situations in a very specific (negative) way, while there were so many different possibilities that she never entertained and explored. Only when Simone really started to wonder ('why do I keep experiencing people as not liking me, wanting to reject me, while there are so many other explanations of what could be going on?'), about her rigid, psychic equivalent experience of self and other was there a possibility of her considering alternative (hopefully more adaptive in current context) perspectives. Mentalizing the relationship in the session is the toughest training ground for managing difficult feelings in interpersonal situations as it requires maintaining mentalizing whilst in an emotional interaction within attachment stress. (Bateman & Fonagy, 2016). It's

a place where, through opening the mind, creating curiosity and creating alternative perspectives, patient's representations of self, others and relationships can be formed or strengthened. This in turn helps develop a more coherent, robust sense of self, decreasing the need to externalize or act out.

During this work in the interpersonal domain, ' transference tracers' are used to link the content and process of the session to either the patient-therapist relationship (mentalizing the relationship as above) or to the patient's life outside (relationships outside, general interpersonal functioning). Simone realized more and more how her lack of positive relationships was leaving her feeling lonely and depressed. She could feel this without it becoming so overwhelming that she need to resort to self harm or drugs to stabilize herself. She also noticed that others reacted differently to her (she had an amazing revelation after about 7 months of therapy; ' OMG, I do have influence on how other act towards me'). Understanding her feelings, thoughts and needs and not condemning them helped her start and keep healthier relationships, feel more connected to others. Towards the end of therapy, Simone finally (she had done so many times for short periods of time) ended her relationship with her then, still addicted, partner. With her improved mentalizing capacity and reduced substance use, Simone was increasingly successful in not withdrawing during difficult moments, and staying in contact or re-connecting quicker, enabling her keep her appointments (treatment goal 1.1, 1.2 and 5.1).

3.3 Final phase of treatment

The clinician needs to maintain awareness of the trajectory of treatment and needs to set in the final phase of treatment on time. In the final phase of the treatment, that starts around the 12 month point during the main treatment (see figure 1), preparations are made for ending treatment. The focus is on consolidating and enhancing the gains made during therapy and accepting some failures or goals not achieved. The fifth treatment goal ' improving social functioning' is an important goal from the very beginning of therapy, but a main focus in the final stage explicitly addressing patients responsibility and independent functioning in the outside world. Simone's improving self confidence helped her dare reflect on what she might really want (as opposed to being convinced that nothing would work out anyway, treatment goal 5.2). Her traumatic experiences in school and anxiety had blocked her wish to complete school, but during the final stage she decided that she thought she was ready for it. Her therapist went to the school she wanted to attend with her and helped her negotiate a realistic plan with the school, including the possibility to complete her therapy while starting school. It did mean she couldn't go to all group sessions. Simone had an anxious time trying to start

school and felt a bit excluded from her group, and some of her 'old' mistrust of other group members was rekindled. Simone, the therapists and the group members had her important interpersonal patterns in mind and the possible associated mental states that could have been a risk for Simone – like her tendency to self-doubt and give up, withdraw and possibly start drinking when feeling overwhelmed. Simone, however was much more successful in recognizing these 'risky' moments and mental states as they began (recognizing them was a first sign of recovering mentalizing), and thus avoided relapse.

The MBT model, as many other models, considers the ending of treatment and associated separation highly significant in the consolidation of gains made during therapy (REF). Towards the actual ending, Simone tended to slowly and quietly withdraw in her group without much reflection. Her therapist actively put the topic on the agenda to stimulate mentalizing around affective states associated with loss and to explore the meaning of ending treatment for Simone. Her sadness, but also anger about all she had missed in her life for so long and her fear of relapse in follow-up were addressed in both group and individual therapy.

In the final treatment plan evaluation, the team and Simone looked back proudly at all the gains made. Simone was able to not only engage, but also to complete her treatment program as planned. Where she used to completely become overwhelmed by emotion and re-stabilize with alcohol and/or cocaine, her affect regulation had now strongly improved. Her more robust mentalizing capacity, helps her 'catch' earlier mental states, and to act less impulsively. Although she still had mood swings, to her the 'triggers' were clearer, she understands her moods better, recovers faster and persistent depressive periods haven't occurred. Relationships are no longer predominantly determined by mistrust, fear of abandonment and outbursts of anger barely occur. Simone's improved understanding of herself, others and of how relationships work had helped her improve some relationships, stimulated her to step out of one very destructive relationship, and also even develop a few new friendships.

The follow-up treatment program in MBT is tailored to the person. Simone and the team decided that her post-treatment trajectory would consist of individual sessions, with a slow increase in time in between the sessions. The focus being on maintaining gains made and stimulating further changes by a continuous use of mentalizing techniques exploring difficulties while further reintegrating into society. Simone chose two treatment goals to focus on; 1. Further expand her social contacts; 2. Finish school and start work one day a week (strengthening self-confidence was an important aspect). After a few months of 'stable' functioning at school, the actual ending of therapy is considered. How

this is done is also tailored in a creative way together with the therapist. Simone, taking charge of herself and reducing her felt sense of dependency, chose a chipcard with five appointments that she could schedule as she wanted or needed them. This gave her a sense of control in how and when she wanted to definitely end treatment. Three months later, after two –mentalization maintenance- sessions scheduled by Simone, Simone and her therapist jointly decided that that would be their last appointment and that Simone could be discharged.

4. CONCLUSION

Simone's treatment definitely had its obstacles and interactional difficulties for both Simone and the team; a secure, cohesive, mentalizing team is essential in helping the therapists maintain and regain their own mentalizing and reflective process when under pressure (for example in crisis, under teleological pressure, when patients are in crisis, when therapists lose their mentalizing capacity and get stuck in their own counter relational feelings, etc.). Implementing the evidence based form of MBT, developing and maintaining a mentalizing environment, and keeping staff members adherent to the model can be challenging (Bales, et. al. 2017, Bales, et. al 2017). A professional, well organized working environment with strong leadership, structural training, supervision, treatment plan evaluations, intervision and reflections is essential for the therapists to be able to preserve the three C's (consistence, continuity and coherence; Bateman & Fonagy, 2004) essential in an effective treatment of patients like Simone.

The mentalizing environment the team was able to offer, promoted the building of a secure attachment relationship between Simone and her therapist (team) which in turn facilitated her mentalizing capacity. This case study is just a brief illustration of how an MBT treatment can unfold. The unknowing, mentalizing therapeutic stance is a key factor in the success of MBT. The therapist's modeling mentalizing by keeping an open mind, allowing it to be influenced by alternative views, learning and re-working perspectives in each treatment area, will help patients internalize a general curiosity about their own and others minds, facilitating an improved understanding of self, others and relationships. In this sense, every MBT treatment is unique, a new joint adventure of discovering how the mind works.

MBT is not primarily about generating insight; the inferred working mechanism is increasing the resilience of mentalizing capacities. This in turn enables the patient to be less rigidly vigilant. But more importantly epistemic trust is enhanced. Only once this trust and appropriate distrust in the social world is kindled can the patient begin

to learn from others in the wider world. MBT is a collaborative process of joint attention focusing on the patient's mental states, taking into account the experiences of both the patient and therapist. In this process with a constant focus on current events and immediate states of mind, undifferentiated affects are represented and become meaningful in relation to the current interpersonal context improving affect regulation. Or in Simone's words: *"being able to kind of organize the chaos in my head, to understand some of the thoughts and feelings in relation to what was going on helped me experience a certain sense of control. I can influence more than I ever thought, I no longer have to let feeling overwhelm me, but can take a step back and try to think about it'.* Simone's capacity to mentalize others also improved. Simone: *"In MBT you learn to think differently about yourself and wonder why you do things and why you react in a certain way. But you also learn to stand in someone else's shoes, to think about how the other might feel in this situation or how you might be seen by them… this helps understand relationships a lot better. You begin to realize that others have something to say which is different from what you think".*

As stated, in her journey through the MBT treatment Simone's learned a lot about herself, about others, about relationships, but above all about how 'the mind' works. A more robust mentalizing capacity is crucial to self-regulation and constructive, intimate relationships. Increasing the resilience of patients mentalizing capacities will help patients deal with future challenges in their lives and help them to keep learning from social experiences in life outside the therapy.

Simone's evaluation in her own words: *"I think more before I just do things, I kind of know better when to trust or not and am better at keeping my friendships going, started school and am pretty sure I'll be able to finish even though its not going to be easy. My life is still pretty full of ups and downs, and I know its going to be tough at times to stay motivated and finish, but generally I'm stronger and less afraid of going out into the world."*

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Chapter 4

Treatment outcome of 18-month, day hospital Mentalization-Based Treatment in patients with severe BPD in the Netherlands

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ABSTRACT

Psychoanalytically oriented day hospital therapy, later manualized and named mentalization-based treatment (MBT), has proven to be a (cost-) effective treatment for patients with severe borderline personality disorder and a high degree of psychiatric comorbidity (BPD) in the United Kingdom (UK). As to yet it has not been shown whether manualized day hospital MBT would yield similar results when conducted by an independent institute outside the UK. We investigated the applicability and treatment outcome of 18-month, manualized day hospital MBT in the Netherlands by means of a prospective cohort study with 45 Dutch patients with severe BPD and a high degree of comorbid Axis I and Axis II disorders. Outcomes were assessed each six months. Symptom distress, social and interpersonal functioning, and personality pathology and functioning all improved significantly, with effect sizes between 0.7 and 1.7. Suicide attempts, acts of self-harm, and care consumption were also significantly reduced. The results indicate that MBT can effectively be implemented in an independent treatment institute outside the UK. This study also supports the clinical effectiveness of manualized day hospital MBT in patients with severe BPD and a high degree of psychiatric comorbidity.

Borderline personality disorder (BPD) is among the most prevalent mental disorders in the general population (Torgersen, Kringlen, & Cramer, 2001) and mental health care settings (Zimmerman, Rothschild, & Chelminski, 2005), and is associated with high societal costs (Soeteman, Hakkaart-van Roijen, Verheul, & Busschbach, 2008) and a low quality of life (Soeteman, Verheul, & Busschbach, 2008). In the last decade, psychotherapy has been identified as the treatment of first choice for patients with BPD (American Psychiatric Association, 2001; Zanarini, 2009). Controlled trials provide support for the effectiveness of various forms of psychotherapeutic treatments, such as Dialectical Behavior Therapy (DBT; Linehan et al., 2006), Schema-Focused Therapy (SFT; Giesen-Bloo et al., 2006), Transference-Focused Psychotherapy (TFP; Clarkin, Levy, Lenzenweger, & Kernberg, 2007; Levy et al., 2006), Systems Training for Emotional Predictability and Problem Solving (STEPPS; Blum et al., 2008), and Cognitive Behavior Therapy (CBT; Davidson et al., 2006). Another potentially effective treatment that is repeatedly mentioned in various practice guidelines for BPD (American Psychiatric Association, 2001; Dutch Multidisciplinary Clinical Guideline of Personality Disorders, 2008; National Institute for Health and Clinical Excellence, 2009) as well as in the Cochrane review (Binks et al., 2006), is referred to as psychoanalytically oriented day hospital therapy. The empirical evidence for this treatment originated from a randomized controlled trial (RCT) in the United Kingdom (UK), comparing the effectiveness of this program with standard psychiatric care for patients with severe BPD (Bateman & Fonagy, 1999). Major reductions were reported in depressive and anxiety symptoms, social and interpersonal problems, suicide attempts, and acts of self harm. In an 18-month follow-up study, patients continued to improve on nearly all outcome measures (Bateman & Fonagy, 2001). Health service utilization costs were demonstrated to be similar during treatment, whereas the costs were substantially lower compared to the control condition after treatment completion (Bateman & Fonagy, 2003). Binks et al. (2006) concluded that, although the available RCT provides suggestive evidence, the therapy remains "an experimental treatment with too few data to really allow anyone to feel too confident of the findings" and that "more well-designed studies are both justifiable and urgently needed" (p. 1).

The day hospitalization program referred to in the guidelines and review mentioned above was based on the theoretical assumption that enhancing mentalization improves symptoms and functioning of patients with BPD (Bateman & Fonagy, 2004). Mentalizing is the imaginative mental activity that enables us to perceive and interpret human behavior in terms of intentional mental states (e.g., needs, desires, feelings, beliefs, goals, purposes, and reasons) (Allen, Fonagy, & Bateman, 2008; Bateman & Fonagy, 2006). The essential ingredients and key principles were subsequently manualized and named

Mentalization-Based Treatment (MBT; Bateman & Fonagy, 2004, 2006). More recently, it was demonstrated that the previously reported improvements were sustained up to five years after treatment completion (Bate-man & Fonagy, 2009). Additional evidence can be derived from a RCT comparing an outpatient variant of MBT with structural clinical management (Bateman & Fonagy, 2008).

However, as yet it has not been shown whether the manualized day hospital program of MBT would yield similarly favorable results as demonstrated in the original trial of psychoanalytically oriented, partial hospitalizationtreatment (Bateman & Fonagy, 1999), nor have independent institutes outside the UK reported outcome findings of this treatment.

This study aims to investigate the applicability and treatment outcome of manualized day hospital MBT in a clinical population of Dutch patients with severe BPD with a wider range of psychiatric comorbidity.

METHOD

Study population

Participants were recruited from a consecutive series of patients referred to the Center of Psychotherapy De Viersprong, a Dutch institute offering specialized outpatient, day hospital, and inpatient treatment for personality disorders. De Viersprong has a last resort function for treatment of refractory patients with severe and complex personality disorders, often complicated by psychiatric multi-morbidity, who have typically had a history of unsuccessful treatments.

Between August 2004 and November 2009 intake clinicians were instructed to refer the most severe BPD patients to the MBT program (n = 61). Patients were only excluded if they met DSM-IV criteria for schizophrenia or intellectual impairment (IQ < 80). The WAIS was administered when intellectual impairment was suspected. None of the 61 patients met exclusion criteria.

As part of the standard intake procedure, DSM-IV diagnoses were obtained in the majority of patients (n = 49) by the semi-structured interview ratings on the SCID-I for Axis I (First, Spitzer, Gibbon, & Williams, 1997; Dutch translation by Groenesteijn, van Akkerhuis, Kupka, Schneider, & Nolen, 1999), and on the SCID-II (Ekselius, Lindstrom, von Knorring, Bodlund, & Kullgren, 1994; Dutch translation by Weertman, Arntz, & Kerkhofs, 2000) or SIDP-IV (Pfohl, Blum, & Zimmerman, 1997;

Dutch translation by De Jong, Derks, van Oel, & Rinne, 1996) for Axis II disorders. Of those, 39 patients met diagnostic criteria for BPD, and were included. Twelve patients did not complete a diagnostic interview during the intake procedure due to logistical reasons, or because of mental states interfering with the interview (e.g., heavy withdrawal symptoms, dissociative states, and psychotic symptoms). However, in all patients the Borderline Personality Disorder Severity Index (BPDSI; Giesen-Bloo, Wachters, Schouten, & Arntz, 2010) was administered at start of treatment. Six patients with a BPDSI score above 20, considered to be the clinical cut-off for BPD (Nadort et al., 2009), were also included. Thus, the sample consisted of 45 diagnosed BPD patients (see Figure 1).

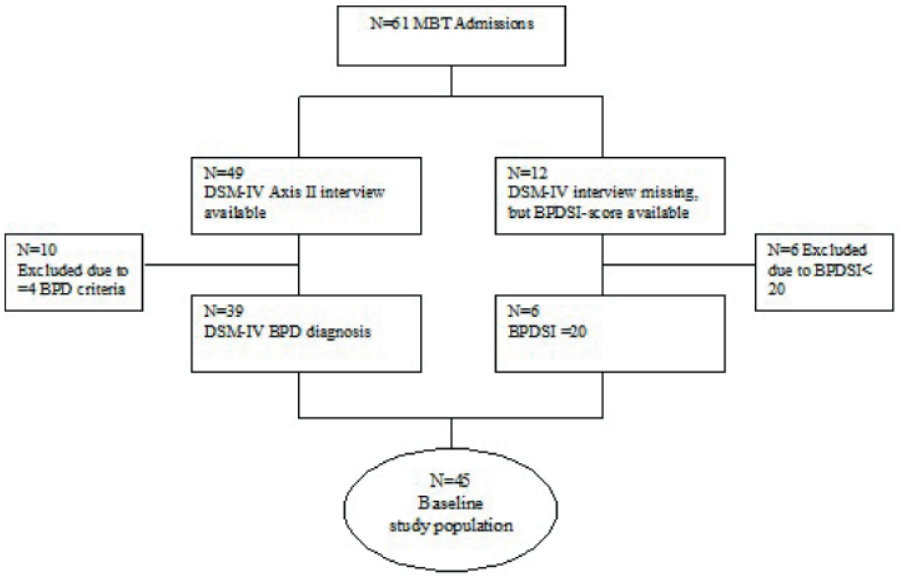

Figure 1. Flow chart of the study population

At baseline, these 45 patients had a mean age of 30.1 (*SD* = 6.5), and 71.1% was female. Educational level for 37.8% of the patients was low, intermediate for 55.5% of the patients, and high for 6.7% of the patients. Eighty percent of the patients were unemployed. Most patients (91.1%) had at least one comorbid Axis-I diagnosis; 66.7% had more than 1 AxisI disorder. The highest prevalence was found for substance use disorders (79.2%), anxiety disorders (42.2%), mood disorders (35.6%), and eating disorders (33.3%). The percentage of patients with more than one comorbid axis II diagnosis was

also considerable (62.2%), with the highest prevalence for avoidant personality disorder (22.2%), paranoid personality disorder (17.8%), dependent personality disorder (15.6%), and antisocial personality disorder (6.7%).

Treatment program

The treatment program consists of a maximum of 18 months manualized day hospital MBT, continued by a maximum of 18 months of maintenance mentalizing (group) therapy. This study reports on the treatment outcome of the day hospital phase.

The day hospital program, covering five days per week and four and a half hours per day, included implicit mentalizing groups (i.e., daily group psychotherapy and weekly individual psychotherapy, and individual crisis planning from a mentalizing perspective) and explicit mentalizing groups (i.e., art therapy twice a week, mentalizing cognitive group therapy, and writing therapy). The week program is ended with a social hour and community meeting. Once a week a psychiatrist member of the MBT team fulfills medication consults upon request of the patients. There were two treatment groups consisting of nine patients each. The operationalized treatment goals were: (1) to engage the patient in treatment; (2) to reduce psychiatric symptoms; (3) to improve social and interpersonal functioning; (4) to decrease the number of self destructive acts and suicide attempts; and (5) to stimulate adequate care consumption and prevent reliance on hospital admissions and prolonged inpatient care (Bateman & Fonagy, 2006). To achieve these goals, all program components specifically focus on the enhancement of the patient's mentalizing capacity, i.e., the mental process of understanding self and others in relation to mental states such as thoughts, desires, intentions and feelings. The theoretical assumption is that enhancing mentalization improves symptoms and functioning of patients with BPD (Bateman & Fonagy, 2004).

The Dutch program was conducted by a team of eight therapists with varying degrees of clinical experience, ranging from junior psychologists and social nurses to highly experienced clinical psychologists and psychotherapists. During the first two years after start of implementation, the program director (D. Bales) and one of the social nurses received intensive on-the-job training by A. Bateman and his staff in St. Ann's Hospital in London, U.K. Afterwards, the program director was appointed licensed MBT trainer in The Netherlands. All therapists were extensively educated, trained, and supervised by one of the developers of MBT (A. Bateman) and/or the appointed trainer (D. Bales).

Adherence to the MBT treatment model was monitored in several ways. First, in the daily group reflections after the group therapy, the therapists where continuously stimulated to reflect on their adherence during the session; i.e., which of their interventions had enhanced mentalizing, which interventions had not, and what would have been alternative interventions? Second, the weekly team supervision focused on case material to increase comprehension of mentalizing theory and therapist competency in working with MBT principles and the intervention spectrum. Third, on a regular basis taped sessions were assessed by supervisors at the unit using the adherence scale as described by Bateman & Fonagy (2004, 2006). During the first two years adherence was quarterly rated good to excellent (overall 83–97% positive scores) by Bateman, based on observation of group session and tapes.

Outcome measures

Treatment outcome was measured at start of treatment (T0), six months (T1), 12 months (T2), and 18 months (T3), in the areas corresponding to the treatment goals; i.e., (1) treatment commitment; (2) symptom distress; (3) social and interpersonal functioning; (4) personality pathology and functioning; (5) suicide attempts and self-harming behavior; and (6) care consumption. Assessments were conducted by a treatment-independent research assistant, trained and employed by the Viersprong Institute for Studies on Personality Disorders (VISPD).

Treatment Commitment. As indicators for treatment commitment, we calculated drop-out and push-out percentages, average length of treatment, and average treatment attendance percentage. Drop-outs were defined as patients who prematurely ended treatment themselves, despite negative advice of the staff and intensive outreaching work aimed at (re)enhancing commitment. Push-outs were defined as patients who were discharged and thus forced to end their treatment, because of criminal activities within the unit (e.g., drug dealing).

Symptom Distress. General symptom distress was measured by the Global Severity Index (GSI) of the Symptom Checklist 90-R (SCL-90-R) questionnaire, using the 0–4 score range (Arrindell & Ettema, 2003). Depression was measured by the 21-item Beck Depression Inventory (BDI; total range 0–63; Beck, Steers, & Carbin, 1988). The EuroQol EQ-5D questionnaire was used to measure health-related quality of life. The five items of the EQ-5D refer to five dimensions: mobility, self-care usual activities, pain/discomfort, and anxiety/depression. The response to these dimensions (no problems/some or moderate problems/extreme problems or unable to) are weighed

to arrive at a single index score ranging from 0.33 (worst imaginable health state) to 1.00 (best imaginable health state; Euroqol group, 1990; Lamers, McDonnell, Stalmeier, Krabbe, & Busschbach, 2006).

Social and Interpersonal Functioning. Interpersonal problems were measured using the 64-item Inventory of Interpersonal Problems-Circumflex version (IIP-C; range 0–5) (Horowitz, Alen, Wiggings, & Pincus, 2000). Two subscales of the 45-item Outcome Questionnaire (OQ-45) were used to assess dissatisfaction in interpersonal relationships and dissatisfaction in societal tasks (Lambert et al., 1996). The subscale Interpersonal Relationships consists of eleven items and has a score range of 0 to 44, while the subscale Social Role consist of nine items and has a score range of 0 to 36.

Personality Pathology and Functioning. Borderline symptomatology was measured using the Borderline Personality Disorder Severity Index (BPDSI), a semi-structured interview measuring the frequency of manifestations of the BPD diagnostic criteria over the previous three months (Arntz, 1999; Giesen-Bloo et al., 2010). Furthermore, changes in (mal)adaptive personality functioning were measured using the 118-item Severity Indices of Personality Problems (SIPP-118) questionnaire. The SIPP-118 measures 16 facets of (mal)adaptive personality functioning fitting into five higher-order domains, with lower scores reflecting more maladaptive levels of personality functioning: Self control, Identity Integration, Responsibility, Relational capacities, and Social Concordance (Verheul et al., 2008).

Suicide Attempts and Self Harming Behavior. The number of patients reporting suicide attempts and/or acts of deliberate self harm over the previous six months was measured by the semi-structured Suicide and Self Harm Inventory (SSHI; Bateman & Fonagy, 2004).

Care Consumption. The number of patients with additional treatments in general and also specifically the number of patients with psychiatric inpatient admissions during the last year before entry into day hospital MBT and during the MBT treatment was assessed by an additional set of questions (available upon request from the first author) in combination with the patients' medical records.

Statistical analysis

Statistical analyses were based on intention-to-treat-analysis and were performed using SPSS version 15.0. We used generalized estimating equation (GEE) analyses to deal with the study design and the accompanying data structure. GEE takes into account that the same patients are repeatedly measured and uses all the available data, irrespective of the number of repeated measurements (Twisk, 2003). Within

GEE, correction for the dependency of observations is performed by adding a within-subject correlation structure to the regression model. For the analyses we used an exchangeable correlation structure, which assumes correlations between subsequent measurements to be the same, irrespective of the time between the measurements. For each outcome measure from the five outcome domains, we performed a GEE analysis with as dependent variable the according continuous or categorical outcome and as independent variable three dummy variables indicating time. The baseline measurement was used as a reference category. To reduce variances attributed to nonrelevant factors we included age and gender as covariates in our analyses. The regression coefficient of each dummy variable was used to estimate the effect of the treatment between baseline and the follow-up. This regression coefficient was estimated for the average patient (i.e., with a mean age of 30.1, and 71.1% chance of female gender). Cohen's effect sizes (Cohen, 1988) were calculated for the difference in the continuous outcome measures between baseline and the last measurement (T3). *P*-values < 0.05 were considered significant.

Data completeness

Data on treatment attendance and psychiatric inpatient admissions were collected in all study participants. Follow-up data for the other outcome measures were available for 34 patients (75.6%). Six (13.3%) of the 11 patients without follow-up data refused to participate in any of the measurements or did not or only partially return the assessment booklets, while the remaining five patients (11.1%) did not yet reach one of the follow-up measurement moments. Although follow-up data were far from complete, there appeared to be no differences between patients with follow-up data and those without regarding their baseline characteristics. Furthermore, to check the robustness of the longitudinal statistical analyses, we repeated the GEE analysis in patients with follow-up data only. The results of these sensitivity analyses were almost identical (change in effect size < 10%) to results of the complete patient sample (n = 45), thereby suggesting that the missing data were missing at random. We therefore included all 45 patients in the outcome analyses.

RESULTS

Treatment Commitment. Four patients (8.9%) prematurely dropped out of the program between 11 and 15 months after start of treatment. Three patients (6.6%) were discharged (at 4, 7, and 13 months) because of criminal activities within the MBT unit (i.e., repeatedly using and selling drugs at the day hospital, carrying a gun in group therapy, physical assault of a therapist). All seven patients (four drop-outs;

three push-outs) were included in the outcome analyses. The average length of treatment was 15.3 months (*SD* 3.8; range 4– 18 months) for the 33 patients who had finished their treatment at the moment of analysis. The average attendance rate was 63.5% (*SD* 16.6%; range 26.7%–97.6%).

Symptom Distress. As shown in Table 1, quality of life, general symptom distress, and depression all improved significantly during 18 months of treatment, with statistically significant improvement starting 12 months after start of treatment. Effect sizes ranged from 0.68 to 1.26, which can be interpreted as moderate to large effects.

Social and Interpersonal Functioning. Interpersonal problems, interperson-al relations, and social role functioning all improved within 18 months of treatment (see Table 1), with statistically significant improvement starting 12 months after start of treatment. Effect sizes ranged from 0.81 to 1.36, which can be interpreted as large effects.

Personality Pathology and Functioning. Borderline symptomatology improved significantly 18 months after start of treatment. Furthermore, identity integration and social concordance started to improve significantly within the first six months of treatment, whereas self control, responsibility, and relational functioning started to improve after 12 months of treatment (see Table 1). Effect sizes ranged from 1.23 to 1.74, which can be interpreted as large to very large effects.

Suicide Attempt and Self-Harming Behavior. No suicides occurred during treatment in the study population. One patient committed suicide four months after dropping out of treatment. As shown in Figure 2, the percentages of patients reporting at least one suicide attempt were 31.7% for T0 (with 1.9 as the average number of attempts, range 1–5), 14.7% for T1 (with 1 as the maximum number of attempts per patient), 0% for T2, and 6% for T3 (with 1 as the maximum number of attempts per patient). In the GEE model, the decline of the number of suicide attempts for the study population was statistically significant for all three follow-ups; i.e., for six months (Beta = -1.40, standard error = 0.52, $p < 0.01$), 12 months (Beta = -9.16, standard error = 1.52, $p < 0.001$), and 18 months (Beta = -2.18, standard error = 0.90, $p < 0.05$).

Figure 2 also shows the percentages of patients reporting at least one act of self-harming behavior; i.e., 51.2% for T0 (average number of self-harm acts 17.9; range 1–90), 32.4% for T1 (average number of self-harm acts 6.5; range 1–25), 15.8% for T2 (average number of self-harm acts 3.0; range 1–7), and 19% for T3 (average number of self-harm acts 3.0; range 1–5). Similar to the GEE model for the number of suicide

attempts, the decline of the number of self-harming acts for the study population was statistically significant for all three follow-ups in the GEE model; i.e., for six months (Beta = -1.17, standard error = 0.37, $p < 0.01$), 12 months (Beta = -2.19, standard error = 0.30, $p < 0.001$), and 18 months (Beta = -2.48, standard error = 0.47, $p < 0.001$).

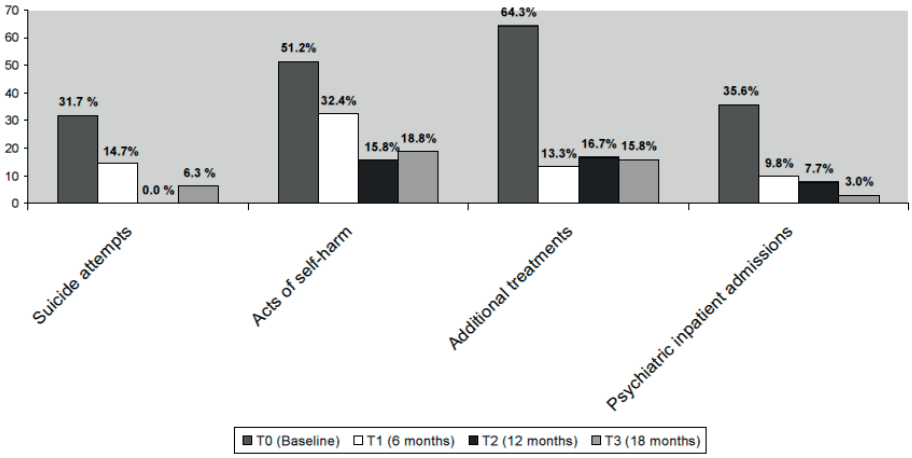

Figure 2. Percentages of patients with self-harm behavior (suicide attempts and acts of self-harm), additional treatments, and psychiatric inpatient admissions at the start of treatment and during follow-ups.

Care Consumption. Figure 2 shows the percentages of patients with additional treatments in general and with psychiatric inpatient admissions specifically at T0, T1, T2, and T3.

The percentage of patients reporting additional treatments decreased from 64.3% at start of treatment to 13.3% at T1, 16.7% at T2, and 15.8% at T3, respectively. In the GEE model, this decline was statistically significant for all three follow-ups; i.e., after six months (B = -2.78, standard error = 1.07, $p < 0.01$), 12 months (B = 2.35, standard error = 0.67, $p < 0.001$), and 18 months (B = 2.45, standard error = 0.70, $p < 0.001$). The percentage of patients with psychiatric inpatient admissions in the past six months decreased from 35.6% at start of treatment to 9.8% at T1, 7.7% at T2, and 3.0% at T1. In the GEE model, this decline was statistically significant for all three follow-ups; i.e., after six months (Beta = -1.82, standard error = 0.65, $p < 0.01$), 12 months (Beta = -3.21, standard error = 1.26, $p < 0.05$), and 18 months (Beta = -3.07, standard error = 1.20, $p < 0.05$).

Table 1. Treatment outcome of MBT at baseline, and 6, 12, and 18 months after treatment in the symptomatic, social and interpersonal, and personality domains

	M	SD	β (SE)	95% CI	*p*
Symptomatic functioning			**Symptom distress (SCL-90)**		
T0 start	1.73	0.68			
T1 6 months	1.60	0.79	-0.11 (0.10)	-0.30 - 0.08	.243
T2 12 months	1.37	0.95	-0.36 (0.15)	-0.65 - -0.07	.016*
T3 18 months	0.79	0.60	-0.83 (0.12)	-1.08 - -0.59	.000***
Effectsize			1.23		
Social and interpersonal			**Interpersonal problems (IIP)**		
Functioning					
T0 start	3.05	0.46			
T1 6 months	2.96	0.39	-0.12 (0.07)	-0.25 - 0.01	.075
T2 12 months	2.69	0.69	-0.39 (0.12)	-0.63 - -0.15	.002**
T3 18 months	2.42	0.59	-0.62 (0.10)	-0.81 - -0.44	.000***
Effectsize			1.36		
Personality functioning			**Borderline symptomatology (BPDSI)**		
T0 start	31.31	8.13			
T1 6 months					
T2 12 months					
T3 18 months	20.51	10.28	10.02(1.74)	-13.44 - -6.60	.000***
Effectsize			1.23		
			Responsibility (SIPP)		
T0 start	3.64	0.71			
T1 6 months	3.78	0.76	0.13 (0.11)	-0.08 - 0.33	.239
T2 12 months	4.30	0.84	0.69 (0.17)	0.37 - 1.02	.000***
T3 18 months	4.76	1.32	1.03 (0.21)	0.62 - 1.44	.000***
Effectsize			1.45		

T0 = start of treatment; T1= 6 months after start of treatment; T2 = 12 months after start of treatment; T3 = 18 months after start of treatment; M = observed mean, SD= observed standard deviation, β(eta) = estimate T1/T2/T3 compared to baseline (T0), SE = standard error, 95% CI= 95% Confidence Interval β; p = significance of change between respectively T1-T0; T2-T0; T3-T0; EQ = EuroQol EQ-5D; SCL-90: Symptom CheckList-90; BDI: Beck Depression Inventory; IIP: Inventory of Interpersonal problems; OQ: Outcome Questionnaire; BPDSI: Borderline Personality Disorder Severity Index; SIPP: Severity Indices of Personality Problems. *p<0.05, **p<0.01, ***p<0.001.

M	SD	β (SE)	95% CI	*p*	M	SD	β (SE)	95% CI	*p*
Depression (BDI)					**Quality of life (EQ-5D)**				
26.98	10.23				0.49	0.29			
25.25	10.88	-1.91 (1.52)	- 4.90 - 1.08	.211	0.54	0.30	0.06 (0.05)	-0.04 - 0.15	.263
20.49	13.53	-7.06 (2.37)	-11.70 - -2.41	.003**	0.63	0.26	0.17 (0.05)	0.07 - 0.26	.001**
14.55	12.36	-12.90 (2.39)	-17.58 - -8.22	.000***	0.68	0.32	0.20 (0.07)	0.07 - 0.33	.003**
		1.26					0.68		
Dissatisfaction in interpersonal relations (OQ)					**Dissatisfaction in social role (OQ)**				
24.01	6.71				16.82	5.39			
24.51	6.67	0.26 (1.20)	-2.10 - 2.62	.829	17.02	4.51	0.13 (0.93)	-1.70 - 1.96	.887
19.47	6.46	-4.71 (1.37)	-7.40 - -2.02	.001**	13.06	5.99	-3.92 (1.29)	-6.44 - -1.40	.003**
17.54	7.90	-6.66 (1.63)	-9.86 - -3.45	.000***	12.75	4.02	-4.36 (1.02)	-6.35 - -2.37	.000***
		0.99					0.81		
Selfcontrol (SIPP)					**Identity integration (SIPP)**				
3.73	0.76				2.96	0.67			
3.96	0.87	0.20 (0.15)	-0.09 – 0.49	.183	3.17	0.64	0.23 (0.11)	0.02 – 0.44	.032*
4.51	1.32	0.89 (0.22)	0.46 – 1.32	.000***	3.75	1.14	0.82 (0.23)	0.38 – 1.27	.000***
5.00	0.98	1.23 (0.21)	0.82 – 1.65	.000***	4.13	0.97	1.17 (0.21)	0.77 – 1.57	.000***
		1.62					1.74		
Relational functioning (SIPP)					**Social concordance (SIPP)**				
3.40	0.71				4.88	0.80			
3.56	0.75	0.17 (0.11	-0.04 - 0.38	.115	5.16	0.85	0.27 (0.11)	0.06 – 0.48	.012*
4.00	0.95	0.57 (0.18)	0.21 – 0.93	.002**	5.43	0.83	0.63 (0.14)	0.35 - 0.91	.000***
4.40	0.96	0.89 (0.18)	0.54 – 1.23	.000***	5.93	0.81	0.99 (0.15)	0.69 – 1.13	.000***
		1.24					1.23		

DISCUSSION

Summary of findings

This prospective cohort study in a clinical population of Dutch patients with severe BPD is the first to show that manualized day hospital MBT can be effectively implemented by an independent institute in a naturalistic setting outside the UK. The findings are of considerable interest because they prove MBT to be applicable in this target population consisting of patients with severe BPD and psychiatric multi-morbidity, most of whom had a history of unsuccessful treatment(s). No exclusion criteria other than schizophrenia or intellectual impairment were applied.

Positive results are reported with respect to all treatment goals. First, as only 15.5% of the patients prematurely left treatment (8.9% drop-outs, and 6.6% push-outs), it is reasonable to conclude that the vast majority of patients were effectively engaged in treatment. This conclusion is supported by an average treatment attendance of 63.5%. In our clinical experience, such drop/out and attendance figures can be considered favorable for this particular population, as multiple clinical characteristics promote nonattendance (e.g., high severity of BPD, lack of motivation, high prevalence of psychiatric comorbidity especially in terms of substance use disorders). Second, symptom distress, personality pathology and functioning, and social and interpersonal functioning all improved significantly within 18 months, mostly with large to very large effect sizes. Remarkably, the highest effect size was found for identity integration. This variable is relatively closely associated with the treatment's focus on enhancing the patient's mentalizing capacity, thereby lending suggestive support for the treatment's working mechanisms. Third, all patients showed a significant decrease in suicidal and self harm acts. Finally, we observed a significant decrease in patients receiving additional treatments and in complementary psychiatric hospitalizations. Hence, this cohort study as well as the original UK trial (Bateman & Fonagy, 1999) both report significantly positive results on all outcome measures, strengthening the confidence that manualized day hospital MBT is an effective treatment for patients with severe BPD.

Strengths and limitations

A major strength of the present study is its external validity and clinical utility: it was conducted in regular clinical practice, in a naturalistic setting outside the UK, the results were based on intention-to-treat analyses, and the study included severe borderline patients with a high level of psychiatric multi-morbidity. There were no exclusion criteria except for schizophrenia and intellectual impairment. This is in contrast with several other studies (e.g., Clarkin, Levy, Lenzenweger, & Kernberg,

2004; Giesen-Bloo et al., 2006; Linehan, Armston, Suarez, Allmon, & Heard, 1991; Ryle & Golynkina, 2000; Verheul, van den Bosch, Koeter et al., 2003) in which outcomes are possibly optimized by excluding many of the most severe borderline patients, such as patients with co-morbid substance use disorders, paranoid or antisocial personality disorders. Reported results of those studies can be generalized to a (possibly better-functioning) selection of the total BPD population, whereas the current study likely has greater generalizability. Post-hoc analyses on BPD patients with co-morbid ASP and/or PPD revealed that these subgroups benefited at least as much as the other BPD patients. Another strength is the size of the effects. Reported effect sizes range from 0.7 to 1.7. It should be noted that these estimates can be considered conservative, since the first time of measurement was at start of treatment, and not at the initial time of the intake procedure. In between, patients may have benefited from the expectation to benefit from treatment as well as some of them from pretreatment interventions such as an introduction to MBT, an explicit mentalizing course, low-frequent individual sessions starting crisis planning, and working on commitment issues.

Our study also has several limitations. First, in contrast to the UK study, our study lacked a control group, limiting the possibilities to draw conclusions about the efficacy of day hospital MBT. Second, the modest sample size and the considerable sample loss over the follow-up period. This concern is somewhat mitigated by the finding that the sensitivity analyses indicate a nonresponse pattern characterized by missings at random, thereby suggesting the results from the GEE analyses to be robust and the generalizability unthreatened. A third limitation is that our assessment battery did not include a direct measurement for mentalization, thereby limiting the possibilities to explain the mechanisms of change in MBT. However, it is interesting to note that our patients did not only show symptomatic improvement, but that the highest effects sizes were reported within the personality functioning domain, especially regarding identity integration and self-control, with effect sizes greater than 1.5. Possibly, the combination of symptomatic and more structural improvement can be viewed as tentative and indirect evidence for a positive change in mentalizing capacity.

Future directions

In previous follow-up studies of MBT a remarkable finding was that the treatment benefits were observed to increase in the follow-up period (Bate-man & Fonagy, 2001, 2009) rather than, as typically occurs, remaining at the same level or even decreasing (cf. Levy, 2008). We are currently investigating whether or not this favorable course

after the 18-month day hospital treatment episode, as observed in the UK study, will also hold for the Dutch sample. Because of its high intensity and dosage, day hospital MBT is a relatively costly treatment. Recently, Bateman and Fonagy (2009) have shown a less intensive variant of MBT; i.e., intensive outpatient (IOP) MBT, to be effective. However, we have compared the two samples and discovered a large difference in symptom severity at baseline (i.e., approximately one standard deviation on the SCL-90). It will be important to investigate and identify the optimal dosage in BPD or in subgroups of BPD patients. We recently started a RCT comparing the (cost-) effectiveness of day hospital MBT and intensive outpatient MBT. Furthermore, future research should address treatment processes and effective ingredients of treatment. For example, the focus on stimulating attachment to the therapist, while at the same time asking patients to maintain mentalizing capacity, has been pointed to as (one of) the key element(s) in effective treatments of BPD (Choi-Kan & Gunderson, 2008; Fonagy & Bateman, 2007), but as yet there is no direct empirical support in favor of this theoretical claim. Further research is needed to evaluate the improvement of mentalizing capacity as mechanism of change in MBT as well as other possible important elements contributing to the effectiveness of MBT such as the substantial amount of outreaching work, the consistent application of a coherent theoretical framework, the avoidance of iatrogenic effects, and the intensity and duration of treatment (Bateman & Fonagy, 2000; De Groot, Verheul, & Trijsburg, 2008; Fonagy & Bateman, 2007; Verheul & Herbrink, 2007). The search for patient characteristics that influence treatment outcome, mechanisms of change, and key elements of effective treatments (including intensity) may all help to tailor treatments to individual patients and may thereby lead to more cost-effective treatments (cf. Fonagy & Bateman, 2007).

In conclusion, this study shows that manualized day hospital MBT can be effectively disseminated in other settings and countries, and yields support for the clinical effectiveness of MBT in patients with severe BPD and a high degree of psychiatric multi-morbidity. Our findings might stimulate clinicians and researchers to stretch the boundaries of psychotherapy even further, by including borderline patients with relatively high levels of comorbidity of severe mental disorders such as substance use disorders, and paranoid and antisocial personality disorder.

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Chapter 5.

Effectiveness of Day Hospital Mentalization-Based Treatment for Patients with Severe Borderline Personality Disorder: A Matched Control Study

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ABSTRACT

The present study extends the body of evidence regarding the effectiveness of day hospital Mentalization-Based Treatment (MBT) by documenting the treatment outcome of a highly inclusive group of severe borderline personality disorder (BPD) patients, benchmarked by a carefully matched group who received other specialized psychotherapeutic treatments (OPT). Structured diagnostic interviews were conducted to assess diagnostic status at baseline. Baseline, 18-month treatment outcome and 36-month treatment outcome (after the maintenance phase) on psychiatric symptoms (Brief Symptom Inventory) and personality functioning (118-item Severity Indices of Personality Problems) were available for 29 BPD patients assigned to MBT, and an initial set of 175 BPD patients assigned to OPT. Propensity scores were used to determine the best matches for the MBT patients within the larger OPT group, yielding 29 MBT and 29 OPT patients for direct comparison. Treatment outcome was analysed using multilevel modelling. Pre to post effect sizes were consistently (very) large for MBT, with a Cohen's d of —1.06 and —1.42 for 18 and 36 months, respectively, for the reduction in psychiatric symptoms, and ds ranging from 0.81 to 2.08 for improvement in domains of personality functioning. OPT also yielded improvement across domains but generally of moderate magnitude. In conclusion, the present matched control study, executed by an independent research institute outside the UK, demonstrated the effectiveness of day hospital MBT in a highly inclusive and severe group of BPD patients, beyond the benchmark provided by a mix of specialized psychotherapy programmes. Interpretation of the (large) between condition effects warrants cautionary caveats given the non-randomized design, as well as variation in treatment dosages. Copyright © 2014 John Wiley & Sons, Ltd.

Keywords: Borderline Personality Disorder, Mentalization-Based Treatment, Matched Control, Propensity Score, Psychotherapy, Treatment Outcome

Psychotherapy has been identified as the 'treatment of first choice' for patients with borderline personality disorder (BPD) (American Psychiatric Association, 2001). Several controlled trials provide support for the effectiveness of various psychotherapeutic treatments for BPD, such as Dialectical Behavior Therapy (DBT) (e.g., Linehan et al., 2006), Schema-Focused Therapy (SFT) (e.g., Giesen-Bloo et al., 2006), Transference-Focused Psychotherapy (TFP) (Clarkin, Levy, Lenzenweger, & Kernberg, 2007), Systems Training for Emotional Predictability and Problem Solving (Blum et al., 2008), Cognitive Behavior Therapy (CBT) (Davidson et al., 2006) and Mentalization-Based Treatment (MBT) (Bateman & Fonagy, 2009). That said, there still is quite a limited body of evidence for the efficacy of specific psychotherapy treatment packages, with most brands not having published sufficient individual studies to allow for pooled effect sizes, as was noted in the most recent pertinent Cochrane meta-analysis (Stoffers et al., 2012). This also specifically applies to MBT.

Mentalization-Based Treatment is a psychodynamic treatment rooted in attachment and cognitive theory (Bateman & Fonagy, 2009). It aims to strengthen patients' capacity to understand their own and others' mental states in attachment contexts in order to address their difficulties with affect regulation, impulse control and interpersonal functioning, which act as triggers for acts of suicide and self-harm. The available empirical evidence supporting MBT originated from a randomized controlled trial (RCT) in the UK, comparing the effectiveness of psychoanalytically oriented treatment in a day hospital setting (later labelled MBT) to standard psychiatric care for patients with severe BPD (Bateman & Fonagy, 1999). Treatment outcome results were significantly better for the MBT group than for the general psychiatric care group in terms of reductions in depressive and anxiety symptoms, social and interpersonal problems, suicide attempts, acts of self-harm, number of days in hospital and use of psychotropic medications. The superiority of MBT persisted during the 5-year follow-up period (Bateman & Fonagy, 2001, 2008). Health service utilization costs by MBT patients were demonstrated to be similar during treatment, whereas the costs were substantially lower than in the control condition after treatment completion (Bateman & Fonagy, 2003). In a Dutch cohort study (Bales & Bateman, 2012), we showed that manualized day hospital MBT can also be effectively implemented in an independent treatment institute outside the UK with comparably favourable results. In the most recent published trial, Bateman and Fonagy compared an intensive outpatient variant of MBT to structural clinical management (Bateman & Fonagy, 2008). Their conclusion was that structured treatments improve outcomes for individuals with BPD and that, with a focus on specific psychological processes, MBT shows additional benefits in comparison to structured clinical support.

To date, no study has directly compared the effectiveness of day hospital MBT to the effectiveness of other psychotherapeutic treatments (OPT) for BPD patients. In the original UK trials, the control groups did not receive formal psychotherapy, but Treatment As Usual and Structured Clinical Management both aimed at symptom management only. The present study compared the clinical benefits of day hospital MBT to those observed in carefully matched patients who completed other psychotherapeutic interventions that presume to address underlying vulnerabilities (e.g., affect regulation and identity problems) and improve quality of life (by enhancing social and interpersonal functioning). Moreover, most of extant outcome research describes carefully controlled groups in academic settings, leaving data about the effectiveness of treatment packages in 'real world samples' scarce. While randomized controlled effect studies clearly represent the gold standard for treatment evaluation, randomization is not always practically feasible. Quasi-experimental designs offer fewer controls for the internal validity of the study, but such designs may optimize external validity by presenting data from real life settings (as opposed to tightly controlled academic settings).

In sum, the present matched control study, executed by an independent research institute outside the UK, compares the clinical benefits of day hospital MBT to those observed in a more stringent comparison condition (i.e., diverse specialized psychotherapy programmes) in samples that presumably have high ecological validity.

METHOD

The Medical Ethical Committee of the Erasmus Medical Center Rotterdam and the institutional review board of the Viersprong Institute for Studies on Personality Disorders (VISPD) approved of this study. All participants gave their informed consent. Patients who declined participation were not disadvantaged in any way by their decision and remained eligible for MBT treatment regardless of their participation status. The MBT treatment was conducted at 'de Viersprong', the Netherlands Institute for Personality Disorders. De Viersprong offers highly specialized outpatient, day hospital and inpatient psychotherapy for personality disorders, and was the first treatment centre in the Netherlands to implement day hospital MBT. The institute offers tertiary care for treatment refractory patients with severe and complex personality disorders that are often complicated by psychiatric comorbidity. All patients in the OPT group participated in the Study on the Cost-Effectiveness of Personality Disorder Treatment (SCEPTRE) (Bartak, 2010). Between July 2003 and April 2006, participants were recruited from six mental healthcare centres in the Netherlands for the SCEPTRE study (i.e., de

Viersprong, Halsteren; Altrecht, Utrecht; Zaans Medical Center, Zaandam; De Gelderse Roos, Lunteren; GGZWNB, Bergen op Zoom; Arkin, Amsterdam). These institutions offer specialized outpatient, day hospital and/or inpatient psychotherapy for patients with personality disorder. Within SCEPTRE, 175 patients were diagnosed with BPD (based on the Structural Clinical Interview for DSM disorders [SCID-II]), and these patients were selected for the OPT reference group in this study.

Patients

Between August 2004 and January 2008, 41 patients were referred to day hospital MBT. Inclusion criteria were (a) meeting DSM-IV diagnostic criteria of BPD (based on SCID-II/Structured Interview for DSM-IV Personality [SIDP-IV] ratings), (b) minimum age of 18 years and (c) willingness and ability to give informed consent. Exclusion criteria were minimal, consisting of (a) meeting criteria for schizophrenia (based on SCID-I), (b) intellectual impairment (IQ <80, based on Wechsler Adult Intelligence Scale) or (c) organic brain disorder. As part of the standard intake procedure, DSM-IV axis II diagnoses were measured using a semi-structured diagnostic interview, i.e. the SCID-II (Ekselius, Lindström, von Knorring, Bodlund, & Kullgren, 1994; Weertman, Arntz, & Kerkhofs, 2008) or the SIDP-IV (Pfohl, Blum, & Zimmerman, 1997). Due to temporary staffing problems, five of the 41 patients were not interviewed. Axis II assessment could not be completed for seven patients because their mental state acutely interfered with the administration of the interview (e.g., acute severe withdrawal symptoms, dissociative states and/ or psychotic symptoms). A final total of 29 of the referred patients met the inclusion criteria.

Treatment outcome was assessed at several time points. In the MBT group, assessments were conducted at start, and 6, 12, 18, 24, 30 and 36 months after the start of treatment. In the OPT group, 107 patients (61.1%) received follow-up assessments at the start and end of treatment, at 6 and 12 months follow-up, and again at 36 months after treatment assignment. The remaining 68 patients (38.9%) received assessments at treatment assignment, and at 12, 24 and 36 months after treatment assignment. These timing differences within SCEPTRE were due to logistic differences between treatment centres. Time was modelled in months before or after the start of treatment.

Treatment Conditions

Mentalization-Based Treatment in Day Hospital

The MBT programme consists of a maximum of 18months manualized day hospital MBT, continued by a maximum of 18 months of maintenance mentalizing (group) therapy. This study reports on the treatment outcome of the day hospital phase (18 months) and of the maintenance therapy (after 36 months). The mean treatment duration of the day hospital was 15.5 months (SD = 3.8 months; range 3.9–20.0 months).

Within mentalizing theory, BPD is considered as a relational problem resulting from a developmental vulnerability to losing mentalizing, primarily in interpersonal relationships as a result of unmanageable emotional arousal. Central to MBT is enhancing the mentalizing capacity within everyday interpersonal interactions and specifically within the context of an attachment relationship. Its basic premise is that enhancing mentalizing process will improve symptoms and functioning of patients with BPD. Treatment goals of MBT are as follows: (a) to engage the patient in treatment; (b) to reduce psychiatric symptoms; (c) to improve social and interpersonal functioning; (d) to decrease the number of self destructive acts and suicide attempts; and (e) to stimulate adequate care consumption and prevent reliance on hospital admissions and prolonged inpatient care (Bateman & Fonagy, 2006). To achieve these goals, all programme components specifically focus on the enhancement of the patient's mentalizing capacity, i.e. the mental process of understanding self and others in terms of mental states such as thoughts, desires, intentions and feelings. Accordingly, the day hospital programme included implicit mentalizing groups (i.e., daily group psychotherapy and weekly individual psychotherapy, and individual crisis planning from a mentalizing perspective) and explicit mentalizing groups (i.e., art therapy twice a week, mentalizing cognitive group therapy and writing therapy). The week programme is ended with a social hour and community meeting. Psychiatrists provided medication consultation when indicated. A more detailed description of the MBT principles, interventions and programme components are beyond the scope of the present paper but are provided in Bateman and Fonagy (2006) and Bales and Bateman (2012).

Other Psychotherapeutic Treatments

The psychotherapeutic treatments in the OPT group consisted of a variety of treatment settings, durations and theoretical schools that are deemed representative for specialized care for PD in the Netherlands (Bartak, 2010, for a more detailed discussion of the SCEPTRE sample frame). All of these treatment

programmes presume to remedy underlying vulnerabilities (e.g., affect regulation and identity problems) and improve quality of life (by enhancing social and interpersonal functioning), and are explicitly not limited to symptom management. Of the 175 patients in OPT, 68 (38.9%) were assigned to an inpatient setting (average treatment duration 9.8 months, SD 4.9 months), 66 (37.7%) were assigned to a day hospital setting (average treatment duration 11.8 months, SD = 6.1 months) and 41 (23.4%) were assigned to an outpatient setting (average treatment duration 18.7months, SD = 14.4 months). Patients with diagnoses of ADHD, bipolar disorder, psychotic disorders and substance use disorders (SUD) were excluded. Psychiatrists provided auxiliary medication when indicated.

Therapists and Adherence

Mentalization-Based Treatment was conducted by a team of therapists with varying degrees of clinical experience, ranging from junior psychologists and social nurses to highly experienced clinical psychologists and psychotherapists. During the first 2 years after the start of implementation, the programme director (and first author, Dawn Bales) and one of the social nurses received intensive onthe-job training by A. Bateman and his staff in St. Ann's Hospital in London. Afterwards, the programme director was appointed as the licensed MBT trainer for the Netherlands. All therapists were extensively educated, trained and supervised by Bateman and/or Bales. Adherence to the MBT treatment model was monitored by daily post-session supervision on adherence, as guided by the Bateman & Fonagy adherence scale (Bateman & Fonagy, 2006). Moreover, weekly team supervision focused therapists on the accurate use of the MBT intervention spectrum. Based on the observation of group sessions and tapes during the first 2 years, adherence was quarterly rated 'good to excellent' by Bateman.

All psychotherapists in the OPT condition were licensed psychiatrists or psychologists with extensive (M = 14.9 years; SD = 10.1) postgraduate clinical experience. The treatments under study can be considered highly representative of specialized psychotherapeutic practice in the Netherlands.

Outcome Measures

Two domains of treatment outcome were assessed (a) psychiatric symptoms and (b) personality functioning. For the MBT condition, assessments were conducted by treatment-independent research assistants, trained and employed by the VISPD. For the OPT condition, assessments were conducted at the respective setting, again by independent raters.

Psychiatric Symptoms

General psychiatric symptom distress was measured with the widely used Brief Symptom Inventory (BSI) (Derogatis & Melisaratos, 1983). We used the Global Severity Index, i.e. the mean score of the 53 comprising items of the BSI (range 0–4). Higher scores are indicative of greater symptom severity.

Personality Pathology and Functioning

Changes in (mal-)adaptive personality functioning were measured using the 118-item Severity Indices of Personality Problems (SIPP-118) (Verheul et al., 2008). The SIPP-118 measures 16 facets of (mal-)adaptive personality functioning coalescing into five higher-order domains: Self-control, Identity Integration, Responsibility, Relational Capacities and Social Concordance, with lower scores reflecting more maladaptive levels of personality functioning. Favourable psychometric properties have been found for the SIPP-118, as well as evidence for (cross-national) validity (Arnevik, Wilberg, Monsen, Andrea, & Karterud, 2009; Verheul et al., 2008).

Analytic Strategy

Baseline Differences

Baseline demographic and clinical characteristics of patients in MBT and OPT conditions were calculated and tested for significant differences using the Fisher's exact test for dichotomous variables and Student's t-tests for continuous variables.

Matching

Two clinically relevant differences in demographical variables between MBT and OPT patients were observed, i.e. (1) a history of inpatient treatment and (2) currently having paid work or going to school. The total sample was divided into four groups based on these characteristics. Within these groups, patient pairs were matched on the smallest difference in propensity score (see below). To enable all MBT patients to be matched, no limit was set on the score differences.

Propensity Scores

A propensity score can be defined as the conditional probability of assignment to one of two treatment groups given a set of observed pre-treatment variables. Pretreatment characteristics related to outcomes were considered potential confounders (Brookhart et al., 2006) and were therefore included in the propensity score calculation. For pre-treatment variables, two to eight values (1.0% to 3.8%) were missing, and these values were imputed using the expectation maximization method. Pretreatment variables were used as covariates in a logistic regression with group membership (MBT versus

OPT) as outcome. The probabilities for group membership reflect the propensity score for each individual patient. For the determination of the characteristics related to outcome, we calculated change scores by subtracting the baseline scores from the mean of the follow-up scores. The relations of these outcomes were determined with Student's t-tests for dichotomous variables and with Pearson correlations for continuous variables.

Longitudinal Analyses

Multilevel models, also known as mixed models, were used for the evaluation of the course of the outcome variables over time. These models make optimal use of incomplete repeated measures records with unbalanced time points. Moreover, this method compensates for potential bias caused by missing data that are contingent on the effects incorporated in the model (Little, 1987). Time was modelled in months before or after the start of the treatment. In a first step, saturated models were postulated with intercept and slope (time) as random variables. For within group analyses, time was defined as level 1, and patients as level 2. Time, quadratic timeand logarithm of time were entered as fixed effects. For between-group analyses, we added group, and interactions between group and time to the fixed effects. The covariance structure was based on the deviance statistic using restricted maximum likelihood (Verbeke & Molenberghs, 1997). Next, following an iterative procedure, non-significant fixed time effects were excluded from the model until a parsimonious final model was obtained that did not differ significantly from the saturated model. Statistical significance was determined with the deviance statistic using ordinary maximum likelihood (Singer & Willett, 2003). When removing non-significant effects, it was respected that interaction effects may be nested under their respective main effects (Hox, 2002). Cohen's d effect sizes (Cohen, 1992) were calculated using the estimated pooled standard deviations from the models.

Analyses were based on the 'intention to treat' principle. Accordingly, patients who prematurely ended treatment were followed up and included in the outcome analyses.

RESULTS

Baseline Characteristics

Table 1 shows percentages, means and standard deviations at baseline for the MBT and OPT conditions. As compared with OPT patients, MBT patients had significantly less often paid work or study (17% versus 48%), more often a history of inpatient treatment (31% versus 10%), significantly lower scores on the SIPP-118 scales Responsibility and Social concordance, and a higher average number of borderline traits (6.9 versus 6.2). The difference in the total propensity score was also significant. Combined, the clinically relevant pre-treatment scores suggest that patients in the MBT condition exhibited personality dysfunction of equal or greater severity.

Matching

Propensity scores were then calculated to statistically equalize the treatment conditions; for a more full discussion of the propensity score method for non-randomized designs in psychotherapy research, see (Bartak et al., 2009). All but two pre-treatment characteristics (i.e., being married and having a narcissistic personality disorder) were related to outcome and therefore included in the computation of propensity scores. As indicated by the analysis of baseline characteristics, patient matching occurred according to (a) having a paid job (or not) and (b) having a history of inpatient treatment (or not). Although a significant difference in propensity scores remained after matching, the matching was nevertheless successful in removing all other significant baseline differences between the matched MBT and OPT groups.

Treatment Outcome Over Time

Parameter estimates of the final parsimonious mixed models are available from the first author. For the purpose of interpretation, the estimations at start, 18 months and 36 months, as well as the pooled standard deviations and effect sizes derived from the between-group mixed models, are presented in Table 2. Patients in both conditions improved at 36 months on all outcome indices. The MBT group showed large effect sizes on all outcome variables at 36 months (Cohen d range 0.81–2.08; median 1.36). Psychiatric symptoms were reduced by a large within effect size after 18 months (d = -1.06) of treatment, and this reduction was extended at 36 months (d = -1.42), at the end of the follow-up period (Figure 1). The matched OPT group also improved over time, with a moderate reduction in psychiatric distress ratings at 18months (d = -0.35), that was also extended at 36 months (d = -0.57). For the domains of personality functioning, generally moderate improvements were observed (median d = -0.47) (Figure 2).

Table 1. Baseline Characteristics of MBT and OPT Study Samples.

				MBT-OPT *p* - value	
	MBT n = 29	**OPT n = 175**	**OPT matched n = 29**	**MBT OPT total group**	**matched**
Female	69%	82%	86%	0.13	0.21
Lower education	86%	71%	69%	0.11	0.21
Married	10%	10%	10%	1.00	1.00
Living with:					
- Partner	24%	29%	21%	0.66	1.00
- Parent	17%	13%	14%	0.55	1.00
- Children	14%	19%	10%	0.61	1.00
Paid work / study	17%	48%	17%	0.002	1.00
Treatment History:					
- Outpatient	45%	49%	59%	0.84	0.43
- Day hospital	17%	10%	14%	0.21	1.00
- Inpatient	31%	10%	31%	0.004	1.00
Personality disorder:					
- Antisocial	17%	7%	10%	0.15	0.71
- Histrionic	3%	11%	7%	0.32	1.00
- Narcissistic	3%	6%	10%	1.00	0.61
- ≥ 1 Cluster A	17%	17%	21%	1.00	1.00
- ≥ 2 Cluster B	21%	22%	24%	1.00	1.00
- ≥ 1 Cluster C	48%	58%	41%	0.42	0.79
	M (SD)	**M (SD)**	**M (SD)**	***p***	***p***
Age	30.0 (6.17)	30.3 (7.76)	30.4 (7.93)	0.84	0.84
GSI *Psychiatric Sxs*	1.79 (0.68)	1.67 (0.64)	1.67 (0.58)	0.35	0.46
SIPP-118:					
- Identity integration	23.0 (7.15)	24.2 (7.25)	24.1 (7.18)	0.43	0.58
- Relational functioning	24.7 (6.69)	27.2 (8.03)	24.6 (7.39)	0.13	0.97
- Responsibility	27.0 (5.76)	31.3 (7.86)	29.7 (7.46)	0.01	0.14
- Self-control	25.4 (6.21)	26.9 (7.34)	27.9 (7.40)	0.32	0.19
- Social concordance	30.4 (6.74)	33.9 (7.16)	32.6 (8.07)	0.02	0.27
Number of BPD traits	6.90 (1.47)	6.24 (1.25)	6.79 (1.35)	0.01	0.78
Propensity score	0.33 (0.24)	0.11 (0.11)	0.22 (0.17)	<0.001	0.05

Note: MBT = Mentalization-Based Treatment; OPT = Other psychotherapeutic treatment; BPD = borderline personality disorder; GSI = Global Severity Index; SIPP = Severity Indices of Personality Problems; Significance testing followed Fisher's exact test for dichotomous variables, and Independent samples t-test for continuous variables.

Table 2. Between-group estimates and effect sizes at pre-treatment, and after 18 and 36 months for MBT-matched and OPT matched samples.

	MBT-group (n=29)		OPT-matched group (n=29)		Between groups	
Outcome	**Estimate (*SD*)**	**Effect size[1)]**	**Estimate (*SD*)**	**Effect size**	**Effect size**	***p*-value**
GSI Psychiatric symptoms						
Baseline	1.78(0.73)		1.46(0.73)			
18 months	1.04(0.67)	-1.06	1.21(0.67)	-0.35	-0.71	0.006
36 months	0.73(0.75)	-1.42	1.04(0.75)	-0.57	-0.85	0.018
SIPP Identity integration						
Baseline	23.0(8.0)		26.5(8.0)			
18 months	33.3(8.6)	1.23	29.4(8.6)	0.35	0.88	0.002
36 months	34.8(10.0)	1.30	29.9(10.0)	0.38	0.92	0.009
SIPP Relational functioning						
Baseline	25.0(7.2)		26.9(7.2)			
18 months	31.2(7.6)	0.84	29.4(7.6)	0.35	0.49	0.076
36 months	31.4(8.7)	0.81	30.6(8.7)	0.47	0.34	0.310
SIPP Responsibility						
Baseline	27.0(6.9)		29.4(6.9)			
18 months	34.8(6.1)	1.21	34.4(6.1)	0.76	0.45	0.007
36 months	40.2(5.8)	2.08	36.8(5.8)	1.16	0.92	0.007
SIPP Self-control						
Baseline	25.3(7.7)		29.4(7.7)			
18 months	34.4(7.7)	1.19	31.8(7.7)	0.31	0.88	0.001
36 months	38.8(7.7)	1.76	34.6(7.7)	0.67	1.09	<0.001
SIPP Social concordance						
Baseline	30.4(7.1)		32.5(7.1)			
18 months	36.7(7.3)	0.87	33.1(7.3)	0.08	0.79	<0.001
36 months	37.6(8.1)	0.95	35.3(8.1)	0.36	0.59	0.028

Note: [1)] Cohen's d
MBT = Mentalization-Based Treatment; OPT = other psychotherapeutic treatment; GSI = Global Severity Indez; SIPP = Severity Indices of Personality Problems.

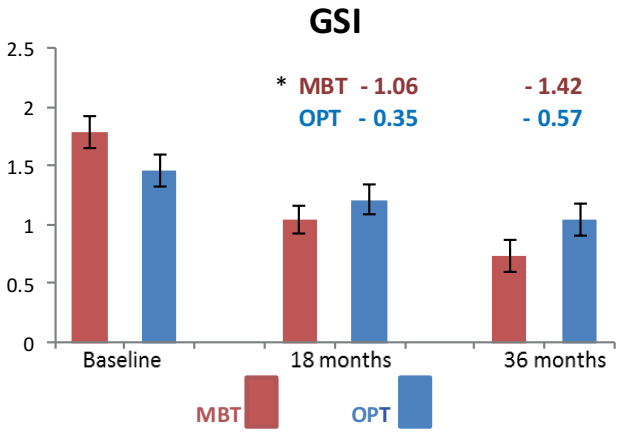

Figure 1. Estimated GSI values for MBT and OPT

Higher scores indicate more psychological complaints
Extensions on bars indicate standard errors
MBT = Mentalization Based Treatment; OPT = Other Psychotherapy
* Cohen's d compared to baseline

Overall, a comparison of effect sizes indicates that superior outcome was consistently achieved in the MBT group, which is confirmed by an inspection of the between-group effect sizes (MBT versus OPT). More specifically, large between effects were for reduction in psychiatric symptoms (-0.71 and -0.85, at 18 and 36 months, respectively), and moderate to large between effect sizes for improved domains of personality functioning (ranging from 0.45 to 0.88 at 18 months, and 0.34 to 1.09 at 36 months). The between-group difference was not significant on relational functioning.

DISCUSSION

This study examined the effectiveness of an (maximum) 18-month day hospital MBT in a group of severe BPD patients, as well as the 36-month follow-up after an additional 18 months of a maintenance regimen. Psychiatric symptoms were reduced by a large within effect size after 18 months of treatment. The psychiatric symptoms reduced even further during the maintenance treatment, as assessed at 36months. Personality functioning (as measured by the SIPP-118) improved by a large within effect size on all five higher-order domains (all ds> 0.80). These changes indicate that patients reported less symptomatic distress, as well as meaningful improvements in self-rated capacities to (a) regulate their emotions, perform self-reflection, and have a more stable self-image and selfrespect (Self-control), (b) capacity for frustration tolerance and enjoyment

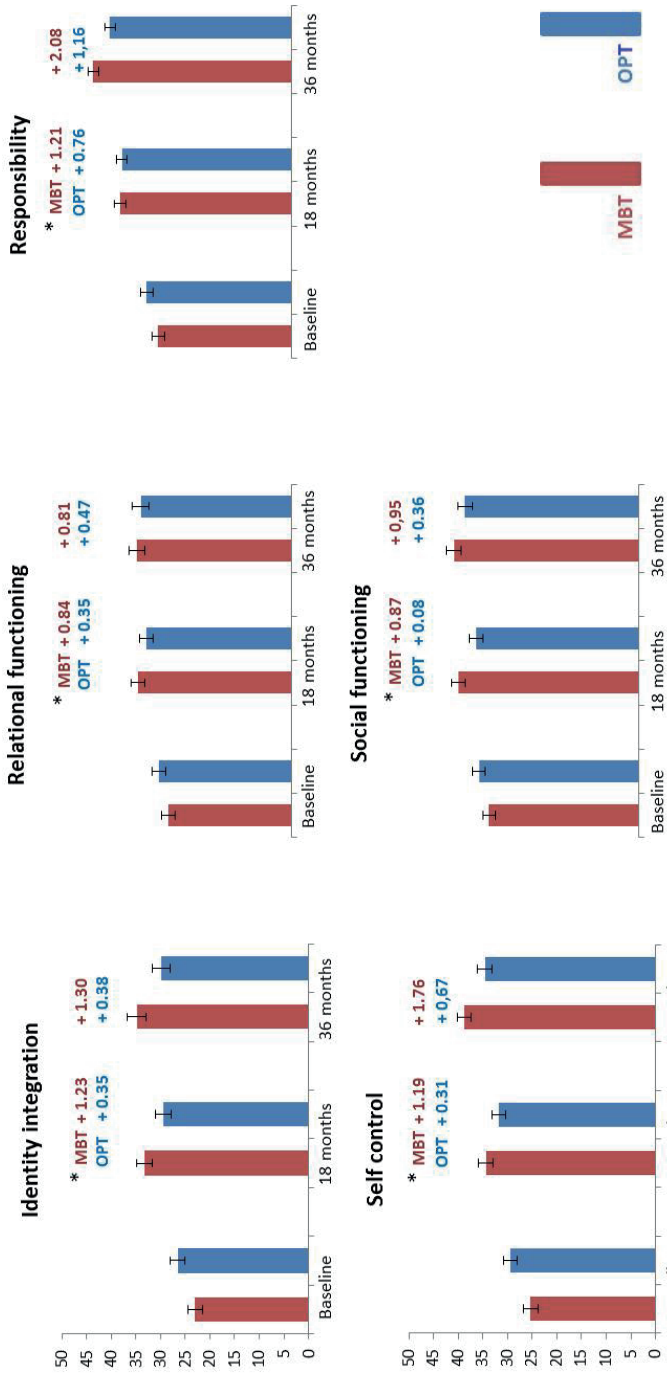

Figure 2. Estimated SIPP domain values for MBT and OPT

Higher scores indicate a better functioning
Extensions on bars indicate standard errors
MBT = Mentalization Based Treatment; OPT = Other Psychotherapy
* Cohen's d compared to baseline

(Identity integration), (c) trustworthiness and responsible industry (Responsibility), (d) to regulate their emotions and behave in a cooperative fashion (Social concordance), and (e) enjoy intimacy and enduring relationships (Relational capacities). The patients significantly continued to improve in the 18-month follow-up period. To provide a benchmark, outcome in the OPT group was assessed. While outcome in OPT was generally favourable (small to medium effects), moderate to large between-group effects indicated superior outcome in MBT patients on all outcome variables, except for non-significant difference in change in relational functioning.

Some cautionary comments are in order when making this comparison. Of course, the present matched control design does not offer the internal validity controls as afforded by RCTs. It is possible that other variables, not included in the extensive baseline set of patient characteristics, confound the direct comparison of MBT and OPT. Indeed, duration of treatment (akin to treatment dosage) was inconsistent and likely slightly shorter in OPT than in MBT, so to some extent favourable differences in MBT may be due to differential dosage. Conversely, there is reason to believe that the observed differences in effect size may be conservative estimates, as for most (other) conceivable clinical variables MBT likely included more severe patients than OPT, given the respective inclusion and exclusion criteria. No specific data were available in the OPT group on pre-treatment axis I disorders, but we know that OPT, in contrast to MBT, excluded patients with diagnoses of ADHD, bipolar disorder, psychotic disorders other than schizophrenia and SUD. We therefore recommend future comparative studies to take axis I comorbidity into account.

Another factor not assessed in this comparison is the relative cost-effectiveness. Day treatment MBT is a resource intensive treatment and presumably carries higher cost than OPT that may or may not be compensated for by fewer visits to auxiliary mental health providers (most notably the more frequent, very expensive inpatient care visits). Related to this issue is also the question whether the exclusion criteria for the other treatment models are still warranted or, alternatively, whether these treatment models can be further tailored to include the more severe cases of BPD. Day hospital MBT would certainly be less promising if other, less intensive, treatment programmes can obtain similarly favourable results in groups of severe BPD patients. To further clarify this issue, we recently started an RCT that will address the question which dosage of MBT is necessary and (cost-)effective for BPD patients in general and for various levels of severity of BPD in particular.

It is also important to recognize that our study does not suggest that MBT is superior in comparison to other evidence-based psychotherapies, such as DBT, SFT, TFP and CBT. Conceivably, the observed superiority of MBT relative to OPT is (partly) attributable to a higher level of treatment integrity due to ongoing training and supervision, adherence measurements, and quality monitoring in the MBT condition. Although many of the other evidence-based psychotherapies were included in the OPT condition, regular psychotherapeutic practice is often inspired by such treatment models rather than the consistent application thereof. Therefore, future studies should take into account the level of treatment integrity across study arms as well as the added value of quality systems aiming at enhancing treatment integrity (Hutsebaut, Bales, Busschbach, & Verheul, 2012).

Notwithstanding these limitations, a major strength of this study is its high external validity, as assignment to MBT and OPT took place in regular clinical practice instead of under experimental conditions. The BPD patients in this study are likely to be representative for BPD patients assigned to MBT or OPT in the Netherlands. Within this naturalistic setting, one of the most rigorous study designs was chosen, namely a matched control design. This methodology was possible due to highly overlapping research designs and assessment batteries across the two conditions.

CONCLUSION

In sum, this study documents the effectiveness of MBT day hospital treatment in a highly inclusive and severe group of BPD patients. Strong, multidimensional (encompassing both symptoms and personality functioning) effects were observed. These effects were consistentlylarger than those observed in a carefully matched group of BPD patients who had received other psychotherapies offered in specialized care in the Netherlands, but this conclusion warrants cautionary caveats given the nonrandomized design.

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Chapter 6

The implementation of mentalization-based treatment for adolescents: a case study from an organizational, team and therapist perspective

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ABSTRACT

Background: Reports on problems encountered in the implementation of complex interventions are scarce in psychotherapy literature. This is remarkable given the inherent difficulties of such enterprises and the associated safety risks for patients involved.

Case description: A case study of the problematic implementation process of Mentalization- Based Treatment for Adolescents (MBT-A), a new therapy for 14 to 18 year old youngsters with severe personality disorders, is presented. The implementation process is described and analyzed at an organizational, team and therapist level.

Discussion and evaluation: Our analysis shows that problems at all three levels contributed and interacted to make the implementation cumbersome and hazardous.

Conclusion: The implementation of complex psychotherapeutic programs for difficult patients could benefit from a structured attention to processes at multiple levels. We therefore propose a new comprehensive heuristic model of treatment integrity. This new model includes organisational, team and therapist adherence to the treatment model as necessary components of treatment integrity in the implementation of complex interventions. The application of this new model of treatment integrity potentially increases the chance of successful implementations and reduces safety risks for first patients enrolling in a new program.

Keywords: Implementation, Treatment integrity, Personality disorders, Adolescents, Mentalization-Based Treatment

BACKGROUND

The last two decades have yielded new and promising interventions for the treatment of borderline personality disorder (BPD). For example, several studies support the effectiveness of various psychosocial interventions for BPD in adults, including Mentalization-Based Treatment (MBT) [1], Dialectical Behaviour Therapy (DBT) [2], Schema-Focused Therapy (SFT) [3], TransferenceFocused Psychotherapy (TFP) [4], Systems Training for Emotional Predictability and Problem Solving (STEPPS) [5] and Cognitive Behaviour Therapy (CBT) [6]. These results have typically been obtained under optimal (experimental) conditions, including extensive supervision, adherence monitoring, and above average organizational support. It is less clear how these evidence-based programs are actually implemented in regular practice. Given the many challenges associated with treating BPD patients and the complexity of these interventions, this issue might be particularly relevant to this patient group. Therefore, it is not only important to report about what works, but also to share experiences on how to implement these promising interventions. However, despite its obvious relevance, reports of (problems in) the dissemination of complex psychosocial interventions seem almost absent in the psychotherapy literature. In fact, we couldn't find a single article describing implementation failures of a psychotherapy treatment program. It is unlikely that this absence of reports reflects actual absence of any implementation failures. Rather, we believe that problems are underreported and opportunities to learn from previously encountered problems are missed [7]. In other branches, such as the airline industry, reporting about problems and the lessons learned has been a successful strategy to increase safety [8,9]. In this article, we aim to introduce this strategy in the psychotherapy literature.

For that purpose, we will describe a case study of a problematic implementation of Mentalization- Based Treatment for Adolescents (MBT-A), i.e. a new treatment program for 14 to 18 year old youngsters with severe personality disorders, at de Viersprong, Netherlands institute for personality disorders. This case study revealed an intriguingly ambivalent result, i.e. patient outcomes were favourable in terms of symptom reduction and improvement of personality functioning and quality of life [10], while the program had to deal with numerous unexpected difficulties and threats for patient safety, including high staff turnover, temporary curtailment of the program, high level of patient and parent dissatisfaction, safety risks for patients and staff, and negative publicity. The analysis described in this article and the lessons learned from it, have stimulated and underpinned a new format for the program. The strongly adapted program now runs much smoother, while the favourable outcomes seem at least maintained, if not further improved.

As far as we know, this manuscript is the first published report on a failed implementation of a psychotherapy program. The problems described in this case are not likely to be specific to the implemented treatment model or specific setting, but instead might include various commonly encountered problems and thus are likely relevant for other treatment models and settings as well. Below, we will first introduce the case and describe the precursors to the implementation problems. Second, we will systematically analyze the encountered problems at an organizational, team and therapist level, respectively. Third, this analysis is used to reformulate the concept of treatment integrity in a way that could be useful to understand successes and failures in the dissemination of evidence based treatment models. This model might help to increase the chance of successful implementation of treatment programs and reduce safety risks for involved patients, staff and organization[a].

CASE DESCRIPTION

Problem definition

De Viersprong has approximately 40 years of experience in treating adolescents with personality problems in a long term inpatient setting. Traditionally, mildly to moderately disturbed adolescents entered this intensive and supportive treatment program and typically showed large improvements with effect sizes in the range between 1.0 and 1.5. Due to recent major organizational changes in mental health services in the Netherlands, including (a) the transition from supply- to demandfocused health care, (b) the differentiation between first (local), second (regional) and third (national) echelon mental health care, and (c) the introduction of stepped care as the basic principle in assignment to each of these echelons, de Viersprong – as a highly specialised, third echelon organization – started to attract a new population of more severely disordered adolescents. The inclusion of these more severely disordered adolescents posed new challenges to the therapists and organization. In particular, they were more sensitive to crisis, and displayed a wider range of externalizing problems. The prevailing treatment model – even with major adaptations – failed to adapt to the needs of these more severely disordered patients, leading to a sharp increase of dropout rates to almost half of the patients. It was obvious and recognized that the old program required substantial reorganization to be able to face the challenges this new patient group presented. In the process of reorganizing, part of the treatment program in the existing clinic was substituted for a new treatment program, i.e. MBT-A.

Choosing a new treatment model

The challenge was to design a treatment program that would be able to deal with the problems of severe borderline adolescents, often including behavioural problems, substance abuse, extreme self-injurious behaviour, extreme sensitivity to crisis, absenteeism, and severe family conflicts. At that time, our intention was to keep the inpatient setting and solve these problems by choosing a method aimed at dealing with the borderline symptoms. However, no randomized controlled studies on personality disorders (PD) in adolescents had been published nor were there guidelines on how to treat these adolescents. Eventually, MBT was chosen as the theoretical and methodological base for the new program. MBT is a psychodynamically oriented treatment program developed by Bateman and Fonagy [11,12] for adults with (severe) BPD. MBT was chosen for various reasons. First, MBT is one of the evidence-based treatment programs for adults with BPD. Second, MBT uses few exclusion criteria and in fact has been proven to be especially effective for very severely disturbed BPD patients [1,11,13]. Third, the model had not yet been applied to adolescents, but a similar approach had been described by Bleiberg [14] in Boston. Finally, and of great importance in this case, the adult MBT-program had been implemented successfully at de Viersprong before [15].

Preparing the implementation

About nine months passed between the choice for MBT and the actual implementation of the new program. During this period, a manual was written with some adaptations of the model to make it suitable for adolescents within an inpatient setting. This mainly included the addition of school and family therapy to the program and supporting developmental tasks, like structuring free time[b]. Furthermore, the team attended several congresses and presentations about MBT and discussed the manual and other relevant literature. Finally, the team was trained by experienced MBT trainers and the manual was revised and supplemented by the supervisors and team.

The start

Although the new therapy was hardly announced in professional journals or other media, many patients were admitted and almost immediately a waiting list developed. During the information sessions before the start of the new program, patients and their families reported that they had been waiting for a new specialized therapy and expressed high expectations. This apparent demand strengthened the belief that the clinical team had made the right choice in adapting their inpatient therapy into a specialized inpatient treatment for severe and/or resistant BPD in adolescents. All these

factors further increased the already motivated and enthousiastic team spirit at the start of the new program in March 2008. However, it turned out that this high morale was quickly put to the test.

Signs of a failing implementation

It soon became clear that the implementation did not develop as expected. Signs were twofold and came from staff as well as from patients. Several staff members, particularly nurses, became overwhelmed and overburdened by the severity of the pathology they had to deal with combined with the ambiguity of their new tasks and role and uncertainty about MBT interventions. This left many nurses feeling powerless, resulting in a loss of authority and an increase of conflicts with patients. The resulting loss of morale and decreasing job satisfaction contributed to conflicts in the team and a burn out among several staff members. This interacted with increasing turmoil among the patient group, who also had to deal with major changes, including a new therapy schedule, a new therapeutic approach, and different rules. A vicious circle developed, with increasingly frustrated and overburdened staff and the youngsters feeling increasingly misunderstood, neglected and angry. All this resulted in an increase in acting out behaviour, more crossings of behavioural boundaries and a general grim and brutal atmosphere. Several nurses took sick leave due to stress and exhaustion, leaving the program understaffed, increasing the work load for the remaining staff. It became impossible to run daily therapy program five days a week. The program had to be limited to initially two and later three days a week. Parents were confronted with their children being at home most of the week, while they counted on them only being home in the weekend. Parents' dissatisfaction escalated in an information meeting with the board of the management of de Viersprong, leading them to inform the National Health Care Inspection, several other organizations, the press and patients' sites on the web. With all the negative press and pressure from patients and parents, the implementation problems reached their climax.

Immediate intervention and long term analysis

At that time, the board of management of de Viersprong intervened, although it would take some time before the measures would have some effect. The most important interventions were a stop in patient admissions and the quick recruitment of additional personnel creating an 'overstaffing' of the team. Overstaffing was necessary, to bring the staff at operational strength given the many sick leaves. Bringing the staff back to its intended operational strength restored the balance staff/patients and helped to regain a sense of control over the acting out behaviour of patients. Furthermore, the

frequency of the supervision by experienced MBT therapists from within the institution was substantially increased. More time was scheduled to train new personnel and to discuss problematic team processes during intervision.

Looking back, the implementation turned out to be almost catastrophic, given the actual risks for patients, staff, and institution. It is therefore remarkable that dropout rates displayed a large improvement (less than 15 %) over the preceding treatment program (almost 50 %) and patient outcomes were actually not poor at all: symptom level and personality dysfunctioning decreased significantly with effect sizes ranging from medium to large [10]. Nevertheless, the beneficial effects of this new treatment should be weighed against the problems and costs associated with its implementation. These costs were considerable. First, patients and families experienced inconsistencies and unreliability, leaving many of them disillusioned. Second, staff had been confronted with much turmoil and crises, resulting in a high rate of illness absence during the first six months after the implementation. In the end, more than 75 % of staff members left the program as a direct or indirect consequence of the turbulence caused by the implementation problems. Third, the new program had caused some reputation damage to the institution and a considerable amount of budget had been reallocated from established programs to the new program. Finally, the crisis had created major operational risks within a relatively small organization.

Given these high costs, risks and burdens, it was considered very important to analyze the encountered problems thoroughly. During and after the efforts of regaining control at the ward, many meetings were organised and several reports were written in an effort to understand 'what went wrong'. From these efforts, it became clear that there was no 'magic bullet' which could be pinpointed as responsible for all encountered problems. In the next paragraph, we will discuss in more detail the several interacting factors leading to the implementation failure.

DISCUSSION OF PROBLEMS AT THREE LEVELS

As in many circumstances of medical failure, it became clear that the failure could only be understood from a complex of interacting problems at different levels. Heuristically, we choose to differentiate between factors at the organizational, team and therapist level that contributed to the failed implementation. This analysis is completed with a discussion of factors related to the specific choice of method (inpatient MBT for

adolescents). Finally, we discuss from a mentalizing perspective how all these levels have interacted to create a cascade-effect leading to the major problems as mentioned before.

Organizational factors

The following organizational factors have contributed to the implementation problems: organizational structures, institutional culture and support, lack of structures to support change management, and staffing, logistics, and budget planning.

Organizational structures

First, as in many institutions, the organization was divided in an adult and youth ward. Both were organizationally separated and managed by different managers. Expertise on the treatment of BPD with MBT was available in the adult ward and through these organizational barriers less easily accessible in the youth ward. Second, the organization had recently gone through a reorganization: management responsibilities were decentralized toward lower hierarchical levels in the organization. As a consequence, most of the managerial setup of the new program was assigned to psychotherapists, lacking relevant managerial experience and expertise. As such, the reorganization contributed to an insufficiently prepared project.

Institutional culture and support

The organization was in transition from a traditional therapeutic community with relatively little interest in research and evidence based thinking towards a modern, science-oriented organization, resembling the processes described by Chiesa and Healy [16]. At the time of implementation, this transition was still accompanied by growing pain, expressing itself most tangibly in heated discussions about the future role of various traditions such as the centrality of 'milieu therapy' as one of the cornerstones of the institution. New programs like MBT and new patient groups like adolescents with severe externalizing problems did not fit in the institution's traditional treatment philosophy. As the new program was considered to represent the reform within the context of ongoing debate, the new program lacked support from several key persons within the institution and as a consequence was cut off from input of experienced therapists in the organization. Moreover, any discussion or critical remark concerning the new program seemed to reflect this fundamental debate and therefore failed to be included in the implementation process in a constructive way. As a result, the program lacked broad support within the institution, leading to an accumulation

of critical remarks after the problems arose. Boundary crossings by the adolescents were interpreted as a justification of this opinion. The team became isolated within the institution.

Lack of structures to support change management

The existing program at the ward had been more or less unchanged for more than 40 years. Several staff members worked for more than 20 years at the ward and were strongly attached to the old program. The existing program was rooted in a Therapeutic Community tradition which had been for decades the core landmark of the institution. The amount and degree of change for all involved parties implied by treating a different population with a different method demanding a different team culture had been largely underestimated. No specific structures to support these changes had been established. As a result, many implementation issues had to be dealt with while already running the program and problems had to be solved 'on the spot'. Further on, potential risks and pitfalls involved in these major changes had not been sufficiently identified at forehand, based upon an analysis of the existing situation and the desired changes.

Staffing, logistics and budget planning

Due to a lack of experience and a hasty and premature start of the new program, the implementation plan showed major shortcomings. Among the shortcomings were: insufficient staffing due to two vacant positions, insufficient logistics and facilities as the building had to serve two different programs instead of one unified program, a selection of staff members with insufficient competencies to deal with the complex needs of the new group of patients, and insufficient budget planning and evaluation. The new program not only required budget for training and supervision, but also an increase in personnel, and a financial buffer for unexpected expenses. Once the problems arose and absent staff had to be replaced in order to be able to continue the program, financial expenses exceeded the planned budget, raising even more the organizational pressure on staff.

Team factors

The following team factors have contributed to the implementation problems: team problems prior to the implementation, resistance toward change, lack of clear leadership, communication difficulties, and lack of clear supervisory structures.

Team problems prior to the implementation

A major reason for changing treatment methods was the experienced shortcomings of the existing model to deal with the new population of crisis-sensitive adolescents. In the absence of a clear method, this had lead to differences in opinions within the old team about how to deal with crisis. Thus, even before the new program started, there was an imminent split in the team, mainly between psychotherapists and nurses. This split was partly due to the nature of the patients in treatment, and their tendency to split their projections on staff members. The psychotherapists were often idealized by the patients, whereas the psychosocial nurses (whom were ´ available´ 24 hours a day) frequently had to deal with the negative projections partially due to their pedagogical role. This strengthened the wish to quickly implement the new program as a possible solution for these differences in opinions. However, as the split wasn't well enough understood, it re-emerged quickly when the arousal increased at the ward due to all unexpected difficulties with the implementation. Old team dynamics kept influencing the new way of working.

Resistance toward change

The new program required changes within the team at different levels. The traditional therapeutic community was characterized by much democracy without a clear demarcation of leadership. The new model required a new hierarchical order with psychotherapists being in lead as the primary clinicians. Further on, the members of the new and old team were identical. Many therapists found it hard to give up their ´old´ theoretical model and routine way of treatment. Despite huge efforts to use the new concepts and philosophy, a subtle mixture of old and new ways of thinking and handling was inevitable, leading to minor and larger inconsistencies in applying the MBT model. With the increase of stress at the ward came an increase in inconsistencies in treatment and an increase in patient (and staff) crisis.

Lack of clear leadership

Partly due to the old 'democratic' culture of the prior therapeutic community, the team lacked clear and broadly supported leadership in this moment of change. This meant that the team was not only experimenting with a new therapy, but at the same time experimenting with its own management.

Communication problems

The team was large and it turned out - due to the (typically part time) working schedules - to be impossible for the whole team to attend intervision-supervision on a regular basis. These factors made it difficult to communicate relevant patient information well

enough between the team members, Relevant patient information got 'lost' between shifts, leading to increasing arousal among patients whom felt 'forgotten' by the staff. More-over, the inability to attend intervision also partially denied staff members the emotional support and learning opportunity in talking over the difficult cases and problematic situations encountered.

Lack of clear supervisory structures

Supervision and training were offered, but due to the organizational barriers, from a distance. More generally, the treatment manual was experienced as too abstract, and the team lacked an experienced supervisor who could help translate theory into practice, guide and monitor interventions and help manage team processes from a mentalizing perspective. What was lacking, was supervision 'on the spot', highly needed given the lack of experience in the team and the challenging population.

Therapist factors

The following therapist factors have contributed to the implementation problems: personnel selection, and lack of experience with the model.

Personnel selection

The old team – selected and trained for the purpose of treating a different population of adolescents – was re-educated in the new model. There had been no explicit selection of personnel based upon their abilities to treat a more severe BPD-population, using a different method, focussing strongly on affective and relational issues. Soon after the start, some personnel felt less comfortable with the new demands that were put upon them by the new program.

Lack of experience with the model

None of the therapists had previous experience with the new model. Although therapists were trained in the model, had read the books and manual, and received classic supervision by experienced trainers, they still felt insufficiently prepared to apply their new knowledge and skills to deal with everyday changing situations. Therapists from all disciplines experienced a lack of concrete supportive protocols to deal with frequent clinical problems like youngsters being absent from therapy or school, engaging in or threatening with self-injurious behaviour, staying in bed, insulting and provoking team members or peers, or refusing to obey general rules of the unit. This lead among several therapists to increased uncertainty about how to apply the model on a daily basis. Especially when problems increased, the team morale dropped as did the belief in the usefulness of the model to face the challenges met in their work with these patients.

This further hindered the use of this new theoretical framework in a consistent way from the start, and to use the mentalizing method as a new cornerstone for team functioning and interactions.

Factors related to the choice of inpatient MBT for adolescents as the new model

Finally, implementation problems could in part also been explained by the specific choice of model and setting. Three issues contributing to the problems at this level are the choice for MBT, the choice for an inpatient setting, and the necessary adaptations for adolescents. All three added to the complexity of the innovation.

MBT

Compared to the existing program, the MBT-model required a totally different sort of stance and range of interventions, requiring different skills from therapists. MBT emphasizes the development of an attachment relationship with patients, staying mentally close even in times of crisis and adopt a not-knowing stance. It requires a level of transparency from therapists unlike other models and aims at focussing on affective issues within the therapist-patient relationship. All these core characteristics of MBT required to some degree different personality characteristics from staff members.

Inpatient setting

The amount and intensity of contact among patients within an inpatient setting is much greater than in an outpatient setting, leading to (hyper)activation of the attachment system and correspondingly higher levels of stress at the ward [17]. Also, within an inpatient setting, the team size is larger, making it more difficult to offer a coherent and consistent approach, which in turn added to a lack of consistency in communication and thus 'unreliability' in the communication as experienced by the youngsters. Acting out increased under such circumstances, having a large emotional impact on nurses because they often had to deal with boundary crossings or parasuicidal actions.

Adolescent population

MBT had originally been developed for adult BPD patients. Therefore, it required adaptation to meet the specific needs of adolescents. For example, pedagocial limit setting turned out to be an important issue which was insufficiently covered by the manual and trained in the classic training. Further on, some characteristics of adolescents seemed to make (especially) group therapy more complex. Their decreased capacity to mentalize contributed to their difficulties to differentiate from peers, leading to high

levels of arousal within group therapy and strong loyalty towards each other. This sometimes led them to cover up each other's boundary crossings and to try managing each other's complex problems without discussing them with adult staff members.

In sum, we believe an important contributing factor to the implementation problems, was the amount of innovation involved. Treating adolescents for their underlying personality pathology was new at that time; adapting MBT to an inpatient setting was new as was treating adolescents with MBT. There was a lack of (published) experiences on the 'shoulds' and 'shouldn'ts' in adapting MBT to an inpatient adolescent BPD population. The high level of innovation in itself created major challenges that should have been addressed more extensively prior to the start in the implementation plan.

A cascade of negative interactions from a mentalizing point of view

It should be clear that all these factors interacted to create a snowballing effect, leading to increasing levels of arousal at the ward and demoralization and anxiety among staff. The huge amount of changes implied by the new program combined with the lack of experience with the new model and the insufficient guided implementation increased feelings of uncertainty and incompetence among staff. In a team that was lacking clear leadership and clear supervisory structures, this lead to inconsistencies in the approach of youngsters. Especially staff members whom felt less comfortable with the new demands from the model, felt uncertain and insecure in an unstable and already conflicted team. Their mentalizing abilities reduced, leaving them more vulnerable to act out towards youngsters, like withdrawing from contact. In turn, the experienced unreliability increased anxiety, activated the attachment system, reduced mentalizing capacity and increased acting out among youngsters (whom are already vulnerable to lose their mentalizing abilities due to developmental changes and their peer bonding in an inpatient setting), often using the more uncertain staff members to project their anxieties and anger upon. Again, this further reduced the mentalizing abilities of these staff members, further increased by the lacking competencies of the team to adopt a mentalizing stance towards team interactions, leading to insufficient support for staff members under stress. In turn, these processes increased splitting within the team, making it even more difficult to maintain a mentalizing stance towards each other. The resulting splitting further contributed to inconsistencies in the approach of youngsters, which again further increased their arousal. Under the influence of the arising problems, previous scepticism from the broader context turned into severe criticism, leading to a defensive withdrawal of the team. The relation between the team and the rest of the organisation got infected by increasing mutual distrust and resulting

problematic communication. This not only denied the team from further emotional and supervisory support but also hindered regaining a mentalizing perspective on team functioning. This contributed to the split within the team, the lack of experienced emotional support and the increasing stress. As a result, a cascade of negative interactions and effects finally lead to exhaustion and complete demoralization of several team members.

Solving the implementation problems

As has been described earlier, the implementation crisis warranted immediate action from board of management of de Viersprong, including a temporary patient stop, the addition of specific MBT expertise to the program, and the recruitment of new personnel. These interventions helped to regain basic control, diminish the turbulence, and improve the quality of the program. However, our extensive analysis of the implementation problems inevitably led to a radical reorganisation of the program in line with the resulting conclusions of this analysis. This reorganisation has been designed along the following lines:

1. *Reducing the complexity of the program.* A major contributing factor turned out to be the high level of innovation, complexity and intensity implied in treating BPD adolescents with MBT for longer periods of time in an inpatient setting. Therefore the inpatient setting was replaced by an outpatient setting. It was assumed that this would reduce the burden of staff members, increasing their ability to maintain a mentalizing stance, individually and as a team. The format of the intensive outpatient version of MBT for adults was used, as has been described in detail and studied by Bateman and Fonagy [18]. Thereby, the program was based upon an 'evidence based format' and improved opportunities to work in smaller teams and enhance consistency. Furthermore, the age range was restricted from 14–18 to 16–18 years. It was assumed that less developmental heterogeneity would also reduce complexity.

2. *Embedding the new program within existing expertise*. As has been described, the lack of organizational embedding led to missed opportunities to use existing expertise from within the institution. Therefore, the new program was organizationally embedded within a newly formed MBT unit that integrated the formerly existing adolescent and adult MBT programs. This enabled us to integrate MBT and adolescent expertise in the organization.

3. *Designing a new implementation plan for the new program*. In contrast to the cumbersome start of the first version of the adolescent MBT program, the new version was started 'de novo'. An implementation plan was designed addressing the various issues mentioned before in this article, including referral process, personnel recruitment, logistics, facilities, and so on. The implementation plan was discussed at all organizational levels, ensuring enough support within the institution.

4. *Embedding the program within the development of a quality system*. One of the major issues was the lack of familiarity with the model on a daily base and the associated difficulties to maintain a reflective, mentalizing stance within the team interactions. This led to reduced therapist adherence to the model and increased interfering team processes. To increase adherence to the working mechanisms of the model and to decrease potentially damaging processes, a quality monitoring system is now being developed. For example, each treatment program has a supervisor who is not a therapist working in that team. The supervisor is an experienced MBT therapist needing several skills: he of she has to be able to measure and reflect on MBT interventions and adherence, to enhance therapist's mentalizing stance, and to signal and manage destructive team processes like unnoticed or unrevealed splits.

5. *Developing an organizational manual*. The organizational manual is a manual on management and service organization in which the managerial aspects of designing and maintaining a MBT service are described. Management focus is on organizing and facilitating the clinical processes as written up in the treatment guide and monitored within the quality system and is thus an important part of the quality system.

The program now runs in this new format. The implementation has been remarkably smoother. Results are being monitored. Although we do not have research-based results yet, the first clinical impressions support the effectiveness of the program in line with our previous findings of the old MBT program for adolescents.

CONCLUSION

In this paper, we have argued that the escalating implementation problems in this case study could best be understood from the interaction of three levels of application: organization, team and therapist. At an organizational level, the organizational barriers and recent reorganisation, lack of support within the institution due to the institutional culture, lack of structures to support change management and the shortcomings in the

implementation plan, were considered to be the dominant problem factors. At team level, the team problems prior to implementation, the resistance toward change, lack of clear leadership, communication problems and lack of supervisory structures were important determinants. At therapist level, the lack of selection of personnel and the lack of experience with the new model contributed to the implementation problems. These problems were further magnified due to the level of innovation implied in adapting MBT for an inpatient adolescent population. Together, these factors led to increasing impotence and frustration in staff, interacting with increasing levels of arousal and distrust in the patient group related to experienced unreliability. Increased patient turmoil, staff exhaustion and safety risks for patients, staff and the institution ended up resulting in ending the inpatient treatment program.

In our view, the analysis of this case study might have implications for the conceptualization of treatment integrity to explain successful implementation of evidencebased programs. In psychotherapy outcome research, treatment integrity refers to the extent to which the intervention was implemented as intended [19]. It usually includes three determining components: treatment adherence, therapist competence and treatment differentiation [20]. Adherence refers to the degree of utilization of specified procedures by the therapist. Competence refers to the level of skill and judgment shown by the therapist in delivering the treatment. Differentiation refers to whether treatments under investigation differ from each other along critical dimensions. In short, treatment integrity classically refers to 'good therapists', i.e. therapists having the skills (competence) to perform the procedures as prescribed by the treatment manual (adherence). Based on our analysis, we propose to extend the concept to include also adherence, competence and differentiation at the level of teams and organisations. Especially in cases of the implementation of complex, innovative interventions for highly challenging patient groups, the reduction of the concept of treatment integrity to therapist adherence and competence might severely underestimate the influence of organisational and team issues in acquiring treatment integrity for such complex programs. In order to encompass these aspects of treatment integrity, we propose a 3x3 model, including three components of treatment integrity (i.e. 1 adherence, 2 competence, 3 differentiation) at three levels of application (i.e., 1 organisational (macro) level, 2 team (meso) level, and 3 therapist (micro) level). Examples of these components of treatment integrity, applied to the model of MentalizationBased Treatment, are provided in Table 1.

Table 1. Multilevel model of treatment integrity including three components of treatment integrity at three levels of application.

Component of treatment integrity Level of application	Adherence	Competence	Differentiation
Therapist-micro level	E.g. Not knowing, mentalizing therapeutic stance , main focus is on enhancing mentalizing within the context of attachment relationship, continuously adapting interventions according to mentalizing capacities of the patient, . . .	E.g. Motivated, professional attitude, feeling responsible, flexible, creative, open minded; being able to deal with crises, in situations under high arousal being able to keep mentalizing stance; team player, being reflective in contact with colleagues about their own mental states,. . .	E.g. avoiding focus on behavioural expressions and skills; avoid classic use of transference to promote personality change; no use of suicide contracts,. . .
Team-meso level	E.g. Continuous efforts to deliver a consistent and coherent treatment and to provide continuity within the treatment; stimulating mentalizing stance within team interactions to help in keeping a mentalizing environment,. . .	E.g. creating a large enough team to provide consistency and continuity even during holidays or sick leave of team members; well-balanced team with clear roles; at least one team, member should have authority and personality to create and maintain holding environment for the team; organizing a supervisory structure to increase MBT knowledge and competence of all team members and to ensure adequate managing of team processes.	E.g. intervision, supervision, group reflection and consultation, all stimulating mentalizing and aimed at enhancing adherence and competence
Organization-macro level	E.g. commitment to fully implement MBT; creating support within the whole organization for the new program; maintaining regular contact with important stakeholders; designing a detailed implementation plan„. . .	E.g. sufficient budget to be able to implement the program; capacity of management to remain calm even if crises occur at patient level	E.g. implementation of a quality assurance system, including continuous monitoring feedback

Adherence refers to the degree to which processes and the procedures that help to optimize the working mechanisms of the model are utilized, i.e. (in case of MBT) what should therapists, teams and organisations do to enhance mentalizing among patients? At therapist level, adherence refers to the basic attitude and interventions that are described in the treatment manual. For example, referring to MBT, therapist adherence refers to the interventions described to enhance mentalizing in patients from a 'not-knowing' mentalizing stance. At team level, adherence refers to necessary team processes enabling the working of the model. For example, MBT requires coherence, consistency and continuity in team work. Inconsistencies (and possible splitting) in team functioning will cause confusion, destabilization, and subsequently an increase in crisis and other destructive behaviour. A consistent approach on the other hand creates reliability and safeness, while continuity helps to reconnect the fragmented experiential world of BPD patients. At organisational level, adherence refers to the managerial and organisational procedures that ensure the necessary conditions to implement and maintain the treatment program successfully. For example, to implement MBT, it is necessary that the organisation creates support for the new program within the own institution as the new, 'difficult', patients might

interfere with the working of other wards. Another example of organisational adherence is the designing of a sufficiently detailed implementation plan, in which the innovative character of the program needs to be thought and worked through.

Competence refers to the level of skill and judgement shown in the delivering of the treatment, i.e. what basic qualities and skills should therapists, teams and organization should have in order to be able to perform the procedures as outlined in the 'adherence' section. At therapist level, competence for MBT refers to the basic qualities of therapists to work with the most complex BPD patients, including their ability to keep a reflective, mentalizing stance under high pressure. At team level, competence in MBT refers to the qualities a team should have to be able to maintain a consistent approach. This includes a well balanced team with clear roles and leadership qualities among at least one team member. At organisational level, finally, competence refers to the organisational and managerial qualities necessary to provide the organisational conditions for delivering this particular treatment. An evident example is sufficient budget to run the new program as it is intended. Another example, related to the complexity of the MBT population, is the ability of (managerial) people in charge to stay calm and intervene constructively after major crisis among the patients (for example, after a suicide).

Differentiation refers to what makes this program 'unique'. As a concept, there is some overlap with the concept of adherence. At therapist level, differentiation refers to the interventions specific for this model and to the 'forbidden' (i.e. 'non-mentalizing') interventions. For example, in contrast to Dialectical Behaviour Therapy, MBT will focus much less on behavioural sequences and will instead focus on underlying mental states. At team level, differentiation should describe the specifics of the team functioning and communication within the particular model. For example, within MBT, communication among team members should be focused at helping each other to restore mentalizing. At organisation level, differentiation refers to the specific managerial issues and challenges for this model. For example, MBT might in the future encourage organisations to implement a quality control system, which requires organisational embedding and funding different from other treatment models for BPD.

We do not suggest this multilevel model of treatment integrity to be necessary to understand successes and failures in all treatment programs. However, the more complex a treatment model and the more complex the patient population, the more relevant it might be to use this more extended heuristic model of treatment integrity to have an overview of all procedures and qualities that should be provided in order to implement and maintain the treatment program successfully. For example,

team adherence becomes a relevant issue when the treatment model requires an integrated (multidisciplinary) team to deliver a consistent treatment. Organisational adherence will be especially relevant when the new program is highly innovative for the organisation where it will be run. If this analysis is correct, this might also imply that the broadening of the concept of treatment integrity could have important implications for developers of complex treatment models. For example, a treatment manual might be a necessary, but insufficient tool to promote adherence in cases of complex (psychotherapeutic) interventions. Developers should also describe how the model should be implemented successfully at local settings within existing teams and existing organisations. This proposal is consistent to the approach taken by the developers of Multisystemic Therapy (MST) [21], who have described the prganisational embedding in a separate managerial manual. We believe their approach could be inspirational for developers of other treatment models as well.

Endnotes

The WMO (Law Medical scientific research with human beings in the Netherlands) does not cover retrospective case studies like the one described in this report. The report does not describe a medical scientific experiment nor does it report on any additional action by patients in order to collect the data for this study. As a consequence no written informed consent was collected from the patients involved in the treatment described.

As our aim is not the discussion of a treatment program for adolescents, but the illustration of a failed implementation, we limit ourselves for this purpose to this short description.

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Chapter 7

Barriers and facilitators to the implementation of mentalization-based treatment (MBT) for borderline personality disorder

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ABSTRACT

There are several evidence-based treatments for borderline personality disorder, but very little is known about the success or failure of implementation in daily practice. This study aims to investigate the success or failure of newly started mentalization-based treatment programs, and to explore the barriers and facilitators. The implementation trajectories of seven different mentalization-based treatment programs in six mental health clinics in the Netherlands were included in a multiple case study combining a qualitative and quantitative design. Semistructured interview data were collected from several stakeholders of each program. Narrative reconstructions of each interview were assessed by 12 independent experts. Results showed that several programs struggled to implement their program successfully, leading to discontinuation in three programs. According to the experts, particularly elements at the organizational level (i.e. organizational support) and team level (i.e. leadership) contributed to implementation outcome. These findings have important implications for the translation of guidelines and research findings in daily practice.

INTRODUCTION

According to several international guidelines and review studies, evidence-based psychotherapy programs, such as dialectical behavior therapy (DBT), mentalization-based treatment (MBT) or schema-focused therapy (SFT), are considered to be the treatment of choice for adults with borderline personality disorder (BPD).[1–3] Randomized controlled trials (RCTs) generally yield large effect sizes for these treatments on several outcome parameters, including borderline and other psychiatric symptoms and social functioning (e.g.[4–6]). However, RCTs are designed to maximize efficacy through, forinstance, extensive organizational support, involvement of developers of the program, monitoring of treatment fidelity and sufficient budget for training and supervision. As we have argued before, such conditions are rarely met in regular clinical practice.[7] Programs are almost never implemented in exactly the same format or structure as in experimental studies, therapists are rarely selected for the specific program, and ongoing model supervision and fidelity checks are rarely provided beyond the initial training. Given these differences, the large effect sizes as obtained in RCTs cannot be readily generalized to the programs implemented in real-life practice. An important question is therefore under what conditions these large effects can be obtained in daily practice.

A recent study suggests that organizational (in) stability has a profound impact on treatment outcome in a MBT program for BPD patients.[8] We found that initially large treatment effect sizes diminished spectacularly in periods of major organizational changes for the same patient population in the same unit. Findings of this historical or retrospective cohort study are potentially interesting: whereas it demonstrates large effects under non-experimental conditions, it also demonstrates the difficulties in maintaining the quality and treatment outcomes in a changing organizational context. Outcomes dropped significantly in periods of expansion of the unit, organizational and managerial instability, and high personnel turnover.

Given the high prevalence of BPD in mental health care, and its high individual, societal and economic burden of disease,[9,10] it is remarkable how little attention the field of BPD has devoted to the implementation of evidence-based psychotherapy in clinical practice. Our own interest in this topic was initially raised following the difficulties we met when implementing a new treatment program for adolescents with BPD.[11] Due to many problems, the program was discontinued temporarily. The organization suffered from high financial losses and personnel turnover, and patient outcomes were less beneficial. In a reconstruction of the elements contributing to these problems, we concluded that only a complex interaction of elements at an organizational, team

and therapist level could sufficiently account for the negative outcomes. We proposed a new model of treatment integrity, arguing that the concept of treatment integrity might usefully be extended to include aspects of organizational and team functioning as well.[7]

Although interesting and challenging, the abovementioned findings are based on one single case study. Therefore, we cannot exclude the possibility of selection bias. The present study aims to explore the generalizability of our previous findings to other institutions and contexts. More specifically, the research aim was twofold. First, we investigated success or failure of implementation of seven MBT programs in the Netherlands, including an exploration of important determinants influencing the (quality of) implementation and the course of the implementation trajectory (phase 1 of the study). Second, we explored the hypothesis that success or failure in the implementation of MBT involves multiple causes at organizational, team and therapist level, and we attempted to identify the crucial barriers and facilitators of implementation (phase 2 of the study).

METHODS

Design

A multiple case study design using a combined qualitative and quantitative research design. A sequential exploratory strategy was chosen in which a qualitative study (phase 1) is followed by a (partial) quantitative study (phase 2). Both methods are integrated in the interpretation phase.[12] In the qualitative study, phase 1, we started with an exploratory ('content-driven') approach, creating the possibility of generating new categories, and completed with a more confirmatory ('hypothesis-driven') approach.

Phase 1

Participants: Participants included were departments of mental health-care institutions in the Netherlands that intended to implement the full MBT Partial Hospitalization or Intensive Outpatient program in the same format as studied in the RCTs[4,5,13,14] and that restricted these programs exclusively for BPD patients. Based upon these criteria, seven departments from six different mental health centres were requested to participate in the study. All centres agreed.

Procedure: The first author approached the management of the department, explained the research focus and design and asked for participation. Subsequently, two employees from each participating department were interviewed, i.e. the manager

formally responsible for the department, and the principal therapist of the MBT team. The research purposes were explained, and informed consent was asked from each respondent. Both respondents were interviewed separately in order to obtain relevant and reliable information from different perspectives ('topdown' and 'bottom-up'). All interviews were conducted by the first author, and the interview procedure was observed and checked by co-first author.

Instrument: A semi-structured in-depth interview format was developed for the purpose of this research with a double focus. The interview consistently started with open-ended exploratory questions. First, respondents were asked whether the implementation of MBT was successful or not. Second, respondents were asked to reflect upon the implementation phase—expanding over the first two years—and to identify important factors influencing outcome ('In your opinion, what elements contributed to the (positive and/or negative) outcomes of the implementation of the program at your unit?'). The topics the respondents raised were explored in more detail. After having explored the spontaneously produced information in detail, respondents were more specifically asked (from our hypothesis-driven approach) to comment upon organizational, team and therapist issues, which might have contributed to the outcome of the implementation (e.g. 'In your opinion, to what degree was there sufficient support for this program within your institution and can you comment upon that?' or 'In your opinion, to what degree were team members competent enough to apply the MBT model?'). The interview format can be requested from the authors.

Analyses: To develop a narrative reconstruction of the implementation trajectory, the transcripts were analysed systematically:

1. All interviews were audio-taped and transcripted.
2. Each transcript was coded to organize the (fragmented) texts.
3. The researchers analysed the implementation trajectory of each department (combining the coded texts of the two interviews per department) and developed a narrative reconstruction with an integrated understanding of the interaction between several contributing elements influencing the implementation trajectory.
4. A quality assurance procedure (member's check) was used. Reconstructions were returned to both respondents separately to check on the accuracy of our interpretation and integrated description of their implementation trajectory. Feedback and additional information were iteratively processed until a version was obtained that both respondents agreed on as reflecting a joint understanding of the implementation trajectory in their department. All respondents consented to the final versions for further study.

Phase 1 resulted in seven narrative reconstructions—one for each department—detailing the relevant determinants of the implementation trajectory in a narrative and interactional way.

Phase 2

Participants: Twenty expert reviewers, selected based on their extensive experience in two areas (i.e. the treatment of BPD patients and/or management of BPD treatment programs not restricted to MBT), were approached to participate in this study. Twelve of those expert reviewers agreed to participate and returned a completed review questionnaire.

Procedure: The seven narrative reconstructions (phase 1) were masked for review, the identity of the organizations being concealed to assure confidentiality of delicate 'organizational' information and to enhance objectivity of the reviewers. The masked reconstructions were sent to the panel of 20 expert reviewers. They were asked to review the seven blind narrative reconstructions by filling in a questionnaire. This procedure took an average of 1.5 h to complete.

Review questionnaire: A questionnaire was developed to review the reconstructions. In this questionnaire, participants were asked to (1) to assess whether the success or failure of the implementation of each MBT case involved multiple barriers and/or facilitators at organizational, team and therapist level; (2) to rate the relative significance of each level; (3) to identify returning determinants of success or failure; (4) to list the determinants according to their importance as judged by the rater; and (5) to add relevant determinants according to their own judgment of the cases and own experience.

Analyses: Average scores were calculated.

RESULTS

Phase 1

A summary of the outcomes and determinants of each case is reported in Table 1. Short summaries of each narrative reconstruction are included in Appendix 1. The full narrative reconstructions can be requested from the one of the first authors. Table 1 shows that implementation was clearly successful in two programs (29%), outcomes were mixed in the two programs (29%) and implementation failed in three programs (43%), resulting in discontinuation of those programs.

Table 1: Summary of outcome and determinants of each case

Unit	Program	Outcome of implementation	Determinants
A	PH (2 groups)	Negative outcome: program stopped, high expenses, high burden for personnel, high turnover of personnel	· Organizational split between 'care' and 'cure' treatment programs · Lack of support within the organization · Upsetting discussions within the unit and overt fights concerning leadership · Lack of role differentiation · Nurses felt incompetent · Splits between management and team
B	lower dosage PH (3 days, 1 group) and IOP (1 group)	Positive: for PH (lower dosage) and IOP: low drop- out rate, gradually more severe BPD patients, acceptable burden among team members	· Clear institutional support, involvement of all experts from the organization · Active leadership · Strong team, complementary personalities · Sufficient budget for training · Gradual development towards better adherence and engagement of more severe BPD patients
C	PH (2 groups)	Negative outcome: program stopped, high absence through illness, high turnover, financial loss	· Top-down implementation · Lack of support in (existing) team · High levels of conflict before the start · Differences in training and motivation between groups and within groups · Unit split between 'team on model' and 'team off model' · Team split between disciplines · Reorganization, leading to a change in support by key managerial persons · Split between management and team / hostility
D	PH (2 groups)	Negative: program has stopped at time of writing; high turnover of personnel, dissatisfaction of patients, financial loss	· Choice of new program by select group and top-down implementation · Split between management and team · Isolation of the team within the institution · Problems with insufficient patient inclusion · Recruitment personnel not based upon competences and interest/motivation · Split within team
E	PH (2 groups) and IOP (1 group)	Mixed: PH groups are still running, but there are still financial losses; IOP group never started	· Broad support within organization; MBT in line with mission of institution · RCT provided support to continue program · Direct involvement of first line of management · Program insufficiently embedded within institution, leading to lack of referrals · Strong co-leadership

Table 1: (continued)

Unit	Program	Outcome of implementation	Determinants
F	PH (2 groups)	Positive: quick expansion of the unit; mission to include 'difficult' patients was accomplished; few incidents and drop outs; good outcome results	· Strong support from higher management, at the start and during the whole period · MBT fulfilled mission of institution to involve new and difficult patients · Partial lack of support, but unit was physically isolated · Strong leadership · Small and cohesive team · Personnel recruited based upon capacities and motivation
G	PH (2 groups) and IOP (2 groups)	Positive for IOP Mixed for PH: high burden among team members, high level of drop out, many crisis-like incidents, formal complaints	· Hurried implementation, no implementation plan · Temporary splits between management and trainers; role confusion · Lack of protocols for dealing with crisis · Difficulties within the team to keep reflective stance · Diverting from the model by team · Lack of experience

PH=Partial hospitalization, IOP=Intensive outpatient

Table 2: Success and/or failure of implementation:(Relative) contribution of organizational, team and therapist factors as judged by experts on a 0-5 Likert rating scale (average score and range)

	Case A	Case B	Case C	Case D	Case E	Case F	Case G	Aver-age
Success or failure (phase 1)	Failure	Success	Failure	Failure	Mixed	Mixed	Success	
Success of implementation depends on a combination of factors at organization, team and therapist level	4.8 (4-5)	4.4 (4-5)	4.8 (4-5)	4.6 (3-5)	4.2 (3-5)	4.4 (3-5)	4.1 (3-5)	4.49
Organizational factors have contributed to success/ failure	4.8 (4-5)	3.8 (3-5)	4.1 (3-5)	4.1 (3-5)	3.9 (3-5)	4.4 (3-5)	3.6 (2-5)	4.1
Team factors have contributed to success/ failure	3.9 (3-5)	4,5 (4-5)	4.4 (3-5)	3.8 (3-5)	4.9 (4-5)	4.0 (3-5)	3.8 (3-5)	4.2
Therapist factors have contributed to success/ failure	2.4 (1-4)	3.8 (3-4)	3.3 (3-4)	3.1 (2-4)	3.8 (3-4)	3.9 (3-4)	3.8 (3-4)	3.4

1. Strongly disagree; 2. Disagree; 3; Neither agree nor disagree; 4: Agree; 5: Strongly agree

Phase 2

The second part of the research tested the hypothesis that success or failure in the implementation of MBT involves multiple causes at organizational, team and therapist level and explored the crucial barriers and facilitators of implementation.

1. Multiple causes at organizational, team and therapist level

Table 2 provides the average ratings of expert's judgment of the correctness of the statement 'Success of implementation depends on a combined action of factors at organization, team and therapist level', according to a 6-point likert scale, ranging from 0 (statement is clearly contradicted in this case) to 5 (statement is completely confirmed in this case). Results clearly suggest that experts support the statement as being applicable to all the cases, with scores—depending on the particular cases—ranging between 4.1 and 4.8.

2. Relative contribution of organizational, team and therapist factors

Table 2 provides ratings of experts of the relative contribution of organizational, team and therapist factors to the perceived implementation success or failure. Although all factors contributed, therapist factors were rated somewhat less important (3.4) as compared to organizational (4.1) and team factors (4.2).

3. Identification of crucial barriers and facilitators

Experts were asked to identify recurring patterns of critical barriers and facilitators of success/failure throughout the narrative reconstructions. In order of importance (as determined by the number of times each determinant was mentioned by an expert), experts referred to (1) support within the organization (n = 8); (2) leadership (n = 7); (3) selection of therapist (n = 7); (4) training (n = 5); (5) highly structured project-based implementation (n = 5); (6) availability of methodical expertise (n = 3); (7) budget (n = 3); and (8) team size (n = 2). All other determinants were mentioned only once.

4. Identification of additional barriers and facilitators

Finally, experts were asked to identify additional barriers and facilitators of success/failure. The following aspects were mentioned (none of them more than once): severity of patient population, phasing the implementation, changing an existing team vs. starting with a new team, extra incentives (like an RCT), charismatic leadership, ability to manage destructive team processes and ability to keep up team morale.

DISCUSSION

Summary of results

This multiple case study is to our knowledge the first attempt to understand some of the determinants of success or failure in the implementation of evidence-based treatment programs for BPD. Our results testify of the complex nature of implementing evidence-based psychotherapy programs in regular mental health centre institutions. In summary, our findings indicate that the implementation of evidence-based MBT programs in the Netherlands is associated with mixed outcomes at best. Implementation was clearly successful in two programs (29%), outcomes were mixed in the two programs (29%) and implementation failed in three programs (43%), resulting in discontinuation of those programs. Furthermore, our findings suggest that in all cases the course of implementation was influenced by multiple elements at organizational, team and therapist level. Although each implementation trajectory constitutes its own story, involving local issues and specific team cultures, our results yield suggestive evidence for some more generic barriers and facilitators across all implementation trajectories. Facilitators include the presence of organizational support, sound financial management, strong and consistent leadership, highly structured projectbased implementation, managing (negative) team processes, therapist selection, sufficient expertise and training opportunities, whereas the absence of these elements is a barrier to implementation.

Strengths and limitations

The current study has various strengths and limitations worth mentioning. First, our study fits well in with a growing recognition of the critical role of implementation science in health services research.[15,16] In mental health care, previous studies have generally focused on the dissemination of evidence-based treatments (i.e. key factors in spreading information so that organizations and clinicians can adopt them) and initial implementation factors such as training and supervision. During implementation, it is important to monitor progress for unanticipated influences (i.e. barriers and/or facilitators) and progress toward implementation goals.[17] To the best of our knowledge, this study is one of very few in the *mental* health field exploring potential barriers and facilitators *during* implementation at multiple levels. Further, we would like to point to the innovative study design, and the careful and rigorous strategy of data collection and exploration. However, various limitations might hamper the interpretation of results. First, as this study is limited to MBT, it is unknown to what degree our findings can be generalized to other evidence-based psychotherapy programs for BPD patients. This limitation is somewhat mitigated by the fact that several of our expert reviewers, who

originated from various different theoretical backgrounds, explicitly mentioned that they recognized the described problems from their own practices. Second, narrative reconstructions were based upon interviews with two involved professionals of the program (manager and therapist), thereby excluding information obtained from each team member, patient experiences and outcome data. In theory, the apparent success or failure of an implementation might be evaluated differently through the eyes of the patients or other therapists. This limitation is somewhat mitigated by the fact that all three programs that were rated as clear failures were ultimately discontinued; these discontinuations can be considered indicators of external validity of the ratings. Third, we are aware that a qualitative approach bears the risk of confirming the researcher's hypotheses. We attempted to prevent this in three ways: (1) the interview schedule provided ample opportunities for respondents to come up with 'their own story' of the course of implementation (exploratory approach); (2) the integration of information of both respondents in a narrative reconstruction was double checked through both respondents to assure it was a reconstruction of their story; and (3) we asked independent experts to interpret the reconstructions and draw conclusions regarding confirmation or disconfirmation of our hypotheses. Finally, the partially hypothesis driven focused on the levels of organizational, team and therapist factors possibly limited the more robust emergence of the fourth category, the higher-order level contextual factors. The awareness of and attention to this higher-order system level (e.g. federal, state and local policies, insurance companies policies, mental health-care infrastructure and funding system, national income and public sector expenditure) is becoming increasingly important, as outlined for instance in the Mental Health Systems Ecological model.[18] As this study was conducted in the Netherlands only, which is generally considered a well-resourced country in the management of PD, we were not able to investigate potential determinants of implementation success and failure at the system level. We should, however, keep in mind that the relative importance of factors at the organizational, team and therapist level might be different in other contexts, for example in lower income countries with poor mental health-care infrastructure and funding.

Scope of implications

This study focused exclusively on the implementation of MBT programs in BPD patients. Some aspects might be applicable to other evidence-based psychotherapies for BPD as well, whereas other aspects might be unique to MBT. Similarly, some aspects might be unique to BPD, whereas other aspects are applicable for other mental disorders as well. Regarding the applicability to other psychotherapies for BPD, it is noteworthy that many experts explicitly recognized these implementation issues from their own experiences in different settings using different therapy methods. However, MBT originally was

designed for very severe BPD patients. In all but one of our cases, the program intended to include the most severe BPD patients. In most of the participating treatment centres, these patients had been excluded from other psychotherapy programs before starting MBT. Working with these very severe BPD patients undoubtedly affected the burden for personnel,the amount of crisis and the general level of arousal in teams providing treatment for these patients. Thus, other psychotherapies might seem easier to implement to the extent that they include a less severe BPD group. Furthermore, we observed that the partial hospitalization MBT programs were associated with more implementation problems than the intensive outpatient MBT programs. The partial hospitalization setting is characterized by a high treatment dosage in terms of contact frequency and intensity. Other evidence-based treatment programs, such as schema-focused therapy and DBT, have mostly been provided in lower dosages, comparable to the dosage of intensive outpatient MBT. Our experience is that a higher treatment dosage not only requires more organizational facilities but is also related to higher levels of arousal in team and patient groups. An interesting hypothesis for future studies would be that characteristics of the treatment format are more important than specific theoretical orientation to account for success vs. failure of implementation.

Regarding the applicability to other mental disorders, it is noteworthy that the treatment of BPD patients is widely considered to be especially challenging, given the emotional turbulence, high level of crisis and strong emotional appeal that characterizes patients with BPD. Due to the relatively challenging nature of BPD, (lack of) critical success factors in organizations, teams and therapists might have a greater impact upon treatment outcome than in other mental disorders. For example, Davidson and colleagues demonstrated that even within the same treatment program, competent therapists averted five times more suicide acts than less competent therapists.[19] We believe that existing issues in organizational, team and therapist functioning might be magnified due to the nature of BPD characteristics. In other patient samples, similar problems might remain less visible. However, also in the field of conduct disorders, it has been demonstrated that efforts to replicate the effects of Multisystemic Therapy (MST)[20] in Canada[21] and outside North America[22] were regularly associated with reduced effectiveness. Such findings have inspired the developers to implement a quality system, including licensure and quality assurance oversight by MST Services.[23] The overall aim of MST's quality assurance system is to provide treatment conditions similar to the research conditions of the RCT's that provided support for the intervention. A recent study comparing community agencies using the quality oversight by MST Services with agencies lacking such a quality monitoring provided evidence for reduced treatment results—in terms of the number of court charges—in the latter condition.[24] Interestingly, MST's Quality System pays a lot of attention to the organizational context of the MST treatment

program, much alike our own findings concerning the major role organizational issues play in success of implementation (this study) and treatment outcome.[8] This example of MST strongly suggests that the scope of our findings is not limited to BPD but, instead, does also apply to the treatment of other complex mental disorders such as conduct disorders.

Recommendations

Our findings touch upon an important issue that has been relatively left unexplored in the field of PD, namely the translation of scientific evidence into daily practice. A recent study revealed that only 23% of Dutch borderline patients received first choice treatment as recommended by the Dutch clinical guideline.[25] This finding is in line with Balas and Boren's[26] conclusion that it takes an average of 17 years to turn 14% of original research findings into beneficial change in clinical practice. The development of the first evidence-based treatments for BPD dates back to the nineties with the landmark studies of Linehan et al.[27] and Bateman and Fonagy.[4] Approximately 20 years later, the time has come to take our field one step further and develop strategies to close the gap between scientific findings and clinical practice. According to the current study, the critical issue is not so much 'what works for whom', but rather 'how to disseminate and implement science into practice?'

This study adds to growing awareness of and attention to key factors that should be taken into account when implementing psychological treatments for BPD. Based on an integration of our findings from this study and the implementation literature, the following factors can be considered important. At the organizational level, (1) highly structured project-based implementation; (2) full commitment of the board, including financial support; (3) proactive management collaborating with supervisor and team to provide a supportive working environment; (4) active collaboration with major referral centres to provide integrated disease management across echelons; (5) establishing clear pathways for referrals (including clearly defined inclusion and exclusion criteria) and rapid service access; (6) quality monitoring of treatment processes and outcomes; (7) clearly defined treatment program structure including treatment phasing; (8) facilitating sufficient time for treatment plan review, supervision and intervision; (9)recruiting professionals based on affinity with BPD and necessary skills and competencies; and (10) a team leader with the competencies to effectively build teams and to maintain a healthy and professional working environment. Important factors at the team/therapist level include (1) maintaining consistency and continuity within a coherent (MBT) framework enhancing focused, clear, consistently applied interventions by all team members; (2) willingness of team members to improve their skills and understanding

through reflection, training and supervision; (3) optimal team size consisting of five to nine therapists with an absolute maximum of 12; (4) team consisting of active, responsive, flexible and effective team players; (5) clearly defined roles and responsibilities and a culture in which team members help each other and address when responsibilities are not being met; (6) a program supervisor who monitors and supervises clinical process and team functioning; (7) unambiguous clinical leadership; each patient has an appointed primary clinician who is responsible for assessment, treatment planning and treatment coordination; (8) all therapists, including the psychiatrist, integrated in a one-team model; (9) a goal-focused and process-oriented treatment approach guided by a treatment plan and monitored and revised when necessary in treatment plan evaluations; and (10) crisis management protocol and a commitment protocol guiding consistent team intervention.

CONCLUSION

Despite its exploratory nature, this study provides strong evidence that implementation of evidence-based treatment programs for BPD can be cumbersome and depends on a whole range of factors. There are few reasons to believe that the problems described in six different mental health centres are limited to these specific centres or to the Netherlands alone. It is fair to state that underestimating the complexity of implementing treatment programs for BPD is not only costly from an economic perspective (given the waste of budgets for training and implementation) but also from a human perspective (given the high burden among patients and personnel). Our field is in high need for evidence-based models and strategies for dissemination, implementation and quality maintenance. We hope this study will inspire others to undertake relevant scientific and clinical work to that end.

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APPENDIX 1: SHORT SUMMARY'S OF CASE A– CASE G

Short summary of Case A

Unit 1 intended to develop two PH programs. Outcome of the implementation trajectory is negative according to both respondents: the program has been discontinued, the intended research never started, key team members have left the organization, there was a high absence through illness, the program was not profitable while running and the institution suffered huge financial losses (due to lost investment on implementation, training, supervision; due to excessive sick leave etc). At the time of starting up the program, the institution underwent a major reorganization which led to territorial fights concerning the allocation of the severe BPD patients between the 'cure' and 'care' part of the organization. There was a major split in the organization that could not be resolved by the board of management. The MBT program was directly involved in these fights as they included former 'care' patients in the 'cure' programs. The new program was perceived with jealousy as the 'favourite' of the management. As a consequence, the MBT program and all costs involved with training and supervision were not supported by all departments of the institution, leading to negative stereotyping and huge pressure on the new MBT program to develop more quickly and start with a new group readily. At the start of the second group, an additional conflict emerged between both principal therapists of the two groups, involving issues of leadership and definition of what 'real' MBT is. The conflict escalated into a split between both sub-teams, leading to fights, negative stereotyping and inability to work together within the same unit. Several team members suffered from the conflicts and especially nurses felt insufficiently supported to deal with the severe acting out of patients. They felt incapable and incompetent in dealing with the patients. The board of management was too distanced and not fully aware of the severity of the ongoing conflicts. There were also hostility and negative stereotyping between management and team. The team lacked clear leadership due to all splits. All the conflicts consumed huge amounts of energy, resulting in a high absenteeism due to sick leave and staff turnover. This in turn led to a permanent cessation of the program.

Short summary of Case B

Unit 2 transformed an existing psychotherapy program into a PH program and started a new IOP program. Outcome was considered by both respondents to be positive for both programs in terms of realization of intended programs, small number of dropouts, increasing development of competences and inclusion of BPD patients. The program has only gradually included severe BPD patients, while first treating less severe personality disordered patients. During the first two years, some personnel had

to be replaced as they were less suited for working with BPD patients. Adherence to the model was accomplished slowly. At the start there was broad support within the institution to implement MBT. The organization supported the innovation the program brought. Experts from all fields within the organization were consulted and supported the new program. Training was provided by an internal expert, who was closely involved in the MBT treatment groups. He was perceived as a strong leader, capable of dealing with crisis, enhancing team cohesion and keeping team focused on model. He was backed up by a strong co-therapist. In general, the team consisted of several strong personalities. Respondents perceived it as helpful that the program took sufficient time before including more severe BPD patients.

Short summary of Case C

Unit 3 intended to develop a PH program gradually. After one year, goals had been met with two groups running as planned. After two years, the whole unit was dismantled after several key therapists left the program due to extreme team conflict. The institution suffered huge financial losses during the dismantling of the groups. The burden for personnel had been extremely high with a high turnover of personnel. The organization had decided to implement the program 'top-down': an existing program was transformed into a MBT program without participation of team members in the decision. Personnel were assigned by the management and conflicts existed between management and team at the start of the program, resulting in two forced resignations. Two newly recruited and highly motivated therapists were trained, assigned to the same treatment group and asked to engage the rest of the team (consisting of 'old' team members) into the new model. Both teams soon split up between an engaged team 'on model' and a skeptic team 'off model'. A critical and non-reflective team culture put a high burden upon many less experienced and less skilled team members. Within the teams, a split between skilled psychotherapists and 'less skilled' nurses existed. The model was experienced as complicated and not practical enough. Destructive team processes expressed themselves in gossiping and excluding team members from social activities. There was no leader with active support from all team members who could oversee and manage these team processes. These processes escalated further after an internal reorganization, putting the management even further at a distance. The newly recruited coordinator did not support the model, roles and responsibilities became unclear and the team became more suspicious and withdrew from the management. Team members became ill or left the team, and vacancies could not be filled in easily, leading to understaffing and termination of the program.

Short summary of Case D

Unit 4 intended to implement two PH groups. After two years, both groups are still running, although both respondents agree outcomes are mixed. The program has never been profitable, due to under capacity of both groups, making its continued existence uncertain in times of budget cuts. Further on, there has been a high turnover of personnel, and the program had to be adapted several times to deal with vacancies, leading to dissatisfaction and formal complaints of patients. Respondents agree that treatment quality is poor. In this organization, the implementation of MBT was decided by a select group of 'experts' and implemented 'top-down'. The program rivaled with a DBT program in the same setting, leading to problems with inflow of patients into the program. Further on, many team members had small contracts, leading to high overhead costs, leading to non-profitability of the program. Support for the 'expensive' MBT program diminished within the organization, leading the program to become more isolated within the institution. The board of management was at a distance and was not trusted by the team, leading to a defensive withdrawal of the team. The team was tied together by feelings of hostility and distrust towards management and the rest of the institution. Respondents agree that the team might not be strong enough to survive this struggle. Team members were not recruited based upon competences or motivation to work with severe BPD patients. Several team members refused training and supervision, leading to a split in the team between the 'motivated' and 'passive' team members. However, these splits were covered up and not spoken about given the isolated position of the team within the institution. Team members were completely absorbed by destructive team processes, affecting quality of treatment. Finally, the team imploded when the main therapist left the team. At the time of writing, the program has stopped.

Short summary of Case E

Unit 5 intended to implement two PH groups and one IOP group. Both PH groups have been implemented, the IOP group not (yet). The main issue is the profitability of the program due to under capacity of both groups. The continuity of the program has always been subject of discussion in the institution, although the programs are still running today. The team is highly motivated to keep the program running and to improve their expertise and adherence to the MBT model. Turnover has been high among nurses. The start of the MBT program was broadly supported within the institution, and there was sufficient budget for training and supervision. The unit management was actively involved and very supportive. The program fitted excellently within the institution's mission to enhance availability of psychotherapy for a broader range of (difficult) patients. A randomized trial was designed and gained support for continuing the

program despite budget problems. A major issue was a sequence of reorganizations and changes at different managerial levels, making it necessary to discuss the need of a (non-profitable) program again and again. Goodwill was experienced as dependent upon the interest of the manager in charge. Part of the problems with profitability was due to a bad positioning of the program within the (huge) organization, creating problems with patient inflow. Therapists experienced a constant pressure to demonstrate its relevance. The strong coleadership in the team buffered against this pressure. The team was led by two experienced psychotherapists with strong personalities, different enough to cover all different opinions among team members, but similar enough to bridge differences in opinion. Those leaders managed to create a safe learning environment, focused on developing expertise and improving model adherence. However, not all team members turned out to be suited for working with severe BPD patients. Pressure to assign 'internal candidates' has led to two drop outs among personnel. The lack of concreteness of the MBT manual was experienced as unhelpful to support less skilled team members.

Short summary of Case F

Unit 6 intended to implement one PH group. After two years, the program was expanded with another PH group, and plans for two IOP groups were being made. There was low personnel turn-over, and the whole team is closely involved in the expansion of the unit. The MBT program was chosen by a large group of experts of all departments in the institution to accomplish the mission of the institution to include very severe patients in psychotherapy. The new program was supported by the whole board of management. Research was set up from the beginning. There was some skepticism in the rest of the institution, but the different location of the unit protected it from possible negative stereotyping. Changes in management did not affect support for the program. There was a large budget, and the innovation was considered important for the survival of the institution in the new century. Management was directly and closely involved. There was a strong co-leadership at the unit, by two experienced and strong personalities. The team itself was small and very cohesive, with personnel that was recruited specifically for the new program. There was a clear hierarchy within the team; roles and responsibilities were accepted by everyone. The start of a second PH group initially created some rivalry, but this was dealt with as the second therapist took on a learning attitude and hierarchy was respected. The team developed through learning and supervision.

Short summary of Case G

Unit 7 started with a PH and IOP program, each including two groups of nine patients. Implementation of the IOP program went much more smoothly than the implementation of the PH program. The later was characterized by high levels of verbal

aggression from patients, two formal complaints from patients, a high burden among team members, high drop-out rates and clinical impressions of mixed treatment results. The IOP program included the same patients but experienced much less problems. Respondents mentioned several elements impacting upon the implementation. Most noteworthy was the quick start with four patient groups, especially in the PH program, lacking time and a well-developed implementation plan to implement both programs and all four groups. Roles and responsibilities were not sufficiently cleared out, especially between trainers and management, leading to an uncertainty among team members, that most often lacked experience in the model and were rather young and inexperienced in treating BPD patients. The team lacked protocols to deal with severe aggression and suicidality. This mainly affected the PH program due to the intensity of the program, creating a spiral of escalating arousal, undermining the confidence of team members and creating temporary splits between management and trainers, with further role confusion. The team diverted more from the model and could not maintain a reflective stance well enough. These problems mainly affected the PH team, while the IOP team benefited from a slower start and less continuous arousal due to the lower intensity of the program.

Chapter 8

Implementation of Evidence-Based Treatments for Borderline Personality Disorder: The Impact of Organizational Changes on Treatment Outcome of Mentalization-Based Treatment

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ABSTRACT

The quality of implementation of evidence-based treatment programs for borderline personality disorder (BPD) in routine clinical care is a neglected issue. The first aim of this mixed-method naturalistic study was to explore the impact of organizational changes on treatment effectiveness of a day-hospital program of mentalization-based treatment (MBT-DH). Consecutively referred BPD patients were divided into a pre-reorganization cohort (PRE-REORG) and a cohort during reorganization (REORG). Psychiatric symptoms (BSI) and personality functioning (SIPP-118) before treatment and at 18- and 36-month follow-up were compared using multilevel modeling. Effect sizes in the PRE-REORG cohort were approximately twice as large at 18 months (PRE-REORG: range 0.81–1.22; REORG: range 0.03–0.71) and three time as large at 36 months (PRE-REORG: range 0.81–1.80; REORG: range 0.27–0.81). The quantitative results of this study suggest that even when MBT is successfully implemented, and the structure of the program remains intact, major organizational changes may have a considerable impact on its effectiveness. Second, we aimed to explore the impact of the reorganization on adherence at organizational, team, and therapist level. The qualitative results of this study indicate that the organizational changes were negatively related to adherence to the treatment model at organizational, team, and therapist level, which in turn was associated with a decrease in treatment effectiveness. The implications of these findings for the implementation of effective treatments for BPD in routine clinical practice are discussed.

Keywords: Mentalization-based treatment, implementation, quality maintenance, adherence, psychotherapy, treatment effectiveness, treatment outcome, borderline personality disorder.

Borderline personality disorder (BPD) is a serious and complex disorder that is characterized by three related core features: emotional dysregulation, impulsivity, and social dysfunction (Bateman & Fonagy, 2004, 2016), Patients with BPD almost invariably have high psychiatric comorbidity, seriously impaired quality of life (Soeteman, Verheul, & Busschbach, 2008), and a high economic burden of disease (Soeteman, Hakkaart-van Roijen, Verheul, & Busschbach, 2008). Psychotherapy is considered to be the treatment of choice for BPD patients (Soeteman, Verheul, et al., 2008); (Leichsenring, Leibing, Kruse, New, & Leweke, 2011). There is evidence supporting the efficacy of several types of psychotherapy for BPD; these are Dialectical Behavior Therapy, System Training for Emotional Predictability and Problem Solving, Schema-Focused Therapy, Transference-Focused Psychotherapy, and Mentalization-Based Treatment (MBT) (Leichsenring, et al., 2011; Stoffers et al., 2013). Despite the evidence of the efficacy of these treatments, their implementation in routine clinical practice has been slow. A study in the Netherlands, for instance, estimated that only 23% of patients diagnosed with BPD received psychotherapy (Hermens, van Splunteren, van den Bosch, & Verheul, 2011); a much smaller percentage received an evidence-based treatment. Little is known about the implementation of evidence-based treatments for BPD in other countries, but it is assumed that only a small minority of patients receive such interventions (Hermens, et al., 2011).

With growing interest in the implementation of evidence-based treatments for these patients has come realization of the importance of the *quality of implementation* (J. Hutsebaut, Bales, Busschbach, & Verheul, 2012). The evidence in support of evidence-based treatments has typically been obtained under controlled (optimal) conditions in the context of randomized controlled trials, including extensive training and supervision of therapists, adherence monitoring, above-average organizational support, and involving therapists who typically show high levels of intrinsic motivation and competency. It remains unclear to what degree treatment outcome can be maintained under the suboptimal conditions that are often typical of routine clinical practice, particularly given the widespread budget cuts in mental health care. Various studies have shown that the dissemination of evidence-based treatments, away from the developers' lab, may result in a drop in outcome (Durlak & DuPre, 2008; Henggeler, 2004; Schoenwald, 2008). This has been shown, for example, for multisystemic therapy for antisocial youth (Henggeler, 2004). In the field of personality disorders, the U.K. National Institute for Health and Clinical Excellence guidelines (2009) emphasize that unlike pharmacological treatments—where prescribers are assured of the quality of the product by manufacturers—the quality of a psychological intervention depends on therapists having the necessary skills and organizational support to replicate the intervention that has been found to be effective in research settings. This aligns with

expert opinions that the outcome of psychotherapy may be highly dependent on the organizational context in which the treatment program is delivered (Bateman & Krawitz, 2013). As an example of therapist factors, Norrie and colleagues (Norrie, J. et al., 2013) found that competent therapists were able to avert more than five times as many suicidal acts as their less competent colleagues who had had the same training and supervision and used the same methods.

Elsewhere, we have argued that the implementation of multidisciplinary, team-based treatment programs, such as MBT for patients with BPD, is a complex process with several risks in relation to treatment safety and efficacy (J. Hutsebaut, et al., 2012). This conclusion was based on a study of the implementation of MBT for adolescents with BPD, which showed that successful implementation of MBT was dependent on the successful management of several interacting factors at three interrelated levels: that of the organization, the team, and the individual therapist. More specifically, lack of support and implementation planning at the organizational level was associated with and further increased resistance to changes to the treatment program, as well as being associated with communication problems and lack of an adequate supervisory structure at the team level, and with a lack of competence and adherence to MTB at the therapist level.

Two recent studies of the implementation of DBT and SFT, two other evidence-based treatment programs for BPD (Nadort et al., 2009; van den Bosch & Sinnaeve, 2015), similarly pointed to the importance of organizational factors, such as managers' commitment to the implementation of the program, the need for the program to be well embedded in the organization, and the importance of factors related to the team and individual therapists, such as team cohesion, commitment of therapists/team to the intervention, supervision, and consultation.

This paper seeks to further explore the importance of the quality of implementation of evidence-based treatments for BPD by addressing the influence of a major organizational change on the efficacy of MBT. It can be argued that even when a treatment program has been successfully implemented in a given setting, it is uncertain whether the same quality of treatment delivery can be maintained in the long term. Organizations and teams are dynamic entities. Teams might experience a high turnover of personnel, particularly in the context of treating patients with BPD; organizations change; team leaders, managers, and experts can change jobs; new team members may experience difficulties in being accepted in the team; and so on. It is questionable whether the effectiveness of a treatment program will be resistant to all these changes

and dynamics. The issue of maintenance of treatment results in a changing team and organizational environment has not yet been the subject of scientific study in the field of personality disorders.

The authors' own treatment setting underwent considerable organizational changes 4 years after the successful implementation of MBT, offering a unique opportunity to explore the impact of such changes on the treatment outcome of MBT. The National Institute for Personality Disorders at the Viersprong in The Netherlands has offered a day-hospital MBT program (MBT-Day Hospital: MBT-DH) since 2004. In a naturalistic outcome study (D. Bales et al., 2012), we showed that MBT-DH was associated with similar outcomes to those reported in previous trials of MBT. However, after the publication of these findings, the treatment setting encountered significant organizational changes in a relatively short period of time (August 2008 to March 2010). First, the adult MBT unit expanded and a national MBT training program was started. Second, the implementation of a new adolescent MBT program was problematic (J. Hutsebaut, et al., 2012), resulting in high staff turnover, temporary curtailment of the program, high level of patient and parent dissatisfaction, safety risks for patients and staff, and negative publicity. Third, the management structure changed and the adult MBT unit had to merge with the newly developed adolescent MBT unit. These changes were accompanied by a tripling of personnel, many of whom were inexperienced in the MBT model. Fourth, during this period the unit's supervisor and trainers were partially deployed elsewhere. Finally, the former manager of the adult unit, an MBT expert (who had implemented MBT at the institution previously) changed jobs, and a clinician who, although experienced with other treatment modalities, had virtually no knowledge of MBT, was appointed to manage the newly merged MBT unit for adults and adolescents.

This study had two aims. First, we aimed to investigate the impact of major organizational changes on treatment effectiveness by comparing treatment outcomes before and during the reorganization. Second, in the qualitative part of this study, we aimed to explore to what extent possible changes in outcome could be accounted for by the impact of the reorganization on adherence at organizational, team, and therapist level by comparing both cohorts on a list of critical success factors for implementing MBT.

METHODS

Participants and Procedures

Study participants were consecutively referred patients to the adult MBT unit of the National Institute for Personality Disorders at the Viersprong, The Netherlands. Major organizational changes took place at the institute between August 2008 and March 2010. For the purposes of this study, September 1, 2008 was taken as the cut-off point to separate the pre-reorganization cohort (PRE-REORG) from the cohort of patients who were treated during the reorganization (REORG). PRE-REORG patients had had at least 9 months of treatment before the organizational changes were implemented, that is, they started MBT-DH between August 2004 and December 2007. REORG patients had at least 9 months of treatment during the reorganization period, that is, they started day hospital MBT between September 2008 and April 2011.

As part of the standard intake procedure, patients underwent a detailed diagnostic screening including the Structural Clinical Interview for DSM disorders (SCID-II; Ekselius, Lindstrom, von Knorring, Bodlund, & Kullgren, 1994; Weertman, Arntz, & Kerkhofs, 2008), or the Structured Interview for DSM-IV Personality (SIDP-IV; Pfohl, Blum, & Zimmerman, 1997). Patients meeting DSM-IV diagnostic criteria for BPD were included in the study. Exclusion criteria were kept to a minimum, and were (a) the presence of schizophrenia based on the SCID-I, (b) intellectual impairment (IQ <80) as assessed with the Wechsler Adult Intelligence Scale-III, (c) organic brain disorder, and (d) living further than 1 hour's travelling distance from the unit. The PRE-REORG cohort consisted of 41 patients. Due to logistical reasons, four patients were not interviewed and had no formal BPD diagnosis. The SCID-II interview could not be completed for seven patients because they were too distressed at the time of the interview (e.g., heavy withdrawal symptoms, dissociative states, psychotic symptoms). As a result, 30 of the referred patients in the PRE-REORG cohort were included in the analyses. The REORG cohort consisted of 16 patients, who enrolled in the program between September 2008 and April 2011. A number of 6 patients who started treatment in the interim period, between January and August 2008 were not included. All analyses were based on the intention-to-treat principle. All enrolled patients in both conditions were followed and included. The Medical Ethics Committee of the Erasmus Medical Center (Rotterdam, the Netherlands) judged that – according to Dutch law – this study did not require formal approval, as the data had already been collected in a naturalistic setting.

TREATMENT

In both cohorts, the MBT condition consisted of a maximum of 18 months of manualized MBT-DH (D. L. Bales & Bateman, 2012; Bateman & Fonagy, 2004, 2006), followed by a maximum of 18 months of maintenance mentalizing (group) therapy. This study reports on the treatment outcome of the day hospital phase (18 months) and of the mentalizing-maintenance therapy (after 36 months) for both cohorts.

The day hospital program includes implicit mentalizing groups (comprising daily group psychotherapy and weekly individual psychotherapy, and individual crisis planning from a mentalizing perspective) and explicit mentalizing groups (art therapy twice a week, mentalizing cognitive group therapy, and writing therapy). The weekly program ends with a social hour and community meeting (D. L. Bales & Bateman, 2012; Bateman, Bales, & Hutsebaut, 2013; Bateman & Fonagy, 2004). Patients could also consult a team psychiatrist for medication upon request.

Treatment goals of MBT are: (1) to engage the patient in treatment, (2) to reduce psychiatric symptoms, (3) to improve social and interpersonal functioning, (4) to decrease the number of self-destructive acts and suicide attempts, and (5) to stimulate adequate care consumption and to prevent reliance on hospital admissions and prolonged inpatient care (Bateman & Fonagy, 2006). To achieve these goals, all program components specifically focus on enhancement of the patient's mentalizing capacity, that is, the mental process of understanding the self and others in terms of mental states such as thoughts, desires, intentions, and feelings. The theoretical assumption is that enhancing mentalizing improves the symptoms and functioning of patients with BPD (Bateman & Fonagy, 2004).

Outcome measures

This study focused on two key targets of MBT: improvements in (a) psychiatric symptoms and (b) personality functioning, assessed at the start of treatment and at 6, 12, 18, 24, 30, and 36 months after the start of treatment. Assessments were conducted by a treatment-independent research assistant, trained and employed by the Viersprong Institute for Studies on Personality Disorders (VISPD). To maximize data acquisition outreaching work was done (phone calls, e-mails, incidentally a visit to their home) and gift certificates were used at crucial assessment points for motivation.

Psychiatric symptoms

General psychiatric symptom distress was measured with the Brief Symptom Inventory (BSI; De Beurs & Zitman, 2006; Derogatis & Melisaratos, 1983), a well-validated questionnaire derived from the Symptom Checklist 90-Revised (SCL-90-R; Arrindell & Ettema, 2003; Derogatis, 1977). In this study, we used the Global Severity Index (GSI), that is, the mean score of the 53 items of the BSI (range 0–4). Higher scores indicate more symptoms. De Beurs and Zitman (2006) reported a Cronbach's alpha of 0.96 for this instrument.

Personality

Personality functioning was measured using the 118-item Severity Indices of Personality Problems (SIPP-118; Verheul et al., 2008), a self-report questionnaire aiming to measure the severity of the generic and changeable components of personality disorders. The SIPP-118 measures 16 facets of (mal)adaptive personality functioning, which fit into five higher-order domains—Self-control, Identity Integration, Responsibility, Relational capacities, and Social Concordance—with lower scores reflecting more maladaptive levels of personality functioning. The SIPP has good psychometric properties and (cross-national) validity (Arnevik, Wilberg, Monsen, Andrea, & Karterud, 2009; Verheul, et al., 2008). Cronbach's alphas of between 0.69 and 0.84 have been reported for the facets.

Statistical analysis

Differences in baseline characteristics between the two cohorts were analyzed by using chi-square tests for dichotomous variables and Student's *t*-tests for continuous variables. Multilevel modeling was used to evaluate changes in symptoms and personality functioning in both cohorts. Multilevel models make optimal use of incomplete repeated measures data with unbalanced time points. It corrects for bias when absence of data is dependent on characteristics that are present in the models (missing at random, MAR) (Little & Rubin, 1987). Available data from all 7 time points were included in the models, in order to enlarge the power of the analyses. Time was modeled as a continuous variable in months before or after the start of the treatment.In a first step, saturated models were tested with intercept and slope (time) as random variables. For within-group analyses, time was defined as level 1 and patients as level 2. Time, quadratic time, and logarithm of time were entered as fixed effects. For between-group analyses, we added group and interactions between group and time to the fixed effects. The covariance structure was based on the deviance statistic using restricted maximum likelihood (Verbeke & Molenberghs, 1997). Then, in a step-by-step procedure, fixed time effects that were not significant ($p > .10$) were excluded from the model until a parsimonious final model was reached that did not differ significantly from the saturated model. Statistical significance

was determined with the deviance statistic using ordinary maximum likelihood (Singer & Willett, 2003). When removing nonsignificant effects, interaction effects must remain nested under their respective main effects (Hox, 2002). Cohen's *d* effect sizes (Cohen, 1992) were calculated using the estimated pooled standard deviations from the models. Cronbach's alphas within both cohorts were calculated. All analyses were based on the intention-to-treat principle. Patients who ended treatment prematurely were also followed and included in the outcome analyses. Statistical analyses were performed using SPSS version 20.0.

Qualitative study: the quality of implementation

For the qualitative study, a focus group was organized to explore the impact of the institutional reorganization on adherence at organizational, team, and therapist level. Participants in the focus group were selected on the basis of their ability to assess adherence at two or more levels from several relevant perspectives; they consisted of two managers, three therapists who had been involved in treating patients from both cohorts, and two researchers who had been involved in research on MBT in the unit but were not involved in any of the treatments. Participants were blind to potential differences in treatment outcome between both cohorts. In a first round, participants individually assessed the quality of implementation of MBT-DH for both cohorts, based on a checklist measuring critical success factors of the implementation of MBT. The checklist was derived from the quality manual of MBT (Bateman, et al., 2013) augmented with results from previous relevant implementation studies (Bateman, et al., 2013; J. Hutsebaut, et al., 2012). Second, a focus group discussion was led by the first author, in which a summary of the participants' ratings was presented, after which participants were invited to discuss the summary. Finally, the participants provided a consensus score for adherence to MBT in each of the cohorts on a 5-point Likert scale (ranging from *very poor* to *very good*).

RESULTS

Baseline characteristics

As Table 1 shows, there were no significant baseline differences between the two cohorts.

Table 1. Baseline characteristics of pre-reorganization (PRE-REORG) and during reorganization cohorts (REORG)

	'Pre-reorganization Cohort' (PRE-REORG) n = 30	**'During reorganization Cohort' (REORG) n = 16**	
	n (%)	**n (%)**	***p***
Female	21 (70)	13(81)	0.64
Education:			
- lower	4 (13)	2 (13)	
- high school	24 (80)	12 (75)	0.80
- higher	2 (7)	2 (13)	
Married	3 (10)	2 (13)	1.00
Living with:			
-Partner	7 (23)	3 (19)	1.00
-Parent	6 (20)	5 (31)	0.63
-Children	4 (13)	3 (19)	0.96
Paid work / study	5 (17)	4 (25)	0.77
	Mean (sd)	**Mean (sd)**	***p***
Age	29.8 (6.3)	27.9 (5.7)	0.31
GSI	1.79 (0.70)	1.86 (0.61)	0.74
SIPP:			
- Self-control	25.0 (6.5)	25.9 (6.8)	0.66
- Identity integration	23.0 (7.0)	21.9 (7.1)	0.62
- Responsibility	26.9 (6.0)	29.8 (7.3)	0.15
- Relational functioning	24.6 (6.5)	24.9 (7.5)	0.87
- Social concordance	29.8 (6.9)	33.9 (6.7)	0.06
Number of BPD traits	6.9 (1.5)	6.3 (1.2)	0.12
Participating at:			
- Baseline	30 (100)	16 (100)	
- 18 months	23 (77)	12 (75)	
- 36 months	18 (60)	6 (38)	
Total analysed entries of the 7 time-points	143	64	

Table 2. Effect estimates and standard errors of final between group mixed models.

				Pre-reorganization Cohort' (PRE)		
Estimate [standard error] p-value	**Intercept**	**Time linear**	**Time quadratic**	**Intercept**	*** Time linear**	*** Time quadratic**
GSI psychiatric symptoms	1.92	-0.032	0.0005	-0.14	-0.017	
	[0.19]	[0.011]	[0.0003]	[0.23]	[0.009]	
	<0.001	0.006	0.094	0.553	0.071	
SIPP self-control	25.9	0.35	-0.006	-0.28	0.25	
	[1.6]	[0.13]	[0.003]	[1.94]	[0.09]	
	<0.001	0.007	0.058	0.887	0.008	
SIPP identity integration	22.4	0.55	-0.011	0.014	0.25	
	[2.1]	[0.14]	[0.004]	[2.47]	[0.09]	
	<0.001	<0.001	0.004	0.995	0.005	
SIPP responsibility	29.2	0.29	-0.006	-2.02	0.27	
	[1.60]	[0.10]	[0.003]	[1.93]	[0.06]	
	<0.001	0.006	0.034	0.299	<0.001	
SIPP Relational capacities	24.7	-0.07	0.005	-0.08	0.61	-0.014
	[1.79]	[0.18]	[0.005]	[2.21]	[0.22]	[0.006]
	<0.001	0.705	0.390	0.969	0.006	0.031
SIPP social concordance	33.3	0.11	-0.002	-3.16	0.44	-0.008
	[1.68]	[0.13]	[0.004]	[2.07]	[0.15]	[0.004]
	<0.001	0.386	0.676	0.132	0.004	0.065

* = interaction with (times X).

Between-group differences

The estimates of the parameters in the final parsimonious mixed models are presented in Table 2. For the purpose of interpretation, the estimates at the start of treatment, 18 months and 36 months, as well as the pooled standard deviations and effect sizes derived from the models, are presented in Table 3 and depicted in Figure 1. Effect sizes on various outcomes in the PRE-REORG cohort were twice as large at 18 months (PRE-REORG: range .81–1.22, median 1.09; REORG: range .03–.71, median .53) and more than three times as large at 36 months (PRE-REORG: range .81–1.80, median 1.60; REORG: range .27–.81, median .48). The observed differences between the two cohorts were statistically significant at both 18 and 36 months for most outcome parameters (self-control, identity integration, responsibility, relational capacities, and social concordance). On the GSI we observed a trend toward statistical significance ($p < .07$).

Table 3. Estimates and effect sizes for both cohorts

	'Pre-reorganization Cohort' (PRE-REORG)		'During reorganization Cohort' (REORG)		Difference	
Outcome	**Estimate**	**(alpha) Effect size**	**Estimate**	**(alpha) Effect size**	**(sd) Effect size[1]**	***p***
GSI Psychiatric symptoms		(.98)		(.95)		
Start	1.78		1.92		(0.79)	
18 months	1.05	-1.00	1.49	-0.58	-0.42	0.07
36 months	0.62	-1.56	1.37	-0.74	-0.82	0.07
SIPP Self-control		(.92)		(.85)		
Start	25.6		25.9		(7.0)	
18 months	34.4	1.22	30.1	0.59	0.63	0.008
36 months	39.1	1.76	30.4	0.58	1.17	0.008
SIPP Identity integration		(.94)		(.89)		
Start	22.4		22.4		(8.9)	
18 months	33.3	1.22	28.7	0.71	0.51	0.005
36 months	36.9	1.63	27.8	0.60	1.03	0.005
SIPP Responsibility		(.88)		(.55)		
Start	27.2		29.2		(6.9)	
18 months	35.3	1.18	32.5	0.47	0.71	<0.001
36 months	39.6	1.80	31.9	0.38	1.42	<0.001
SIPP Relational capacities		(.90)		(.74)		
Start	24.7		24.7		(7.4)	
18 months	31.4	0.91	25.0	0.04	0.88	0.002
36 months	32.1	1.02	28.2	0.47	0.55	0.117
SIPP Social concordance		(.87)		(.77)		
Start	30.1		33.3		(6.7)	
18 months	36.9	0.99	34.7	0.21	0.79	0.001
36 months	37.4	1.02	35.2	0.27	0.80	0.029

[1] Compared to baseline, negative values on the GSI indicate lower scores
alpha - Cronbach's alpha

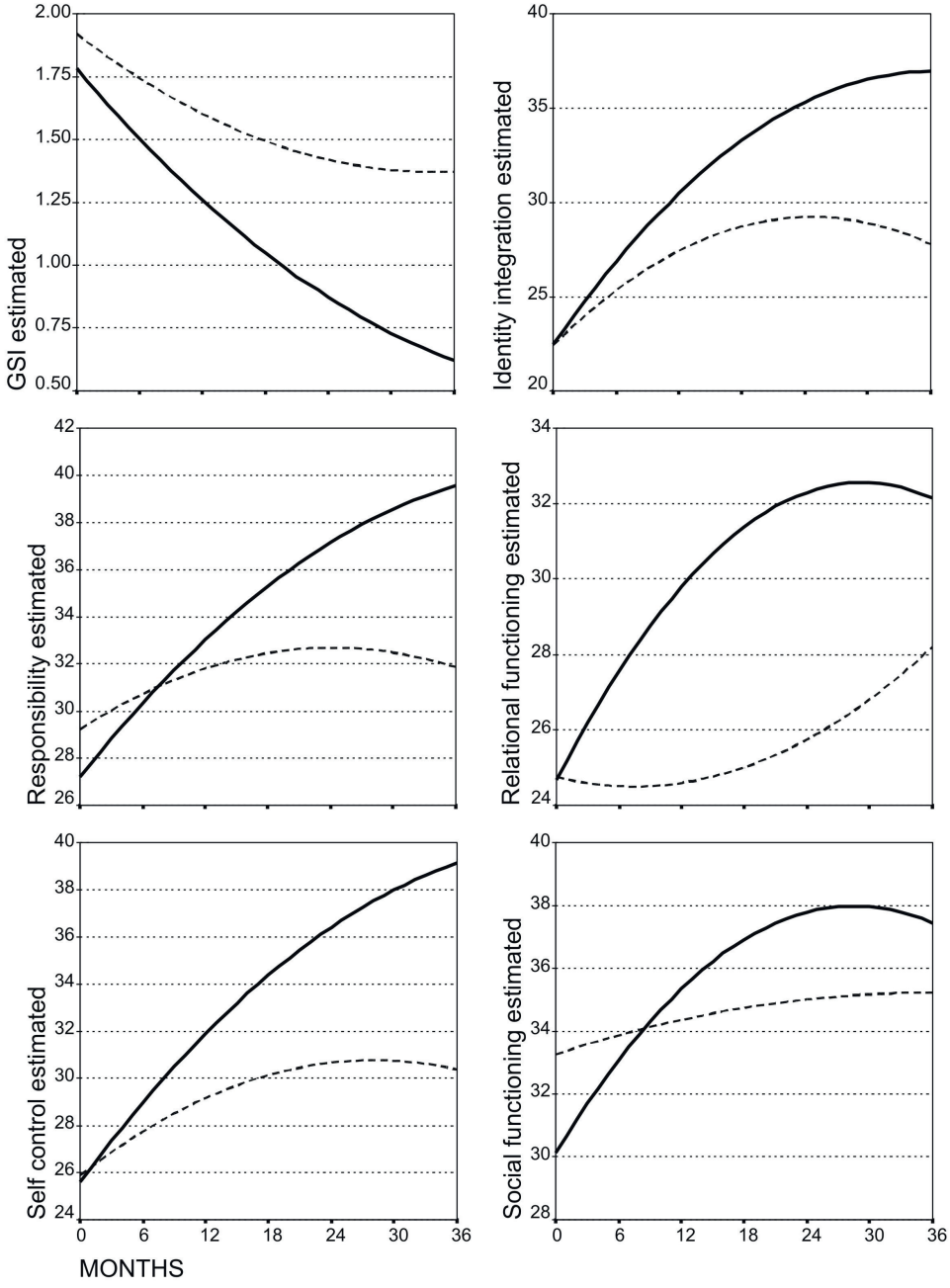

Figure 1 Estimated courses of outcome variables

Note: Solid lines = 'Pre-reorganization Cohort' (PRE-REORG); dotted lines = During reorganization Cohort' (REORG)

Table 4. Consensus ratings on adherence of two cohorts at organizational, team and therapist level

Organization	**Cohort 1 (PRE-REORG)**	**Cohort 2 (REORG)**
Commitment and support within the organization to fully implement MBT	7	4
Availability of comprehensive implementation plan	6	2/3
Sound financial management	7	4
Continuity in management	7	2/3
Organization of MBT unit (clear structure, defined roles and responsibilities, etc.)	6	2
Stability in the organization	5	3
Staff selection based on competences regarding treating BPD patients, MBT competence, team composition, affinity with treatment model	7	1
Team		
Well balanced team composition	6	2/3
Team size (8-12)	6	1
Leadership (clear leadership as supported by the whole team)	6	3
Team cohesion: secure, open, cohesive team	7	2
Mentalizing environment: open, responsive, mentalizing atmosphere	6	2/3
Availability of MBT expertise at the unit	6/7	2/3
MBT training and supervision	5/6	2/3
Consistency: ability of the team to deliver treatment in consistent manner	6	2/3
Coherency: team utilizes theoretically coherent (MBT) framework to tailor interventions	6	2/3
Continuity	6	2
Structure: program structure, clear definition of roles and responsibilities	6	2
Therapist		
MBT experience with the model	4	2
Adherence to the model: adherence and competence with the model in individual sessions and group sessions	6	2/3
Commitment among all team members to MBT-model	7	3

1=very poor; 2= poor; 3= acceptable; 4= adequate; 5= good; 6= very good; 7= excellent

Quality of implementation

Table 4 presents the results of the consensus scores derived from the checklist and discussion in the focus group of adherence at organizational, team, and therapist level for the two cohorts. PRE-REORG scores were a mean 6.1 (range 4–7), suggesting very good adherence at organizational, team, and therapist level. During organizational changes (i.e., REORG), the mean adherence was scored at 2.4 (range 1–4), indicating poor adherence. The focus group ratings for adherence to each of the factors in both cohorts suggests that adherence at each level was better before the reorganization than during the reorganization.

DISCUSSION

This study investigated the impact of major organizational changes on the treatment outcome of MBT-DH in a specialized MBT unit. Results indicated a serious reduction in the effectiveness of the intervention during and after the major organizational changes. In fact, outcomes decreased by almost half in the REORG cohort. Consistent with our assumptions, results from individual ratings and the focus group showed considerable problems in the REORG cohort with regard to adherence to the treatment model at organizational, team, and therapist level. The results can be considered a first step toward understanding important barriers and facilitators in the implementation and maintenance of effective treatment programs in the field of personality disorders.

The current study shows that treatment outcomes in a treatment center may be subject to major fluctuations over time, and suggests that these fluctuations can at least in part be accounted for by the degree of adherence to the treatment model at the organizational, team, and therapist level. This is the first study in the field of personality disorders to highlight the difficulty of maintaining treatment outcome within a changing organizational context. It is important to emphasize that this study took place in a mental health care center involving therapists who were properly trained and supervised in the treatment model. Even during and after the organizational changes the structure of the program was unchanged and there is suggestive (unpublished) evidence to believe that the level of adherence to the model was comparable to benchmark MBT programs across various countries. Under this assumption our study compared optimal MBT (typically showing large effect sizes) to suboptimal MBT (typically showing medium effect sizes).

If replicated, these findings may have important implications for the dissemination and implementation of evidence-based treatments such as MBT in the treatment of BPD. Although initial pessimism regarding the treatment of BPD has been replaced by optimism (Stoffers et al., 2012), the results of this study emphasize the critical role of continuously ensuring adherence to the model at multiple levels. This study suggests that psychotherapy might be especially beneficial when delivered in organizations that are fully committed to the patient population and the treatment program, provide sufficient resources for implementing the program, and are capable of dealing with major reorganizations affecting the delivery of the program. Furthermore, psychotherapy might be especially effective when delivered by well-functioning teams with a clear demarcation of responsibilities, clear leadership, and commitment to an open and reflective team culture. Finally, psychotherapy might be optimally effective only when delivered by competent, well-trained therapists, who receive ongoing supervision and are committed to the treatment model.

This study has several strengths and limitations. An obvious strength is the importance and timeliness of the topic, which fits well in with the growing interest in implementation science. It is a naturalistic study capturing real-life variables in a mental health setting that impact quality of care. Limitations include the relatively small sample sizes in each cohort. This limitation is somewhat mitigated by the fact that the observed differences in outcome between the two cohorts were large. A second limitation is that the distinction between the cohorts (i.e., the choice of a cut-off date separating the two) was made retrospectively. This concern is somewhat mitigated by the fact that the division of cohorts was based on relatively objective grounds (i.e., major organizational changes), but further controlled research is necessary to replicate these findings. Third, with regard to the qualitative study, some participants were not completely unfamiliar with our hypotheses concerning the importance of implementation issues, as one of our previous papers on this topic (Joost Hutsebaut et al., 2011) had been shared among members of the unit. However, all participants in the focus group were unaware of our finding that outcomes during the reorganization indicated a marked drop in treatment effectiveness; they were merely asked to rate the impact of the changes in the organization on adherence to the MBT model at organizational, team, and therapist level. Finally, the study design did not allow us to investigate whether organizational, team, or therapist factors, or a combination of these factors, were responsible for the observed decrease in outcomes.

Despite these limitations, this study suggests the importance of organizational conditions influencing treatment outcome in the treatment of BPD. Organizations will always be dynamic entities. Besides inevitable changes that occur within organizations,

broader reorganizations of health care systems are also likely to impact treatment adherence on different levels. The finding that such changes may have a negative impact on treatment outcome are alarming and highlight the need to develop strategies to optimize organizational, team, and therapist functioning in order to maintain and maximize the quality of psychotherapy for BPD patients in changing organizational contexts. We therefore urgently need more studies on the necessary conditions for the implementation and maintenance of effective treatment programs. As the dynamics of implementation processes are complex, such studies could benefit from using a theoretical framework such as Normalization Process Theory (May, C. 2006, 2013), that facilitates understanding by focusing attention on the mechanisms through which participants invest and contribute to them. Furthermore, we need to develop strategies to guarantee, monitor, and adjust conditions under which these treatments remain effective. Only then can we justify the claim that psychotherapy can be an effective treatment for BPD.

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Chapter 9

Summary of Findings

SUMMARY OF FINDINGS

The overall aim of this dissertation was to investigate the implementation of Mentalization-Based Therapy (MBT) in the Netherlands. In this chapter the main findings of the two chapters and five studies of this thesis will be summarized.

Part A of the dissertation included two chapters introducing MBT. ***Chapter 2***, 'Mentalization Based Treatment in Partial Hospitalization Settings', describes the organizational aspects of developing MBT programs and described how the treatment can be organized to create the optimal context within which interventions enhancing mentalization can be delivered. In ***chapter 3***, 'Discovering how the mind works: the journey of a patient in Mentalization-based Treatment', the MBT trajectory and focus of the different phases of MBT were described, ranging from engaging the patient in treatment and crisis management to the struggles in working with the therapeutic relationship, gradually moving toward reintegration in society and finally the ending of treatment. Typical MBT concepts and interventions were highlighted and discussed, aiming to help therapists translate the general MBT principles to their own clinical practice.

Part B included two studies on the effectiveness of MBT in the Netherlands. MBT had proven to be a (cost)effective treatment for patients with severe borderline personality disorder (BPD) and a high degree of psychiatric comorbidity in the United Kingdom (UK). ***Chapter 4*** describes an investigation into the applicability and treatment outcome of 18-month, manualized day hospital MBT in the Netherlands. This is done by means of a prospective cohort study with 45 Dutch patients with severe BPD and a high degree of comorbid Axis I and Axis II disorders. Outcomes were assessed each six months. Positive results were reported with respect to all treatment goals. First, as only 15.5% of the patients prematurely left treatment (8.9% drop-outs, and 6.6% push-outs), it was reasonable to conclude that the vast majority of patients were effectively engaged in treatment. Second, symptom distress, personality pathology and functioning, and social and interpersonal functioning all improved significantly within 18 months, mostly with large to very large effect sizes. Third, all patients showed a significant decrease in suicidal and self harm acts. Finally, after treatment patients received less additional treatments. This was the first study showing that manualized day hospital MBT could be effectively implemented by an independent institute in a naturalistic setting outside the UK, strengthening the confidence that manualized day hospital MBT is an effective treatment for patients with severe BPD.

The study in ***chapter 5*** extended the body of evidence regarding the long-term effectiveness of day hospital MBT by documenting the treatment outcome of a highly inclusive group of severe BPD patients, benchmarked by a carefully matched group of severe BPD patients who received 'Other specialized Psychotherapeutic Treatments' (OPT). Baseline, 18 month (end of treatment), and 36 month (end of maintenance phase) follow-up data on psychiatric symptoms and personality functioning were available for 29 BPD patients assigned to MBT, and an initial set of 175 BPD patients assigned to OPT. Propensity scores were used to determine the best matches for the MBT patients within the larger OPT group, yielding 29 MBT and 29 OPT patients for direct comparison.

Patients in the MBT group significantly improved during treatment and continued to improve in the 18 month follow-up period. Psychiatric symptoms were reduced after 18 months of treatment, and reduced even further during follow-up. Personality functioning improved largely on all five higher order domains (self-control, identity integration, responsibility, social concordance, and relational capacities). While outcome in OPT was also favorable, the effect sizes were smaller and the comparison between MBT and OPT indicated superior outcome in MBT patients on all outcome variables, except for relational functioning.

In conclusion, this is the second study of this dissertation documenting the (long-term) effectiveness of MBT day hospital treatment in a severe group of BPD patients. Strong, multidimensional (encompassing both symptoms and personality functioning) effects were observed. These effects were consistently larger than those observed in a carefully matched group of BPD patients who had received other psychotherapies offered in specialized care the Netherlands. The interpretation of the effects warrants caution given the non-randomized design, as well as variation in treatment dosages.

In **part C,** a start was made studying key factors in the implementation of MBT in the Netherlands. Reports on problems encountered in implementing complex new psychotherapeutic interventions are scarce in psychotherapy literature. In ***chapter 6*** presents a case study of the problematic implementation process of inpatient MBT for Adolescents, i.e. a new therapy for 14 to 18 year old youngsters with severe personality disorders. In this paper, it is argued that the escalating implementation problems in this case study could best be understood from the interaction of three levels of functioning: organization, team and therapist. At the organizational level, the lack of support within the institution and the shortcomings in the implementation plan, combined with the major challenges due to the level of innovation, were considered to be the dominant barriers to successful implementation. At team level the lack of leadership, difficulties in offering a consistent approach and maintaining a constructive team spirit

and mentalizing stance were important determinants. At therapist level, the lack of concrete supportive protocols to deal with day-to-day clinical problems and the lack of familiarity with the model 'on the work floor' further contributed to the implementation problems. Together, these factors led to increasing impotence and frustration in staff, interacting with increasing levels of arousal and distrust in the patient group related to experienced unreliability. Increased patient turmoil and staff exhaustion ended up resulting in ending the inpatient treatment program, leading to substantial financial losses and reputation losses for the organization.

The analysis of this case study raised important issues. Very Little was known about the success or failure of implementation of evidence based treatments for BPD in daily practice. The study described in ***Chapter 7*** aimed to investigate determinants of success and failure in the implementation of evidence based treatment programs for BPD. The implementation trajectories of seven different MBT-programs in six mental health clinics in the Netherlands were included in a multiple case study combining a qualitative and quantitative design. Semi-structured interview data were collected from several stakeholders of each program: the manager formally responsible for the department and the principal therapist of the MBT team. Narrative reconstructions of each interview were assessed by twelve independent experts. The results testify of the complex nature of implementing evidence based psychotherapy programs in regular mental health centers institutions. The findings indicated that the implementation of evidence based MBT programs in the Netherlands is associated with mixed outcomes at best. Implementation was clearly successful in two programs (29%), outcomes were mixed in two other programs (29%), and implementation failed in the three remaining programs (43%) resulting in discontinuation of those programs. Furthermore, the findings suggest that in all cases the course of implementation was influenced by multiple elements at organizational, team and therapist level. Even though each implementation trajectory constitutes its own unique story, involving local issues and specific team cultures, the results yield suggestive evidence for some more generic barriers and facilitators across all implementation trajectories. Facilitators include the presence of organizational support, sound financial management, strong and consistent leadership, highly structured project-based implementation, managing (negative) team processes, careful therapist selection, sufficient expertise, and training opportunities, whereas the absence of these elements are barriers to implementation.

Another important issue in the implementation of evidence based treatment programs is the neglected issue of the sustainability. Even when a program has been implemented properly, including effective treatment outcomes during the phase of implementation, it remains unclear how this success an be maintained in the long run. In ***chapter 8*** the

impact of organizational changes on treatment effectiveness of a day hospital program of MBT (MBT-DH) is explored. Consecutively referred BPD patients were divided into a pre-reorganization cohort (PRE-REORG) and a cohort during reorganization (REORG). Psychiatric symptoms and personality functioning before treatment and at 18-month and 36-month follow-up were compared using multilevel modeling. Effect sizes in the PRE-REORG cohort were approximately twice as large at 18 months and three time as large at 36 months. Results of this study suggest that even when MBT is successfully implemented, and the structure of the program remains intact, major organizational changes may have a considerable impact on its effectiveness. It was found that organizational changes negatively related to adherence to the treatment model at organizational, team, and therapist level, which in turn was associated with a decrease in treatment effectiveness. To our knowledge, this was the first study in the field of personality disorders on the sustainability of implementation of evidence based treatment programs for personality disorders, highlighting the difficulty of maintaining treatment outcome within a changing organizational context.

Chapter 10

Conclusion and discussion

CONCLUSIONS AND DISCUSSION

The overall aim of this dissertation was to investigate the implementation of MBT in the Netherlands. In this chapter the research questions as formulated in the introduction (chapter 1) are answered, followed by the overarching strengths and limitations of this dissertation and a discussion of barriers and facilitators in the various stages of the diffusion process of MBT. This chapter ends with the general conclusions, recommendations for large-scale implementation of evidence based treatment programs and suggestions for future research.

Answers to the research questions

The overall aim of this dissertation was to investigate the implementation of MBT in the Netherlands.

The first research questions addressed were:

1. *Can day hospital MBT be effectively transferred to the Netherlands?*
    a. Does day hospital MBT produce beneficial treatment outcomes?
    b. How does the effectiveness of day hospital MBT compare to other specialized psychotherapies?

The first two studies in this dissertation show that MBT which was developed and studied in the UK, can be effectively implemented by an independent institute in a naturalistic setting outside the UK. The findings strengthen the confidence that manualized day hospital MBT is an effective treatment for patients with severe BPD. Treatment outcome results were (at least) equal to the original UK results. Furthermore, we extended the body of evidence of the effectiveness of MBT by showing that the long-term effectiveness of day hospital MBT is beyond the benchmark provided by a mix of specialized psychotherapy programs for BPD.

In conclusion: MBT can be transferred to the Dutch context while maintaining its beneficial treatment outcomes. MBT seems to be one of the more promising treatments for BPD.

The second research question of this dissertation was:

2. *What are important barriers and facilitators to successful implementation?*
    a. *What are lessons learned in a problematic implementation case of MBT?*
    b. *How successful is implementation of MBT in the Netherlands and what are important determinants influencing the implementation trajectory?*

c. *What is the impact of major organizational changes on the sustainability of MBT implementation?*

The findings indicated that the implementation of MBT programs in the Netherlands is associated with mixed outcomes at best. Furthermore, the results suggest that in all cases the course of implementation was influenced by multiple elements at organizational, team and therapist level. Although each implementation trajectory constitutes its own unique story, involving local issues and specific team cultures, the results yield suggestive evidence for some more generic barriers and facilitators across all implementation trajectories. Facilitators to successful implementation include the presence of organizational support, sound financial management, strong and consistent leadership, highly structured project- based implementation, managing (negative) team processes, team composition, therapist selection and competencies, sufficient expertise, structural supervision and training opportunities. The absence of these elements were found to be barriers to successful implementation.

In conclusion: The positive answer to the first research question about the transferability of MBT is put into perspective by the answer to the second question: yes, MBT can be transferred, but this involves a complex process and – even when successfully completed – remains vulnerable to disruptions at the organizational, team and therapist level.

Methodological strengths and limitations

This dissertation is the result of a quest for successful implementation strategies for MBT. The consecutive studies and publications paralleled a variety of attempts to implement, to disseminate and to improve the quality of MBT programs in the Netherlands. One of the strengths of this dissertation, therefore, is that daily practice and research developed simultaneously or, in other words, theory and practice were reciprocally informed. Another strength of the dissertation is that it does not only reflect the successes, but pays equal attention to failures. It is rare in (mental) health care that failed implementations are documented and published, even though most certainly they do occur as often as successful implementations. In part, the learning potential from the studies in this thesis is derived from the combination of failures and successes, rather than from any one of the two in particular. Finally, a strength of this dissertation is the high external validity of its underlying studies, as assignment to MBT took place in regular clinical practice instead of under experimental conditions. Assignment was characterized by very few exclusion variables, thereby ensuring that the results of the thesis apply to the vast majority of BPD patients rather than just a selection of them.

In the multiple case study, different general mental healthcare departments located in different parts of the Netherlands were included to further enhance the generalizability of the findings beyond de Viersprong.

Some of the limitations of this dissertation arise from the other side of the same coin, i.e. those related to the naturalistic research design. Most of the studies presented in this dissertation typically have an exploratory (hypothesis-generating) rather than an experimental (hypothesis-testing) nature. A second limitation is that this thesis focuses on the implementation of one variant of one intervention only, i.e. day hospital MBT. In recent years the number of day hospital MBT programs sharply decreased in favour of outpatient programs, a trend that can be observed across various treatment methods and countries. One cannot rule out the possibility that the implementation of outpatient programs may be less complex due to the lower intensity of treatment and less intensive team processes. However, it is rather likely that the same barriers and facilitators apply to many treatments for BPD or even for (complex) mental disorders in general, as similar findings were reported for Dialectical Behavior Therapy (DBT), but also for much less intensive prevention programs (Swales, Taylor & Hibbs, 2012; Bosch & Sinnaeve, 2015; Durlak & DuPre, 2008).

General discussion

The subject of this dissertation gradually shifted from the effectiveness of MBT in part B towards the implementation and sustainability in part C. The implementation studies provided some evidence that the classification 'evidence based' and the brand name (MBT, SFT, TFP and DBT) attached to our treatment programs do not necessarily tell anything about the quality or effectiveness of the treatment program in regular clinical practice. Although the articles in this thesis provide additional evidence for the effectiveness of MBT, it also warns against naivety to assume the effectiveness of any psychotherapeutic model if the context of implementation and quality maintenance is not taken into account.

Barriers in the different implementation stages of the diffusion process

Diffusion refers to the spread of new ideas, technologies, manufactured products, and evidence-based promotion, prevention or treatment programs (Rogers, 2003). The transfer of evidence-based treatment programs from experimental (laboratory) conditions into regular clinical practice and maintaining the effectiveness is a more complicated and time-consuming process than is assumed.

There are many diffusion models, overlapping components being the following phases:

1. Dissemination phase: the spreading of information about evidence based treatment programs (EBTs) so that organizations and clinicians can adopt them
2. Adoption phase: the decision process when an organization or group decide to implement the new program
3. Implementation phase: the actual delivery of the program
4. Sustainability phase: program maintenance

There are many studies documenting serious deficiencies and large gaps between the care people should receive and the care they actually do receive (Corrigan, 2005). Past and current efforts to close the 'science-to-service gap' have not been successful in getting the growing list of evidence-based programs routinely into practice (Fixen, Blasé, Metz & van Dyke, 2013). Based on a review of the literature and the studies above, three major barriers in the diffusion of evidence-based treatments for PD need further addressing. These barriers are linked to four distinct phases of the diffusion process.

1. The slow and cumbersome dissemination process

The first barrier has to do with the slow and cumbersome dissemination process (first phase of diffusion), during which knowledge about a program's existence and value has to be transferred. Balas & Boren (2000) showed that it takes an average of 17 years to turn 14% of original research findings into changes in care that benefit patients. Many research findings get lost before they can infuse clinical practice and where they do reach the field, it often takes many years. It has been observed that health care professionals perform poorly in the application of scientific knowledge and show a tendency to undervalue the aims of evidence-based medicine (Baker, McFall, & Shoham, 2007). This notion also appears to apply to the field of psychotherapy for BPD. The first studies about the efficacy of psychotherapy were published in the nineties (Linehan, Armstrong, Suarez, Allmon, & Heard, 1991; Bateman & Fonagy, 1999) and most clinical guidelines (e.g., those in US, UK and The Netherlands) have been published approximately 10 years ago. However, a Dutch study (Hermens, van Splunteren, van den Bosch, & Verheul, 2011) revealed that in 2010 only 23% of help-seeking BPD patients receive some sort of psychotherapy. The vast majority of BPD patients do not receive a treatment that is recommended by the national and international guidelines. There are no formal data available about the number of patients receiving an evidence-based psychotherapy, but it can be assumed that only a small minority receives one of the evidence-based psychotherapies, not to mention the percentage receiving an evidence-based treatment that is delivered as intended according to the manual.

This brings us to the second barrier in the adoption and implementation phase (second & third phases of diffusion)

2. Large differences between 'program under research' and 'real world program'
The second barrier refers to the strong discrepancies found between the 'program under research' and regular clinical practice. The evidence in support of psychotherapy has typically been obtained under optimal (experimental) conditions, including extensive training and supervision, adherence monitoring, above average organizational support and optimal therapist factors such as intrinsic motivation and high competency levels. Moreover, in many trials there is a selection of patients participating in the study (Weisz & Kazdin, 2010). In other words, the precautions that are being undertaken to increase the internal validity of the trial have often consequences for the ecological validity. Once the information has found its way to clinical practice, implementation processes of complex interventions can be cumbersome. The implementation studies of both MBT (chapter 6 and 7) and Dialectical Behavior Therapy (Swales, 2012) reported mixed outcomes of implementation with a high risk of failure or even termination of the programs within 2 years. Moreover, even when the implementation process did not fail, one cannot assume treatment fidelity, that is the extent to which the program corresponded to the originally intended program. This could be for instance in terms of structure and dosage, i.e., exactly how much of the original program had been delivered, or treatment quality, i.e., how well conducted, therapist adherence, etc. The conditions of a randomized trial are almost never met when the program is implemented in regular clinical practice. Real-world conditions are often suboptimal, for example in terms of the possibilities to implement the exact structure of the program, opportunities for structural supervision and training, organizational climate and so on (Henggeler, 2004). An example of a study that investigated fidelity and dosage of DBT in the Netherlands showed that almost no program was implemented as it was originally intended and most DBT programs were limited to phase 1 (Bosch, 2015).

The third barrier is even more complex as we expand the scope to the sustainability of the implementation (fourth phase), including the maintenance of treatment fidelity and treatment results.

3. Maintenance of treatment fidelity and results: tendency towards 'drift'
Many factors influence the tendency towards 'drift' in program fidelity and therapist adherence over time. Policy makers, organizations and treatment teams are dynamic entities: mental health care infrastructure and funding systems tend to change over time; organizations might change and reorganize; team leaders, managers and experts can change jobs; teams might experience a high turnover of personnel; new incoming

team members have an impact upon team dynamics and so on. All these elements can impact upon the conduct of treatment and upon treatment outcome. In the adjacent field of promotion and prevention programs, eight studies confirm that program implementation can deteriorate over time (Durlak & DuPre, 2008). But also at a more individual level, therapists' adherence to the model can decrease over time. In general, many therapists prefer to enjoy a maximum level of professional autonomy. "They tend to select their methods by looking around, sampling a bit, and in the end choose what they like, what feels good to them" (Baker, McFall, & Shoham, 2008). Furthermore, research has shown that the self-assessment bias of clinicians has lead them to overestimate their rates of client improvement and underestimate their rates of client deterioration (Walfish, McAlister, O'Donnell, & Lambert, 2012). The self-assessment bias and the drive for complete professional autonomy are probably important factors influencing therapist 'drift' from the model.

This 'drift' in level of program implementation and in therapist adherence can have a negative impact on treatment outcome. In the field of promotion and prevention programs, results from over 500 studies offered credible and extensive empirical evidence to the conclusion that the level of implementation affects the outcomes (Durlak & DuPre, 2008). Data from five meta-analyses summarized by Durlak & DuPre indicated that the mean effect sizes are at least two to three times higher when programs are carefully implemented. This has not been studied systematically in the field of implementation of evidence-based programs for personality disorders, but the few studies in this area are confirming the association between 'drift' in program fidelity and a sharp drop in treatment outcomes. This has also been shown, for example, in Multisystemic Therapy for antisocial youth and for Assertive Community Treatment (Henggeler 2004, 2011; Curtis, Ronan, & Borduin, 2004; Schoenwald, 2008; McHugo, Drake, Teague, & Xie, 1999). The study in BPD presented in chapter 8 showed that important contextual changes are negatively related to adherence to the treatment model at organizational, team, and therapist level, which in turn was found to be associated with a decrease in treatment effectiveness. Strikingly, the observed decreases in effect sizes reported corresponded remarkably well to the differences found in the meta-analyses, with well implemented interventions showing two to three times greater effect sizes than poorly implemented interventions. Although the MBT cohort study presented in Chapter 4 showed similar results as the original studies by its developers, some more recent studies demonstrated less favorable outcome results (Jørgensen, C.R., et. al. 2013, 2014; Laurenssen, et al., in press). This is a typical trend for most evidence-based treatments, i.e. a lower effectiveness over time when more trials/studies are published. It has to be

acknowledged that this finding is often attributed to an increased quality of the control conditions. An increasing drift in program implementation and therapist adherence might provide an additional and equally plausible explanation for this phenomenon.

Good or bad news?

This dissertation shows that to start and maintain a high quality, effective MBT program it is not enough to 'just' implement MBT. The context within which programs are implemented seem to have a major impact on its effectiveness. Project-based implementation and structural efforts maintaining delivery of the program as intended requires investment. The current mental health care field, at least in the Netherlands, is characterized by increasing societal pressure for more efficiency often resulting in more bureaucracy. The investments needed to implement evidence based treatment programs as intended seem at odds with the pressure to work at lower cost. The complexities involved in the correct implementation and delivery of high-quality care are rarely the first priority of managers and payers. Consequently, many care professionals suffer from increasing productivity norms and bureaucracy rather than being facilitated to learn new interventions or increase treatment fidelity and quality.

Within this context, the complexities introduced in this dissertation might be considered bad news and may further discourage health care managers and professionals to start disseminating, implementing and maintaining MBT or other evidence based therapies as originally intended. However, one can also see the bright side of the message, the good news: the studies in this dissertation may add to the general consciousness in our field, among health care managers, professionals and payers, that the current trend towards efficiency and bureaucracy may reflect a penny-wise pound-foolish strategy. Extrinsically driven efficiency norms and bureaucracy do not necessarily promote cost-effective care. On the contrary, an important condition to cost-effective care is its effectiveness. That can only be achieved by an intrinsically driven motivation to conduct treatments in the way the effectiveness has been proven, supported and facilitated by health care managers and funded by the payers. In addition, the good news is that the lessons underlying this thesis have already been translated into the development of a quality management system supporting MBT managers and professionals to implement and maintain high quality MBT programs. The quality management system describes how all the components of a MBT program and the context in which it is organized, are effectively integrated. It involves all interventions and actions that can maximize adherence and minimize harmful processes. The quality system is not the treatment itself, but it serves to enable optimal treatment. The primary aim of this system is to continuously monitor the adherence of therapists, supervisors, teams, and organizations to the MBT model and provide subsequent feedback and training. In this way the quality

system aims to improve adherence or treatment integrity at each level when necessary (Bateman, Bales, & Hutsebaut, 2013). The study presented in chapter 8 showed how major organizational changes were negatively related to adherence to the treatment model which in turn was associated with a decrease in treatment effectiveness. This system is currently operational in 43 treatment programs and – even though its added value to patients, clinicians and outcomes needs to be properly evaluated – the first impressions are generally positive and justify to considerable optimism about the possibilities to achieve high quality standards in regular practice.

General conclusions, recommendations and suggestions for future research

General conclusion

MBT can be effectively implemented by an independent institute outside the UK. This supports manualized MBT as an effective treatment for patients with severe BPD. The implementation of evidence based programs for BPD, including MBT, is complex, can be cumbersome and is associated with mixed outcomes at best. The course of implementation is influenced by multiple elements at organizational, team and therapist level. Even when MBT is successfully implemented, the sustainability of implementation of evidence based treatment programs for personality disorders is an important issue; it is difficult to stay 'on model' and maintain treatment outcome within changing contexts and systems.

Although we have effective treatments available for BPD, it is likely that only a small percentage of these patients are currently receiving one of those treatments and only a negligible percentage receives an evidence-based treatment as intended. This conclusion brings us back down to earth and provokes modesty as to the extent in which we have succeeded in the diffusion process. On the other hand, this knowledge also enables renewed optimism as it might clearly direct the development of strategies to optimize system, organizational, team and therapist functioning and thereby to enhance, maintain and maximize quality of psychotherapy for PD patients. Below, the most important recommendations for policy and science in this context will be highlighted.

Recommendations for government and policy makers in mental health care institutions

1. Introduce a national (system) level infrastructure for large-scale dissemination and implementation

A large amount of scientific knowledge remains unutilized and the failure to use available science is costly and harmful; it leads to overuse of unhelpful care, underuse of effective care, and errors in executions (Berwick, 2006). Diffusion of effective innovations is a major challenge in all industries including health care. To tackle the first implementation barrier (i.e. the slow and cumbersome dissemination process) and to ensure that more patients with PD are treated with a cost-effective treatment, a national policy is required to speed up the dissemination rate and pave the way for more successful implementation of cost-effective evidence based treatment. To this end a national infrastructure for large-scale, nationwide implementation of effective strategies is needed. For example, Fixsen et al. (2013) present a framework for this purpose. Their approach includes both the establishment of organization and system supports to develop and host the required implementations infrastructure; system changes include aspects such as altering funding streams, modifying certification standards and accreditation standards, shifting accountability measures to include defined interventions and implementation outcomes, and so on.

2. Enhance quality and sustainability of the implementation of evidence-based treatment programs with quality management systems.

To enhance the quality and sustainability of the implementation, including the maintenance of treatment fidelity, therapist adherence and treatment results, quality management systems are necessary. Important aspects of quality management are the combination of quality control and quality assurance. Quality control can be defined as the inspection aspect of quality management and encompasses measures to make sure the service being provided (in this case evidence-based treatment program for PD) is conform quality standards. Quality assurance on the other hand relates to how a process is performed: the implementation process, program fidelity measures, therapist adherence, and so on. Quality management should encompass the whole process from thinking about implementation of a program, to preparing, to the implementation itself and finally to quality maintenance (sustainability) once successfully implemented. In the medical field experience and research have demonstrated that quality assurance activities, when well organized and carried out as part of a systematic approach to monitoring, evaluating, and improvement of all important aspects of care, can enhance

the quality of care being provided. Drift in program fidelity and therapist adherence over time has been shown to happen quickly when oversight is reduced or eliminated (Smith-Boydston, Holtzman, & Roberts, 2014; Swales, 2012). Multisystemic Therapy (MST) studies have shown that the MST quality assurance system enhances adherence and is linked with superior results (Ellis, Naar-King, Templin, Frey & Cunningham, 2007; Henggeler, Melton, Brondino, Scherer, & Hanley, 1997; Henggeler, Pickrel & Brondino, 1999; Sundell, Hansson, Lofholm, Olsson, Gustle, & Kadesjo, 2008) compared to MST without quality assurance system (Smith-Boydston, Holtzman, & Roberts, 2014). The Dutch MBT quality management system, developed in collaboration with Dr. Bateman, the developer of MBT, was inspired by the MST quality assurance system. This quality management system is currently applied to 43 therapy groups in the Netherlands. In the short term, quality management systems are costly and funding is therefore an issue. In the slightly longer term it is likely that they are profitable as a whole; less costs for organizations as to problematic/failed implementations are avoided and more patients receiving an evidence based-treatment program with a superior treatment outcome, which reduces long-term medical costs and lowers societal costs. Other advantages of quality management systems are that they assist policy makers of funding systems, scientific studies, patients, etc. in assessing the quality of a treatment program as the labels given to the program alone are obviously insufficient.

Governments and insurance companies (system level) need to stimulate mental health institutions to work with quality systems, to incorporate larger scale infrastructures (see above) and create drivers for mental health organizations to work with quality systems. An important issue then remains to balance costs of quality management systems with the potential of improved outcomes.

Recommendations for future research

Further research is necessary to improve implementation processes of evidence-based treatment programs for PD. Budget analyses in adjacent fields (National Institutes of Health, Clancy 2006; Institute of Education Sciences, 2010 in Fixsen, 2013) reported that 96.4 – 99.0% of funding is spent on developing new interventions and a mere 1.0 – 3.6% is spent on support for implementation. The lack of funding to improve the effectiveness of implementation supports may help explain the science-to-service gap', the quality chasm (Fixsen, 2013). Fortunately in recent years more national initiatives are being made emphasizing the importance of implementation.

A now often cited formula for successful uses of evidence-based programs (Fixsen, 2013):

Effective interventions X effective implementation = improved outcome

*Note the formula above involves multiplication; if one of the two is 0, the intended outcomes will not be achieved

If we strive toward a reasonable return on investment (ROI) and aim to treat more people with PD effectively, more funding should be invested in implementation science and best practices. My recommendations are:

1. Simplify interventions: To improve the outcome of implementation we need to simplify our interventions whenever possible. A first step would be to investigate and identify the core efficacious components of treatment programs that are related to positive treatment outcome. This will help determine which program features are necessary to be executed with fidelity and which aspects can be modified to suit the individual patient and specific conditions on location.

2. Identify conditions to successful implementation: It will be helpful to focus research on the necessary conditions and determinants of the successful implementation and maintenance of effective treatment programs. The field of mental health practice can learn from business and medical settings. An example from the medical field is the Tailored Implementation for Chronic Diseases Checklist (TICD). The TICD, based on a systematic review, aimed to develop better methods of tailoring implementation interventions to address barriers and capitalize on enablers to improve the quality of care for chronic diseases (Flottorp et al., 2013). It is striking to observe the amount of overlap between this work and the studies presented in this dissertation.

3. Investigate efficiency of quality assurance systems: Importantly, we should develop and investigate strategies to guarantee, monitor and adjust conditions and determinants of successful implementation and maintenance. For example, it would be interesting to compare treatment outcomes of MBT with versus without the support of the recently developed MBT quality management system.

4. To accelerate and simplify the implementation of quality management systems in the field of evidence-based treatments for personality disorders, the possibility of a generic system should be investigated. The necessary ingredients of such a system and the (therapist, team and organizational) aspects that need to be

monitored to ensure the quality of an evidence-based treatment program are most likely largely universal. In such a generic system, the method specific aspects related to adherence to the specific model can be added-on. This would enhance the generalizability of the quality management system to other existing and new interventions.

Final Consideration

Say you have a treatable disease, diabetes for example, and there is an evidence-based treatment, wouldn't you want that treatment, including not only the medication with all the essential ingredients, but also delivered as intended (with dietary advice, regular monitoring and feedback, etc.)? That does not even closely depict the current situation in (mental) health care in which there are serious deficiencies and large gaps between the care people should receive and the care they actually do receive. We have several effective treatments for personality disorders, MBT, SFT, TFP, STEPPS, DGT … and many patients think they are receiving these. But what do these acronyms actually say in regular practice? There are still many steps to be taken in the mental health care system. Only when evidence based programs are successfully implemented on a larger scale nationwide, and quality is permanently monitored, can we justify the claim of effective treatment in regular practice for BPD.

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Appendices

- Appendix 1: Organization, team and therapist level adherence scale
- Appendix 2: Factsheet kwaliteitssysteem MBT
- Samenvatting (Summary in Dutch)
- Curriculum Vitae
- PhD Portfolio
- Dankwoord (acknowledgements in Dutch)

APPENDIX 1: ORGANIZATION, TEAM AND THERAPIST LEVEL ADHERENCE SCALE

Adherence Quality criteria for MBT-programs (Bales, Hutsebaut & Bateman: 2nd version, June 2017)

The table below offers a list of 20 criteria for assessing the quality of MBT-programs. The criteria can be used as a target for improving quality within the MBT quality system and as an instrument for auditing MBT-programs. Criteria include organizational, team and therapist factors. They can be scored on a 5-point scale:

1: very poor 2: poor 3: adequate 4: good 5: very good

Nr.	Criterion	Level	Score (1-5)	Motivation / Strengths and/or weaknesses / Points of attention
1.	The organization (board) is fully committed to implement the MBT-program as intended, including having basic knowledge about the program, providing financial support, creating support within the whole organization and creating a learning environment	Organization		
2.	The management of the MBT-department fully supports and facilitates the MBT-program, including a (pro)active policy to create a healthy working environment, rapid response to potential problems, understanding burden of work and collaborating closely with program supervisors and MBT experts/consultants.	Organization		
3.	The MBT-program has established a committed and reliable collaboration with relevant stakeholders, including establishing a clear pathway to local crisis services, collaboration with addiction services, and collaboration with major referral centers.	Organization		
4.	The MBT-program has an organized referral process, providing assigned patients efficient inflow and rapid access to treatment.	Organization		

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Nr.	Criterion	Level	Score (1-5)	Motivation / Strengths and/or weaknesses / Points of attention
5.	The MBT department has established a routine monitoring system to inform about quality of treatment, including outcome monitoring, monitoring of parameters of quality, and treatment integrity.	Organization		
6.	All MBT- programs at the unit are clearly structured and provide a phased treatment trajectory. This involves defined maximum treatment duration of the program and structuring of program according to the initial, middle and end phase requirements.	Organization		
7.	Team functioning should be oriented at continuously improving team consistency and continuity within a coherent MBT framework; the organization facilitates this by embedding sufficient time for treatment plan review, supervision and intervision	Organization/ team		
8.	Team members are recruited based upon their proven affinity with the targeted population and upon their skills, competencies and characteristics necessary to treat PD patients from an MBT model. Team members demonstrate willingness to improve their skills and understanding through training and supervision	Organization/ team		
9.	Management/team supervisor and team are responsible for creating and maintaining a well balanced and mentalizing team, characterized by openness and a genuine reflective stance	Organization/ Team		
10.	Individual roles and responsibilities are clearly defined and met within the multidisciplinary team. There is clear and accepted leadership in the team.	Organization/ Team		
11.	Each team has a Program Supervisor, who monitors and supervises clinical processes and enhances a mentalizing environment in the team.	Team		
12.	A clear, coherent MBT framework is present, noticeable by a consistent approach within the therapist and in the team.	Team		
13.	Each patient has an appointed primary clinician, who is responsible for assessment, treatment planning and treatment coordination.	Team		
14.	Medication review and somatic screening are provided by a psychiatrist integrated within the unit (one –team model)	Team		

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Nr.	Criterion	Level	Score (1-5)	Motivation / Strengths and/or weaknesses / Points of attention
15.	Treatment should be goal-focused and guided by a treatment plan, including a dynamic formulation of problems and individualized and collaboratively discussed treatment goals.	Team		
16.	Treatment should be process-oriented, monitored and revised when necessary in regular treatment review meetings with team and patient.	Team		
17.	The team works with a clear crisis management protocol, based on MBT treatment principles, including regular risk assessments, crisis plans and consistent and active crisis management	Team		
18.	The team has an active and outreaching approach to enhance commitment of patients to treatment, including assessment of situational triggers and mental states leading to (possible) drop out, active assessment of actual risks and dealing with commitment problems in accordance with MBT protocols.	Team		
19.	The therapist's attitude reflects their continuous efforts to enhance patients' autonomy and thus own responsibility, including shared decision making, involvement in treatment review and stimulating responsibility taking in crisis	Therapist		
20.	All therapists take a mentalizing stance in contact with patients. They focus on enhancing mentalizing of self, others and relations and they use interventions according to the intervention spectrum.	Therapist		

Legend

1. This criterion refers to the full commitment of the organization/board to implement the MBT-programs as intended, which should be demonstrated by the following aspects:
   a. The board has basic knowledge about the program, the patient population it is intended for and the basic program requirements to organize the program.
   b. The board has basic knowledge about the rationale and working of the MBT quality system and is fully supportive in this.
   c. The board facilitates and supports the clear and undisputed embedding of the program within the whole organization.
   d. The organization creates and enhances a learning environment, accepting the possibility of mistakes and providing learning opportunities.
   e. The board understands and financially supports the need to invest sufficient time on activities that are not primarily patient-related such as training, supervision, treatment review, session reflection, etc.

2. This criterion refers to a responsive and proactive management that collaborates with supervisor and team members to provide a supporting and facilitating working environment. This should be demonstrated by:
    a. The MBT department management is (pro)actively involved in maintaining a professional and supportive working environment, enhancing job satisfaction and preventing staff turnover and/or absences.
    b. The MBT department management is approachable for and responsive to team members and/or Program Supervisor and provides rapid response to potential interferences.
    c. The MBT department management fully understands the specific risks of treating complex and high risk patients and the associated burden of work.
    d. The MBT department management is committed to the MBT model; he/she understands MBT well enough to support procedures that enhance treatment integrity and collaborates with the Program Supervisor and/or team concerning important managerial decisions about the program or personnel.
    e. The organization strives for continuity in managerial approach so that possible reorganizations or change of managers have a minimal impact on the working environment.
3. This criterion refers to the managerial task of embedding the MBT-programs within the chain of health care providers and collaborating in order to provide integrated care. This should be demonstrated by:
    a. Active collaboration with major referral centers.
    b. Bi-annually reviewed contract with local crisis services about the pathway to crisis admission, including agreement on roles and responsibilities.
    c. Annually reviewed contract with specialized services for substance abuse, including agreement on roles and responsibilities.
4. This criterion refers to the organization of a referral and intake procedure that assigns the right patients as efficiently as possible to the MBT-program, which should be demonstrated by:
    a. Established clear pathways for referrals outside and within the organization providing rapid access to the MBT services. Duration between referral and first orientation at MBTdepartment should not exceed four weeks.
    b. Clearly defined inclusion and exclusion criteria for each MBT-program; allowing a transparent assignment process and preventing mis-assignments.
    c. Flexible and rapid flow-through from admission to MBT-department, providing adequate transfer of relevant patient information and prior risk assessments.
    d. Reducing waiting list by providing rapid treatment, intermediate care or collaboratively designing a waiting list treatment in accordance with patient, general doctor and/or current therapist.
5. This criterion refers to providing instruments to monitor quality of treatment through outcome and through assessing processes that may affect outcome. This includes:
    a. Routine Outcome Monitoring (ROM) including assessment of specific MBT treatment outcomes (quarterly) or more frequently using Patient Outcome Database (POD) as part of the therapeutic collaborative process.
    b. Monitoring of parameters of quality (attendance, drop-out, crisis, incidents) (1-2 times a month).
    c. Monitoring of therapist adherence (2-4 times a year).
    d. Monitoring of program requirements (2-4 times a year).
    e. Audits (annually).
6. This criterion refers to the clearly defined structure of the MBT treatment including the phasing of the treatment into an initial, middle and end phase. The basic requirements of each phase are:
    a. Basic requirements for the initial phase include:assessment of the patients mentalizing capacities, psycho-education (MBT-I), stabilizing social and behavioral problems, crisis planning and case management to stabilize financial and social problems, collaboratively formulating a treatment plan and agreeing outcome monitoring.
    b. Basic requirements for the main phase include:goal-oriented treatment, main focus stimulating more robust mentalizing ability within attachment relationships, treatment monitoring and review, multidisciplinary coordination (one-team model).
    c. Basic requirements for the end phase include orientation towards termination of treatment and a tailored follow-up program focusing on further re-integration and relapse prevention (maintaining achieved gains).
    d. Treatment duration is clearly defined. The main phase of treatment should not exceed 18 months.
    e. Treatment (dis)continuation is guided by explicit criteria based upon outcome monitoring and treatment review by team and patient.
7. This criterion refers to the importance of maintaining consistency and continuity within a coherent MBT framework. This should be the focus of team functioning and should be facilitated through the organization of team meetings. These include:
    a. The team meets once a week for treatment review.
    b. The team meets at least twice a month for team supervision.
    c. The team meets at least once a month for intervision.
    d. The Program Supervisor attends these team meetings.
    e. Team members are able to contact each other easily outside these team moments to discuss interventions (during working hours).

8. This criterion refers to the selection of competent personnel that have proven affinity to working with the target population and willingness to continuously improve their knowledge, skills and competencies in order to create a coherent MBT-team.
    a. Team leader has excellent communication and leadership skills and the competence to build teams and to maintain a healthy, professional working environment effectively. He/she must maintain a constructive alliance and sufficient political influence within higher levels of the organization.
    b. Therapists are active, responsive, flexible and effective team players. Therapists should be neither too anxious not too avoidant, more proactive than reactive, and should be able to maintain mentalizing when arousal is high (see quality manual for further criteria staff selection).
9. This criterion refers to the continuous efforts towards developing and maintaining a secure, open and cohesive team, creating and maintaining a mentalizing environment enhancing team functioning and multidisciplinary collaboration. This is demonstrated through the following requirements:
    a. The team also consists of therapists whom are not directly involved in the treatment of specific patients, for ex. by providing two treatment groups.
    b. A team consists ideally of 5-9 therapists (range 4-12).
    c. The team should be well enough balanced to prevent the mentalizing process from getting stuck in a team. By selecting team member who react differently when losing their mentalizing abilities, signs of non-mentalizing among team members can be more easily detected by others.
    d. The team signals loss of own mentalizing, help each other restore mentalizing and, if still insufficiently helpful, consult the supervisor to restore mentalizing and guide treatment decisions.
    e. Each team is supervised by a Program Supervisor, whom is not directly involved in treatment of patients from that particular program. The program supervisor's focus is on monitoring clinical process and enhancing team mentalizing and reinstalling when lost (preventing destructive team processes).
    f. The team meets 1-2 times a month for intervision.
10. This criterion refers to importance of creating a safe, predictable environment for therapists and patients;.
    a. Individual roles and responsibilities are clearly defined within a multi-disciplinary team coordination. It should be clear for each team member what his/her responsibilities are and what the roles and responsibilities are of the other team members.
    b. Team members help each other and address each other when responsibilities are not met.
    c. Team leadership:the team leader (program supervisor, coordinator or manager needs to be clearly defined) plays a crucial role in implementing and delivering a coherent and consistent MBT program and in managing the group of therapists.
11. This criterion implies that team functioning should be monitored and supervised by a Program Supervisor. The Program Supervisor:
    a. should not be involved in the treatment of patients of that particular program;.
    b. works sufficient time for the department, to ensure his/her availability in team meetings (recommended is at least 16-24 hours/week);.
    c. helps the team by supervising clinical processes and enhancing mentalizing within the team;.
    d. collaborates closely with the manager (also see 2 d).
12. This criterion refers to the importance of a coherent framework; patients with PD are sensitive to inconsistencies, possibly leading to destabilization. A coherent framework with focused, clear, consistently applied interventions by all team members are believed to enhance treatment effectiveness. For therapists to be consistent, they all need to understand basis of MBT and integrate this understanding in their interventions. Requirements:
    a. All team members demonstrate willingness to work according to the MBT model.
    b. All team members are Level A MBT therapists (Nl:MBT basistherapeut).
    c. A minimum of 1 therapist per treatment program is a level B practitioner level therapist (NL:MBT therapeut).
    d. The program supervisor is an MBT supervisor or at minimum a Level B- practitioner therapist.
    e. The psychiatrist in the team has followed the MBT basic training course and had a minimum of 6 supervision sessions.
13. This criterion refers to the need for clear leadership in treatment coordination. Each patient should have an appointed primary clinician whom is responsible for assessment, treatment planning and treatment coordination. Additional requirements:
    a. The primary clinician is preferably a level B practitioner.
    b. The primary clinician should work at least 24 hours for the department.
    c. The case load of primary clinicians should not exceed 24 patients, including low-frequent follow-up patients (not more than 18 should be in an active treatment trajectory).

14. This criterion refers to the role of the psychiatrist as integrated part of the multidisciplinary team. This includes:
    a. The psychiatrist responsible for medication review is not in the same time a patient's primary clinician.
    b. The psychiatrist is responsible for physical health screening at the beginning of treatment.
    c. The psychiatrist is committed to the MBT model and will prescribe medication in consultation with the primary clinician in treatment review meeting.
15. This criterion refers to the need for a goal-focused treatment approach. This approach should be demonstrated by the treatment plan. This includes:
    a. Each patient should have a signed (preliminary version of a) individualized treatment plan within six weeks after start of treatment.
    b. The treatment plan should be collaboratively designed with patient and relatives.
    c. The treatment plan should consist of a dynamic formulation of problems and individualized, collaboratively discussed goals.
    d. All concerned team members should know and use each patient's treatment plan to focus their interventions.
    e. Treatment plans are leading in monitoring treatment progress during treatment review meetings.
    f. Treatment plans should be updated regularly.
16. This criterion refers to importance of evaluating treatment progress and keeping a process-oriented focus throughout treatment. Such an approach includes the following aspects:
    a. Treatment progress should be reviewed at least every six weeks within active treatment team.
    b. Treatment review occurs at least quarterly in the presence of patient, all concerned therapists (also from other facilities) and (in some instances) relatives.
    c. Routine outcome data are integrated in treatment review at least twice a year to assess treatment progress and inform decisions on continuation or cessation of treatment.
17. This criterion refers to the necessity of a clear crisis management protocol, based upon MBT principles. This requires:
    a. Assessment of (self-) destructive symptoms and formulation in treatment plan.
    b. Availability of an individualized crisis plan for all patients with (self-)destructive behavior within four weeks after start of treatment (based on mentalizing functional analysis).
    c. Discussion and sharing of crisis plan with relevant parties and availability for all team members in cases of crisis management.
    d. Active assessment of risks each treatment day, based upon risk factors of crisis, including individualized risk factors and mental states as formulated in crisis plan. When risk is heightened, primary clinician sets out active approach according to treatment plan and protocol.
    e. Crises during working hours should be dealt with by the team according to crisis protocols; out reaching work is done when necessary.
    f. Agreements about crisis management outside working hours are clear for patients, relatives and crisis intervention teams.
18. This criterion refers to an (pro)active approach towards commitment issues. The team should demonstrate the following:
    a. Early assessment of situational triggers and mental states possibly leading to commitment problems. These are included in the treatment plan.
    b. Assessment of risk of drop out (at least weekly). When risk is heightened, primary clinician sets out active approach according to treatment plan and protocol.
    c. Handling commitment problems in accordance with MBT protocols.
19. This criterion refers to a basic attitude of each therapist to stimulate autonomy and taking of responsibility by patients. MBT is by definition collaborative. This includes among others:
    a. Stimulating shared decision making regarding treatment program, treatment goals, crisis planning etc.
    b. Active involvement of patients and relatives in treatment review.
    c. Stimulating patients own responsibility before, during, and after crisis.
20. This criterion refers to each therapist's focus on enhancing mentalizing, independent of the particular treatment modality (individual, group, verbal, art therapy). Therapists:
    a. Record individual and group sessions on a quarterly base.
    b. Should demonstrate at least adequate adherence on the MBT Adherence Scale.

Factsheet
Kwaliteitssysteem MBT

"Een kwaliteitssysteem helpt om bewezen effectieve modellen op zo'n manier te implementeren dat de (veronderstelde) werkzame mechanismen maximaal benut worden."

Het kwaliteitssysteem voor de behandelmethode Mentalization Based Treatment (MBT) biedt ondersteuning bij het veilig implementeren van nieuwe MBT-programma's en bij het borgen van de kwaliteit van lopende programma's. Het is ontwikkeld om de doelmatigheid van behandelen te vergroten door actief te sturen op kwaliteitsverbetering.

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Noodzaak voor een Kwaliteitssysteem MBT

Uit een recente studie blijkt dat in Nederland slechts 1 op de 5 patiënten met een borderline persoonlijkheidsstoornis die zich binnen de geestelijke gezondheidszorg (ggz) aanmeldt voor hulp, één of andere vorm van psychotherapie krijgt. Het aantal patiënten dat een kwalitatieve bewezen effectieve vorm van psychotherapie krijgt, is niet bekend, maar ligt ongetwijfeld nog heel wat lager. De wetenschappelijk onderbouwde aanbevelingen vanuit de diverse richtlijnen in de ggz vinden slechts erg moeizaam hun weg naar de praktijk. Bovendien is het bekend dat de implementatie van bewezen effectieve behandelmodellen in de praktijk vaak erg afwijkt van de opzet van de oorspronkelijk onderzochte programma's. Dit heeft gevolgen voor de behandelresultaten. Deze zijn daardoor aanzienlijk minder effectief dan in onderzoekscondities. Wanneer werkzame behandelmodellen beter in de praktijk geïmplementeerd worden dan is het zeer aannemelijk dat er een behoorlijke winst op het gebied van doelmatigheid van behandelen behaald wordt. Een kwaliteitssysteem helpt om de bewezen effectieve modellen op zo'n manier te implementeren dat de (veronderstelde) werkzame mechanismen maximaal benut worden.

Diverse studies binnen de somatische gezondheidszorg laten zien dat het werken met kwaliteitssystemen een groot verschil kan maken in de kwaliteit van zorgverlening. Zo blijken 9,2% van de somatische patiënten onbedoelde schade op te lopen tijdens een verblijf in het ziekenhuis. Hiervan wordt 40% als vermijdbaar ingeschat. Professionals blijken onvoldoende in staat om hun eigen handelen te monitoren en de kwaliteit van zorg die men levert in te schatten.
Toepassing van (eenvoudige) kwaliteitssystemen in de somatische gezondheidszorg leidt tot een zeer significante daling van medische fouten en ongewenste schade. Een vaak gegeven voorbeeld is de handhygiëne: elke arts kent het belang van een goede handhygiëne. Zonder controle volgt slechts één op drie de bekende voorschriften rondom handen wassen uit. Een eenvoudige checklist en monitoringssysteem blijkt het aantal infecties tot nul te reduceren.

"Ervaringen met het kwaliteitssysteem van MST hebben aangetoond dat een kwaliteitssysteem een belangrijke invloed heeft op de behandelintegriteit van behandelaars en dus ook op de behandeluitkomsten."

Toepassing van kwaliteitssystemen binnen de geestelijke gezondheidszorg staat nog in de kinderschoenen. Ervaringen met het kwaliteitssysteem van Multisystemic Therapy (MST) hebben echter aangetoond dat een kwaliteitssysteem een belangrijke invloed heeft op de behandelintegriteit van behandelaars en dus ook op de behandeluitkomsten. De verwachting is dat dit nog sterker geldt voor de behandeling van persoonlijkheidsstoornissen, waar het risico op iatrogene beschadiging traditioneel hoger is.

Het kwaliteitssysteem MBT

Het kwaliteitssysteem voor MBT heeft de volgende doelen:

- Bieden van ondersteuning bij het opzetten en implementeren van nieuwe MBT-programma's in de praktijk en het borgen van de kwaliteit van lopende MBT-programma's
- Opleiden en borgen van kennis en competenties van nieuwe en al in programma's werkende MBT-therapeuten;
- Monitoren, feedback geven en bijsturen op de werkzame mechanismen van de MBT behandeling;
- Monitoren, feedback geven en bijsturen op organisatorische en teamvoorwaarden om tot een optimaal doelmatige behandeling te komen;
- Voorkomen van iatrogene schade bij patiënten (schade door toedoen van de behandeling) door het identificeren van potentieel schadelijke processen binnen een behandeling.

Het kwaliteitssysteem bestaat daarom uit de volgende onderdelen:

- Kwaliteitshandleiding: beschrijft op gedetailleerde wijze hoe de belangrijkste behandelprincipes en klinische processen geborgd kunnen worden door kwaliteitsbewaking op organisatie-, team-, en behandelaarsniveau;
- Ondersteuningsaanbod: omvat o.a. een uitgebreid aanbod van gedetailleerde protocollen die de uitvoering van specifieke programmaonderdelen en hanteringswijzen voor veel voorkomende klinische incidenten beschrijven;
- Opleiding: een aanbod van basis- en specialistische cursussen voor individuele behandelaars en teams, gericht op blijvende vervolmaking;
- Supervisiestructuur: omvat een uitgewerkte visie op supervisie en consultatie om de uitvoering van de behandeling te borgen en potentiële bedreigingen tijdig te detecteren, zodat de implementatie en uitvoering veilig en kwalitatief goed verloopt.
- Monitoringinstrumenten: omvat een reeks instrumenten, zoals checklists, auditrapporten en lijsten voor het meten van behandelintegriteit van teams en behandelaars. Op basis hiervan wordt de kwaliteit van behandeling voortdurend gemonitord en bijgestuurd.

Rendement van MBT

Na een MBT-behandeling worden aanzienlijke verbeteringen geconstateerd op het vlak van vermindering van psychische klachten, verbeteren van zelfbeeld en relationeel functioneren, afname van zelfdestructief gedrag en suïcidaliteit, en beter maatschappelijk functioneren. Uit diverse studies blijkt dat deze effecten niet alleen standhouden, maar zich zelfs nog doorzetten na de intensieve behandelperiode. Dat alles zorgt ervoor dat een behandeling al snel een positief rendement heeft in termen van maatschappelijke kosten.

Expertisecentrum MBT Nederland

Het kwaliteitssysteem MBT is ontwikkeld door het expertisecentrum MBT Nederland in samenwerking met A. Bateman. MBT Nederland zet zich in voor de kwaliteit van Mentalization Based Treatment in Nederland. MBT Nederland is partner in het wereldwijde netwerk van het Anna Freud Centre in Londen, waaraan de grondleggers van de Mentalization-Based Treatment (MBT) Anthony Bateman en Peter Fonagy verbonden zijn.

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SAMENVATTING (SUMMARY IN DUTCH)

Dit proefschrift representeert een lange termijn ontwikkelproces dat in 2004 begonnen is toen Mentalization-Based Therapy (MBT) voor het eerst in Nederland werd geïmplementeerd. Dit proces werd gedreven door de ambitie om kwalitatief hoogwaardige evidence-based interventies voor patiënten met een borderline persoonlijkheidsstoornis (BPD) te implementeren.

Het **algemene doel** van dit proefschrift was om de implementatie van Mentalization-Based Therapy (MBT) in Nederland te onderzoeken. De volgende **onderzoeksvragen** kwamen aan bod:

1. Kan MBT effectief overgedragen worden naar Nederland (transferability)
    a. Heeft deeltijd MBT vergelijkbaar gunstige behandeluitkomsten zoals in de originele Britse onderzoeken ? (Hoofdstuk 4)
    b. Hoe verhoudt de effectiviteit van deeltijd MBT zich tot andere gespecialiseerde psychotherapieën? (Hoofdstuk 5)

2. Wat zijn belangrijke belemmerende en faciliterende factoren voor een succesvolle implementatie van MBT?
    a. Welke lessen kunnen getrokken worden uit een problematische implementatie van MBT? (Hoofdstuk 6)
    b. Hoe succesvol is de implementatie van MBT in Nederland? Wat zijn belangrijke factoren die van invloed zijn op het implementatietraject? (Hoofdstuk 7)
    c. Wat is de impact van grote organisatorische veranderingen op de bestendigheid (sustainability) van de implementatie van MBT? (Hoofdstuk 8)

Hieronder worden de belangrijkste bevindingen ter beantwoording van de onderzoeksvragen uit de twee hoofdstukken en vijf studies van dit proefschrift samengevat.

Deel A van het proefschrift bestaat uit twee hoofdstukken waarin MBT wordt geïntroduceerd. ***Hoofdstuk 2***, 'Mentalization Based Treatment in Partial Hospitalization Settings', beschrijft een aantal organisatorische aspecten van het implementeren van MBT-programma's. De inhoud van dit hoofdstuk gaat over hoe de behandeling het best te organiseren om de optimale context te creëren waarbinnen mentaliseren bevorderende interventies werkzaam kunnen zijn. In ***hoofdstuk 3***, 'Discovering how the mind works: the journey of a patient in Mentalization-based Treatment', worden het MBT-behandeltraject en de focus van de verschillende fasen van MBT beschreven. De focus van de fasen verschuift in eerste instantie van het betrekken van de patiënt

bij de behandeling (commitment) en crisismanagement tot het werken binnen de therapeutische relatie. In latere fasen van de behandeling verschuift de focus geleidelijk meer richting reïntegratie in de samenleving en uiteindelijk richting afscheid en beëindiging van de behandeling. Typische MBT-concepten en interventies worden toegelicht naar aanleiding van een casus. Dit kan therapeuten helpen de algemene MBT-principes te vertalen naar de klinische praktijk.

Deel B bevat twee studies naar de effectiviteit van MBT in Nederland. Oorspronkelijk kwam de evidentie voor MBT als een bewezen (kosten)effectieve behandeling voor patiënten met ernstige borderline persoonlijkheidsstoornis (BPD) en een hoge mate van psychiatrische comorbiditeit uit het Verenigd Koninkrijk (VK). ***Hoofdstuk 4*** beschrijft een onderzoek naar de toepasbaarheid en behandelresultaten van een 18 maands deeltijdbehandeling MBT in Nederland. Dit gebeurt aan de hand van een prospectief cohortonderzoek waarin 45 Nederlandse patiënten met ernstige BPS en een hoge mate van comorbiditeit geïncludeerd zijn. Positieve resultaten zijn gevonden met betrekking tot alle behandeldoelen. Er zijn verschillende conclusies getrokken gerelateerd aan de behandeldoelen. Ten eerste, aangezien slechts 15,5% van de patiënten de behandeling voortijdig verlieten (8,9% drop-outs en 6,6% push-outs), was het redelijk om te concluderen dat de overgrote meerderheid van de patiënten effectief waren gecommitteerd aan de behandeling. Ten tweede zijn er binnen 18 maanden significante verbeteringen gevonden op psychische en lichamelijke symptomen, persoonlijkheidsfunctioneren en sociaal en interpersoonlijk functioneren, meestal met grote tot zeer grote effectsizes. Ten derde vertoonden alle patiënten een significante afname in zelfverwondend en suïcidaal gedag. Ten slotte verminderde het aantal aanvullende behandelingen die patiënten nodig hadden na de behandeling. Dit was het eerste onderzoek dat aantoonde dat deeltijd MBT effectief kon worden geïmplementeerd door een onafhankelijk instituut in een naturalistische setting buiten het Verenigd Koninkrijk. Dit versterkte het vertrouwen dat MBT een effectieve behandeling is voor patiënten met een ernstige BPS.

De studie in ***hoofdstuk 5*** breidt de evidentie van de lange-termijn effectiviteit van deeltijd MBT uit door de behandelresultaten van een zeer inclusieve groep van 29 ernstige BPS-patiënten te vergelijken met de resultaten van 'andere gespecialiseerde psychotherapeutische behandelingen ' (OPT) bij een zorgvuldig gematchte controlegroep. Op basis van de propensity score hebben we binnen de OPT groep van in totaal 175 patiënten de best matchende BPS cliënten geselecteerd. Dit leverde 29 MBT en 29 OPT-patiënten op voor directe vergelijking. Deze groepen hebben we vergeleken

in termen van hun psychiatrische symptomen en persoonlijkheidsfunctioneren op baseline, na 18 maanden (einde behandeling) en na 36 maanden (maximale termijn einde onderhoudsfase).

Patiënten in de MBT-groep verbeterden significant tijdens de behandeling en bleven verbeteren tijdens de follow-up periode van 18 maanden. Psychiatrische symptomen waren verminderd na 18 maanden behandeling en verminderden verder tijdens de follow-up periode. Er waren grote verbeteringen in het persoonlijkheidsfunctioneren op alle vijf hogere orde-domeinen (zelfcontrole, identiteitsintegratie, verantwoordelijkheid, sociale concordantie en relationele capaciteiten). Hoewel de behandel uitkomst in OPT ook gunstig was, waren de effectsizes kleiner en gaf de vergelijking tussen MBT en OPT een superieure uitkomst bij MBT-patiënten op alle uitkomstvariabelen, behalve voor relationeel functioneren.

Concluderend, dit is de tweede studie van dit proefschrift die de (lange termijn) effectiviteit van deeltijd MBT bij een ernstige groep van BPS-patiënten documenteert. Sterke, multidimensionale (omvattende zowel symptomen als persoonlijkheidsfunctioneren) effecten werden waargenomen. Deze effecten waren consequent groter dan die waargenomen in een zorgvuldig gecontroleerde groep van BPS-patiënten die andere psychotherapieën hadden gekregen aangeboden vanuit de specialistische zorg in Nederland. De effecten moeten evenwel met de nodige voorzichtigheid worden geïnterpreteerd vanwege het niet-gerandomiseerde design, evenals de variatie in behandeldoseringen.

D**eel C** bevat drie studies waarin een begin wordt gemaakt met het bestuderen van sleutelfactoren bij de implementatie van MBT in Nederland. Onderzoek naar problemen bij het implementeren van complexe nieuwe psychotherapeutische interventies is schaars in de psychotherapie literatuur. In ***hoofdstuk 6*** wordt een case study gepresenteerd van het problematische implementatieproces van klinische MBT voor adolescenten, een nieuwe therapie voor 14- tot 18-jarige jongeren met ernstige persoonlijkheidsstoornissen. In dit artikel wordt beargumenteerd dat de escalerende implementatieproblemen het best kunnen worden begrepen vanuit de interactie van drie niveaus van functioneren: organisatie, team en therapeut. Op organisatorisch niveau werden het gebrek aan draagvlak binnen de instelling en de tekortkomingen in het implementatieplan, gecombineerd met de grote uitdagingen als gevolg van het innovatieniveau, beschouwd als de belangrijkste barrières voor een succesvolle implementatie. Op teamniveau waren belangrijke bepalende factoren het gebrek aan leiderschap en moeilijkheden bij het aanbieden van een consistente aanpak en het handhaven van een constructieve sfeer in het team en een mentaliserende houding.

Op therapeutniveau droegen het gebrek aan concrete ondersteunende protocollen om dagelijkse klinische problemen aan te pakken en het gebrek aan bekendheid met het model 'op de werkvloer' verder bij aan de implementatieproblemen. Samen hebben deze factoren geleid tot toenemende onmacht en frustratie bij het personeel, hetgeen interacteerde met toenemende spanning en wantrouwen in de patiëntengroep geassocieerd met de ervaren onbetrouwbaarheid. Verhoogd tumult binnen de patiëntgroep en uitputting van het personeel leidden uiteindelijk tot beëindiging van het klinische behandelprogramma, hetgeen aanzienlijke financiële- en reputatieschade voor de organisatie als gevolg had.

De analyse van deze case study bracht belangrijke kwesties aan het licht. Er was heel weinig bekend over het succes of falen van de implementatie van evidence-based behandelingen voor BPS in de dagelijkse praktijk. De studie beschreven in ***hoofdstuk 7*** had als doel onderzoek te doen naar het succes of falen van nieuw gestarte MBT programma's en om de belemmerende en faciliterende factoren te verkennen. De implementatietrajecten van zeven verschillende MBT-programma's in zes GGZ instellingen in Nederland werden bestudeerd in een meervoudige casestudy waarin het onderzoeksdesign zowel kwalitatief als kwantitatief van aard was. Semigestructureerde interviewgegevens werden verzameld bij de manager die formeel verantwoordelijk was voor de afdeling en de hoofdtherapeut van het MBT-team. Narratieve reconstructies van elk interview werden beoordeeld door 12 onafhankelijke experts. De resultaten getuigen van de complexe aard van het implementeren van evidence-based psychotherapieprogramma's in reguliere GGZ instellingen. De bevindingen wezen uit dat de implementatie van evidence-based MBT-programma's in Nederland geassocieerd is met gemengde uitkomsten. Implementatie was succesvol in twee programma's (29%), de uitkomsten waren gemengd in twee andere programma's (29%) en de implementatie mislukte in de drie resterende programma's (43%) wat resulteerde in het staken van die programma's. Verder suggereren de bevindingen dat in alle gevallen het verloop van het implementatietraject beïnvloed werd door meerdere factoren op organisatie-, team- en therapeutniveau. Hoewel elk implementatietraject een eigen uniek verhaal is met lokale problemen en specifieke teamculturen, leveren de resultaten aanwijzingen voor enkele meer generieke barrières en faciliterende factoren over alle implementatietrajecten heen. Faciliterende factoren omvatten de aanwezigheid van organisatorisch draagvlak en ondersteuning, degelijk financieel management, sterk en consistent leiderschap, zeer gestructureerde projectmatige implementatie, managen van (negatieve) teamprocessen, zorgvuldige selectie van therapeuten, voldoende expertise en trainingsmogelijkheden, terwijl de afwezigheid van deze elementen belemmeringen kunnen zijn voor succesvolle implementatie.

Een ander belangrijk punt bij de implementatie van evidence-based behandelingsprogramma's is de verwaarloosde kwestie van de stabiliteit en bestendigheid (sustainability) op langer termijn. Zelfs wanneer een programma op de juiste manier is geïmplementeerd, inclusief effectieve behandelresultaten in de implementatiefase, blijft het onduidelijk hoe dit succes op de lange termijn kan worden behouden. In ***hoofdstuk 8*** wordt de invloed van organisatorische veranderingen op de behandeleffectiviteit van een deeltijd MBT (MBT-DH) verkend. Een opeenvolgende serie BPD-patiënten werden verdeeld in een pre-reorganisatie cohort (PRE-REORG; n=30) en een cohort tijdens de reorganisatie (REORG; n=16). Psychiatrische symptomen en persoonlijkheidsfunctioneren werden vóór de behandeling en na 18 en 36 maanden follow-up vergeleken met behulp van multilevel modellering. De effectsizes in het PRE-REORG-cohort waren ongeveer tweemaal zo groot na 18 maanden en drie keer zo groot na 36 maanden in vergelijking tot de effectsizes in het REORG-cohort. De resultaten van deze studie suggereren dat, zelfs wanneer MBT met succes wordt geïmplementeerd, grote organisatorische veranderingen een aanzienlijke invloed kunnen hebben op de effectiviteit van een behandeling. Er werd vastgesteld dat veranderingen in de organisatie negatief samenhingen met de trouw (adherence) aan het behandelmodel op organisatorisch, team- en therapeutniveau, wat op zijn beurt weer verband hield met een afname van de effectiviteit van de behandeling. Voor zover ons bekend, was dit een van de eerste studies op het gebied van persoonlijkheidsstoornissen over de bestendigheid van de implementatie van evidence-based behandelingsprogramma's voor persoonlijkheidsstoornissen. Moeilijkheden om adherent aan het model te blijven en goede behandelresultaten te behouden binnen een veranderende organisatorische context werden belicht.

In ***hoofdstuk 9*** worden de belangrijkste bevindingen samengevat (zie hierboven) en in ***hoofdstuk 10*** worden de onderzoeksvragen beantwoord, methodologische sterktes en beperkingen weergegeven gevolgd door een discussie. Het hoofdstuk eindigt met aanbevelingen voor beleidsmakers en voor toekomstig onderzoek.

Conclusies

In *antwoord op de eerste onderzoeksvraag* over de overdraagbaarheid van MBT in Nederland kan uit de eerste twee studies in dit proefschrift geconcludeerd worden dat deeltijd MBT, dat werd ontwikkeld en onderzocht in het Verenigd Koninkrijk, effectief kan worden geïmplementeerd door een onafhankelijk instituut in een naturalistische setting buiten het UK. De behandelresultaten waren (minstens) gelijk aan de oorspronkelijke UK-resultaten. Verder is de evidentie van de lange-termijn effectiviteit

uitgebreid door te laten zien dat de lange termijn effectiviteit van MBT verder gaat dan de benchmark die werd geboden door andere gespecialiseerde psychotherapeutische behandelingen voor BPS.

Concluderend: MBT kan worden overgedragen naar de Nederlandse context met behoud van de gunstige behandelresultaten. MBT lijkt een van de veelbelovende behandelingen voor BPS te zijn.

De bevindingen in *antwoord op de tweede onderzoeksvraag* wezen uit dat de implementatie van MBT-programma's in Nederland op zijn best geassocieerd wordt met gemengde uitkomsten. Bovendien suggereren de resultaten dat de uitvoering in alle gevallen werd beïnvloed door meerdere factoren op organisatie-, team- en therapeutniveau. Hoewel elk implementatietraject een eigen uniek verhaal was, met lokale problemen en specifieke teamculturen, wezen de resultaten in de richting van enkele meer algemene barrières en faciliterende factoren in alle implementatietrajecten. Facilitators voor succesvolle implementatie zijn de aanwezigheid van organisatorische ondersteuning, degelijk financieel management, sterk en consistent leiderschap, zeer gestructureerde projectmatige implementatie, het beheren van (negatieve) teamprocessen, teamsamenstelling, selectie van de therapeut en competenties, voldoende expertise, structureel toezicht en trainingsmogelijkheden.

Concluderend: het positieve antwoord op de eerste onderzoeksvraag over de overdraagbaarheid van MBT wordt in perspectief geplaatst door het antwoord op de tweede vraag: ja, MBT kan worden overgedragen, maar dit is een complex proces en - zelfs wanneer het met succes is voltooid - blijft het proces kwetsbaar voor verstoringen op organisatorisch, team- en therapeutniveau.

CURRICULUM VITAE

Dawn Lee Bales was born on December 16th, 1965 in Milwaukee, Wisconsin, USA. She graduated from high school in Seattle, Washington, USA and permanently immigrated to the Netherlands in 1984. Dawn first became interested in mental illness and psychotherapy in her senior year of high school. This interest evolved into her passion to ensure that more patients who have personality disorders receive high quality treatment and her work illustrates her commitment therein.

Dawn's career has academic roots starting with her psychology studies in 1985 at the University of Tilburg, where she received her first master's degree in Clinical Psychology in 1989 and second in Health Psychology in 1990. From 1989-1990, she worked as an assistant to Prof. Wim de Moor (clinical psychology) at Tilburg University and as a research assistant to Prof. Stan Maes (health psychology) at the Leiden University. Subsequently, from 1991-1998, she completed her post graduate training to become a registered psychotherapist and clinical psychologist (GZ - en klinisch psycholoog).

After working as a psychologist in different mental healthcare organizations, her first specialization in crisis management and Borderline Personality Disorder (BPD) was in the Dutch military service where she worked as a clinical psychologist from 1992 to 1997. In 1995, she was deployed by the Royal Netherlands Army to the former Yugoslavia to work as a clinical psychologist for the Dutch soldiers (UN soldiers, ECMM, UNMOs, etc.) in Bosnia. In 1997, Dawn was hired at St. Elizabeth Hospital in Tilburg to help start up a psychiatric unit and a day hospital program for psychiatric patients with a co-morbid personality disorder.

This dissertation started in 2008 and represents a long-term developmental process beginning in 2004, when Dawn was hired at the Viersprong (a Dutch treatment center offering specialized outpatient, day hospital services, and inpatient treatment for personality disorders) to lead the first implementation of Mentalization-Based Treatment in the Netherlands. She was supervised by Prof. Anthony Bateman, and appointed as MBT trainer and supervisor in the Netherlands. Dawn has had an active role in the development and implementation of multiple adaptations for new populations (i.e. MBT for adolescents (MBT-A), MBT Early, MBT for parents (MBT-P)) and currently works part-time in a MBT-A program.

Over the past seven (7) years, Dawn has set up the training and dissemination center MBT Netherlands (MBT NL). Together with Anthony Bateman and Joost Hutsebaut she initiated and developed a system for MBT quality assurance. Furthermore, she has an active role as MBT specialist in conducting a series of treatment studies at the Viersprong Institute for Studies on Personality Disorders (VISPD). She has been speaking (inter) nationally on both BPD as well as MBT since 2005 and shares her knowledge through her (inter)national publications. Dawn is a member of the MBT Steering group (Ana Freud Centre) and MBT Research Consortium in the Netherlands.

She has three terrific daughters of whom she's very proud: Eva (1996), Isabel (1998) and Pip (Sophia, 2001) and three stinky dogs that are less well-mannered☺. She enjoys painting and traveling in her spare time.

PhD PORTFOLIO

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Relevant courses

2004 tot heden

- Cursus Mentalization-based treatment, AFC in Engeland
- Specialistische cursus Mentalization-based treatment, AFC in Engeland
- Supervisoren cursus Mentalization-based treatment, AFC in Engeland
- Training MBT-F, AFC in Engeland
- Incompany training bij Bateman in Engeland
- 7 jaar supervisie van A. Bateman in Engeland

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Managementtraining 'Persoonlijk Leiderschap', door Pentascope

Publications in international scientific journals

Bales, D., Beek, N. v., Smits, M., Willemsen, S., Busschbach, J.J.V. van, Verheul, R. et al. (2012). Treatment outcome of 18-months, day hospital Mentalization-Based Treatment (MBT) in patients with severe borderline personality disorder in the Netherlands, Journal *of Personality Disorders*, 26(4): 568-582.

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Teaching activities

2005 to present
Developed,, implemented and protocolized MBT training courses in collaboration with Ana Freud Centre; average of 6 hours a week.

MBT training Theory and Practice, Advanced course MBT, Specialized follow-up course MBT, MBT supervisor trajectory, Crisismanagement in MBT, MBT and sociotherapy, MBT-A, MBT and trauma, etc.

Audits and boosters in the context of quality system for MBT programs, supervision, implementation consultation, etc.

2012 & 2014 Lead of organization (MBTNL) of 2 Internationaal MBT Congresses in collaboration with Viersprong Academy

International presentations

2006 June	7th European ISSPD Congress of the International Society for the Study of Personality Disorders, Prague. Tsjechië.
2007 September	Xth International ISSPD Congress 'Development and Changeability of Personality Disorders: New Frontiers in Research and Practice', Den Haag, The Netherlands.
2008 April	16th European Congress of Psychiatry, Symposium: mentalizing-based therapy – summary of the research data. Nice, France.
2009 April	International Congress World Psychiatric Association Treatments in psychiatry: a new update, Mentalization based therapy (MBT): A summary of the evidence and new developments, Florence, Italy.
2009 August	11th ISSPD congress, Mentalization-based Therapy (MBT): A summary of the evidence and new developments, Symposium with Anthony Bateman. New York, USA.
2010 July	1st International Congress on Borderline Personality Disorder, Berliner Congress Center. Berlin, Germany.
2012 April	International congress Expertisecentrum MBT Nederland, Mentalization based treatment (MBT): state of the art 2012/future directions. Haarlem, The Netherlands.
2012 May	APA meeting Philadelphia, Effectiveness of MBT: an independent replication study and other evidence from the Netherlands (in symposium Peter Fonagy and Anthony Bateman). Philadelphia, USA.
2012 September	2nd International Congress on Borderline Personality Disorder holding by the European Society for the Study of Personality Disorders (ESSPD). Amsterdam, The Netherlands.
2013 November	1st International Congress of MBT at UCL. Successful implementation of MBT and the development of a MBT quality system. London, Great Britain.
2014 June	2nd International Congress of MBT in Haarlem, the Netherlands.
2014 October	3rd International Congress on BPD and Allied Disorders. CME Workshop of MBT and presentation 'Implementation of a quality assurance system for mentalization-based treatment: An illustration and report of 2 years of experiences'.
2016 Februari	3rd International Congress of MBT. Geneve, Switzerland.
2016 September	4th International Congress on BPD and Allied Disorders. Vienna, Austria.

2017 July	17th International Congress of ESCAP 2017, Geneva, Switzerland.
2017 December	4th International Conference Mentalization-Based Treatment - Advances in MBT. London, United Kingdom.

National presentations (selection)

2006 November	Benecke, 'Gehechtheid, mentaliseren en psychopathologie bij volwassenen en kinderen'. Amsterdam.
2006 November	Symposium 'Nieuwe psychoanalytische behandelingen voor persoonlijkheidsstoornissen'. Psychoanalytische Kern. Reinier van Arkel. Den Bosch.
2006 November	Studiedag verborgen gebreken NVGP. workshop: Het onvermogen tot mentaliseren: een tijdelijk gebrek. Breukelen.
2007 January	'Werkzame factoren in de behandeling van borderline patiënten met MBT'. Altrecht, locatie Den Dolder.
2007 May	Benecke. 'Gehechtheid, mentaliseren en psychopathologie bij volwassenen en kinderen', Amersfoort.
2007 November	Benecke. Masterclass Valideren - mentaliseren - mindfulness.
2007 October	Workshop: Lang leve de Deeltijd, congres 25 jaar VMPD.
2007 October	Presentatie conferentie GGZ Noord-Holland, Alkmaar/Heiloo. October 2007 Topklinische zorg in de GGZ. Topklinisch in de behandelpraktijk bij volwassenen.
2007 November	Lezing Mentalization Based Treatment in de Viersprong: doelgroep, behandeling en resultaten, NPI Amsterdam.
2008 April	Voorjaarscongres Nederlandse Vereniging voor Psychiatrie. Symposium 'veilige gehechtheid en mentaliseren: preventie van psychopathologie'. Maastricht.
2008 July	Invitational conference Utrecht: "Mentalization-based treatment: een samenvatting van de evidentie". Utrecht.
2008 September	Workshop Dialexis: Mentaliserende gedragstherapie.
2009 February	Centraal Debat op Dag van de Psychoanalyse 2009: Bekwaam behandelen'.
2009 December	Emoties in de spiegel: affectregulatie in psychotherapie.
2010 April	NVvP symposium Pressroom.
2011 June	Symposium Implicaties van de DSM-5 voor diagnostiek en behandeling van persoonlijkheidsstoornissen: "Mentalization-based Treatment (MBT): een theoretische en praktische inleiding".

2011 September	Lezing 2de studiedag VKP-VMPD: "Van 'evidence based' in theorie naar 'evidence based' in de praktijk: de ontwikkeling van een kwaliteitssysteem voor MBT".
2011 September	Mentaliserende gedragstherapie, georganiseerd door stichting Dialexis en de Viersprong.
2013 March	MBT GGz Breburg-breed: actuele ontwikkelingen MBT GGZ Breburg. Tilburg.
2013 April	MBT inleiding en nieuwe ontwikkelingen, een behandelmethode voor patiënten met agressieproblemen in de forensische psychiatrie, NVvP Voorjaarscongres. MECC, Maastricht.
2013 November	Najaarscongres VGCt, 'back to the future'; de toekomst van de cognitieve gedragstherapie in beeld. Veldhoven.
2013 November	Workshop 'structured clinical management'.
2014 March	Lezing MBT- bijeenkomst PsyQ, Groningen.
2014 May	Lezing Refereermiddag militairen GGZ, Hilversum.
2017 January	Lezing Mentaliseren en behandeling op congress 'Ondersteunen van Mentaliseren', Zwolle.

Associations

- Association for Behavioral Therapy and Cognitive Therapy
- Association for Client-Centered Psychotherapy
- Dutch Institute for Psychologists
- Dutch Association for Psychotherapy
- International Society for the Study of Personality Disorders, ISSPD
- European Society for the Study of Personality Disorders, ESSPD
- Borderline Task Force - Board member and chairman of the treatment committee
- MBT research consortium - chair of the treatment committee
- Visitation committee TOP-GGZ, member and visitator (until 2012)
- Director MBT Nederland
- Board Anna Freud Center Steering Group MBT

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