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BASELINE CHARACTERISTICS OF PARTICIPANTS REFERRED TO ONE-YEAR MENTALIZATION-BASED TREATMENT (MBT) IN THE WELLBEING SERVICES COUNTY OF NORTH OSTROBOTHNIA

ABSTRACT

Background and objectives: Evidence-based and structured Mentalization-Based Treatment (MBT) is being piloted in adult specialized psychiatric care in The Wellbeing Services County of North Ostrobothnia (Pohde) to ensure access, timeliness and sufficient range of treatments. This article outlines the baseline characteristics of participants referred to one-year MBT. **Materials and methods:** This non-randomized pilot study aims to investigate the effectiveness of individual MBT and analyse changes in patients' mental wellbeing, symptoms, psychosocial functioning, mentalization, service use and quality of life during MBT. Inclusion criteria of patients included age of 18–64 years; having a complex disorder presentation, i.e. comorbidity of at least two of the following: affective disorder, psychological trauma, personality disorder or signs or symptoms of personality disorder; and decreased functioning. The baseline interviews and questionnaires collected data on sociodemographic factors, clinical characteristics and diagnostics, functioning and measures used for assessing effectiveness. Axis I diagnoses were assessed using MINI interview. Here, we present the characteristics of the sample and descriptives of baseline values of measures of effectiveness. **Results:** Between September 2024 and March 2025, 53 patients were referred to this study, of whom 50 participants started MBT. Patients were referred to treatment from various sources, including both primary healthcare and specialized mental health services. The majority of participants were women, unmarried and had a mean age of 31.5 years. Only a few had previously received psychotherapeutic treatment. According to the MINI interview, the most common diagnoses were depression, anxiety disorders and post-traumatic stress disorder. On average, participants exhibited moderate to marked levels of clinical symptoms and reduced psychosocial functioning, indicating a clear need for mental health treatment. A higher clinical score of CORE-OM is associated with greater anxiety, uncertainty in mentalizing ability, interpersonal problems and attachment anxiety. **Conclusions:** This study provides valuable insights for improving the care of patients with severe mental health problems and a base for future studies of the effectiveness of individual MBT.

KEYWORDS: MENTALIZATION, MBT, SEVERE MENTAL DISORDER, THERAPY, PSYCHOTHERAPEUTIC, TRANSDIAGNOSTIC

INTRODUCTION

Mental health disorders are common worldwide, affecting approximately one in eight individuals (1). Before the COVID-19 pandemic, one in six people in the European Union struggled with mental health issues (2). Recent unprecedented crises have exacerbated this situation, making mental health a crucial

public priority and highlighting the need to improve access to timely and high-quality services (3).

In Finland, the National Mental Health Strategy and Programme for Suicide Prevention 2020-2030 aim for services that meet people's needs, are client-driven, effective and available in a timely manner (4). To support this, The First-Line Therapies ("Terapiat etulinjaan") has developed a stepped care

model for Finnish mental healthcare structures, which provides comprehensive services for creating and maintaining a stepped care model of evidence-based psychosocial treatments (5). The Wellbeing Services County of North Ostrobothnia (Pohjois-Pohjanmaan hyvinvointialue, Pohde) has adopted this model. It has become evident that the range of psychosocial treatments at higher steps that include patients with, e.g. multi-symptom and severe symptoms, is inadequate. As a result, an evidence-based and structured Mentalization-Based Treatment (MBT) is being piloted in specialized psychiatric care to ensure access, timeliness, continuity of psychotherapeutic care and a sufficient range of treatments (6).

Pohde was the first wellbeing services county in Finland to widely train healthcare professionals in the MBT method (6). It was also the first to integrate this treatment into its stepped mental healthcare system. MBT-accredited practitioners are trained in Pohde in close collaboration with the Mentalization Association ("Mentalisaatio ry") in Finland and the Anna Freud Centre (AFC) in the United Kingdom. MBT practitioner trainees are required to have at least one year's work experience in mental health services. Their educational backgrounds include a master's degree in psychology or a bachelor's degree in nursing or social services. Additionally, some completed psychotherapy training and worked as psychotherapists. By June 2024, 20 MBT-accredited practitioners had been trained in Pohde, and a new MBT training programme with 15 trainees was underway for the whole Northern Finland cooperation area.

Mentalizing is the process of understanding ourselves and others through thoughts, emotions and mental processes, both unconsciously and consciously (7). Mentalization is a skill needed to regulate emotions and relationships in various life situations. MBT is originally a structured, multimodal treatment with carefully managed pathways, both in terms of time in therapy over 12–18 months and within sessions, to treat patients with borderline personality disorder (BPD). The goal of the treatment is to increase individuals' mentalizing capacities. Effective mentalizing can strengthen self-understanding and the ability to deal with conflict, allowing better control of behaviour (8). MBT is a potentially effective approach for a wide range of clinical disorders, including personality disorders, depression and eating disorders. According to previous studies, it offers positive outcomes for patients with severe psychiatric diseases, high comorbidity, and for those who do not fit into a specific diagnostic category (9).

Previous studies have focused on MBT adaptations for specific disorders, such as antisocial personality disorder (MBT-ASPD; 10,11), narcissistic personality disorder (MBT-NPD; 12,13), trauma (MBT-TF; 14), psychotic disorder (MBTp; 15)

or eating disorders (MBT-ED; 16). However, there is a growing need for a transdiagnostic approach (17) to better address the complexity, dimensionality and comorbidity of mental health symptoms in the current patient population. While MBT has been found effective for complex disorder presentation, existing studies have been nonetheless primarily concerned with specific diagnostic groups with comorbid presentation. To our knowledge, no previous studies have assessed the effectiveness of MBT in the more heterogeneous context of the stepped mental healthcare system. Due to the heterogeneity of the presentation, this pilot has focused on individual-level treatment. The training of the practitioners has included sections on the more common severe mental health disorder presentation through an MBT lens. Compromised ability to mentalize is a transdiagnostic risk factor for psychiatric ill-being, while changes in mentalizing have been considered a common factor in effective psychosocial treatments (18,19,20,21).

This article aims to describe a group of patients referred to MBT. It is important to characterize this group of patients because MBT is a new form of treatment within public mental and psychiatric services and units. Furthermore, previous research on MBT has focused primarily on group settings and psychotherapy centres abroad. The data for this study were collected throughout the Pohde outpatient psychiatric and mental health services region, including healthcare centres at both primary and specialized level from small municipalities to large cities, as well as specialized psychiatry outpatient clinics at Oulu University Hospital. Here, we present the sociodemographic background and clinical characteristics, diagnostics, and psychological state and trait characteristics of participants referred to one-year MBT.

MATERIALS AND METHODS

The Pilot study on Effectiveness of Mentalization-based Treatment (MBT) as Part of Stepped Mental Healthcare in Finland was approved by the Regional Medical Research Ethical Committee of the Wellbeing Services County of North Ostrobothnia (26/2024, August 19, 2024) and Oulu University Hospital (240/2024, September 12, 2024). The protocol was prospectively registered at the ClinicalTrials.gov (ID: NCT06659211, September 25, 2024) before the first participants were interviewed. This individualized MBT methodology has been previously manualized and described by Bateman and Fonagy (as described; 8).

STUDY DESIGN AND GENERAL DESCRIPTION OF THE STUDY

The study design is a non-randomized clinical pilot study. The Pilot study on Effectiveness of Mentalization-based Treatment (MBT) as Part of Stepped Mental Healthcare in Finland aims to investigate the effectiveness of individual MBT and analyse changes in patients’ mental wellbeing, symptoms, psychosocial functioning, mentalization, service use and quality of life. The data collection and MBT treatments started in September 2024 and are currently (in June 2025) ongoing. The length of MBT treatment is 12 months. Data collection includes a structured baseline clinical interview and a self-report survey of several measures, such as psychiatric symptoms, quality of life and psychosocial functioning. The primary outcome measure is the change in psychological symptoms and wellbeing, measured by Clinical Outcomes in Routine Evaluation – Outcome Measure (CORE-OM) (22,23). All outcomes are assessed at 6, 12 and 18 months. Further, we intend to collect data from medical records on a comparison group of patients receiving psychiatric treatment as usual, allowing the comparison of outcomes such as use of psychiatric services and medications and psychiatric symptoms.

In this current article, we will describe the data collected at the baseline of the study.

PARTICIPANTS

Participants were recruited from public outpatient mental health services in Pohde. The unit, which had newly accredited MBT practitioners, recruited participants for MBT from the mental health services referral queue or from the patient population already in the services. Among the patient population already in the services, we included patients who had started treatment within the last 3 months or who had been referred to MBT by another professional from mental health services. Thus, for MBT therapists, the patient starting MBT was new.

Patients were selected for MBT based on inclusion and exclusion criteria as presented in [Table 1](#) and patient preference. Patients aged 18-64 years were required to have a complex disorder presentation, i.e. symptomatic and functional severity and comorbidity of at least two of the following: affective disorder, trauma, personality disorder or signs or symptoms of personality disorder. This choice was made due to the increasing need in mental healthcare for the treatment and therapy of this multi-symptom and severely symptomatic group of patients, which also makes the study's results more generalizable to real life. In addition, MBT practitioners assessed the patient's suitability for MBT (e.g. willingness to engage in active psychotherapeutic work, interest in the inner world of experience and willingness to work interactively).

Table 1. Inclusion and exclusion criteria applied for the Mentalization-Based Treatment (MBT) patient group.

Inclusion criteria	Exclusion criteria
• Age 18-64 years. • Severe psychological symptoms and decreased functioning ability for long-term • Challenges with interpersonal relationships and emotional regulation • Patients willing to receive MBT At least two of the following: 1. Depression (ICD-10 diagnosis codes: F31.3-F31.5, F32.0-F32.9, F33.3-F33.9, F34.1) or anxiety disorder (diagnosis codes: F40-F48) 2. Trauma background either as diagnosis or as need for treatment 3. Signs of personality disorder (suspected or diagnosed)	• Active substance use disorder (i.e. intoxication F1x.0, active dependence F1x.24, Continuous use F1x.25, a physiological withdrawal state F1x.3 and F1x.4, or psychotic disorder F1x.5). • Acute psychosis (defined as the recent onset of severe psychotic symptoms that interfere with functioning and are not yet in a therapeutic state. (Non-acute psychotic symptoms are not exclusionary) • Disorder requiring inpatient treatment • Previously received MBT • Currently receiving psychotherapeutic treatment (previous psychotherapeutic treatment is not an exclusion) • The exclusion criteria, therefore, do not exclude psychotic disorders or any other psychiatric illness (except active substance abuse disorders)

BASELINE ASSESSMENT

The baseline data consisted of a structured clinical interview and two questionnaires which contained altogether ten different self-report instruments and questions about sociodemographic factors (*Table 2*). The baseline data for patients was collected from September 2024 to March 2025. Patients deemed suitable for research by the MBT practitioners were interviewed by the clinical research nurse. The baseline interviews were conducted in Pohde, at the units where the patient's MBT was set to begin. The duration of the baseline interview ranged from 1.5 to 3 hours. The results of the baseline interviews were reviewed, and conclusions on diagnosis and rating of symptoms and functioning were drawn from within the research team, together with a principal investigator (EJ) and the clinical research nurses. Prior to the baseline interview, all patients signed a written consent form to participate in the study. The consent form also included a request for permission to audio- or video-record MBT sessions for the purposes of treatment fidelity monitoring, therapeutic support and the supervision of the approved MBT supervisor.

Shortly after the baseline interview, participants received an email containing a link to complete two self-report surveys. These included ten self-report instruments and a background information form assessing psychosocial functioning. The questionnaires were created using Research Electronic Data Capture (REDCap), a secure web application developed for digital data collection (24,25).

The contents of the baseline clinical interview and the self-report survey are presented in *Table 2*. The primary outcome measure of this study is CORE-OM. The CORE-OM is a 34-item self-report measure to assess psychological distress and clinical outcomes (22,23). Validated Finnish translations of the questionnaires used in this study have been found to be functional and have good internal reliability (26). Mentalization capacity was measured using the Certainty About Mental States Questionnaire (CAMSQ) and the Reflective Functioning Questionnaire (RFQ) (27,28). Of note, the version of the RFQ used in this investigation is the unidimensional RFQ-6 due to it being more psychometrically optimized from the original RFQ-8 (27).

Table 2. Clinical interview measures and baseline self-report survey.

Baseline interview		Target variable / cut-off scores
Mini International Neuropsychiatric Interview (29)	MINI	Psychiatric symptoms and possible diagnosis of Axis I disorders
Social and Occupational Functioning Assessment Scale (30)	SOFAS	Psychosocial functional capacity. Score of ≤ 70 indicating the presence of a functional deficit (30)
A need for treatment assessment		Reason for seeking treatment, psychological wellbeing, concurrent medications, previous and current treatment
Montgomery-Åsberg Depression Rating Scale (31)	MADRS	Depression symptoms. 15-24 indicating mild depression, 25-30 moderate, 31 or higher indicating severe depression. Score 10 or less indicates remission (32)
Clinical Global Impression - severity (33)	CGI-S	Clinical severity
Self-report survey		
Sociodemographic questions		Reported in Table 4
Clinical Outcomes in Routine Evaluation - Outcome (34)	CORE-OM	Global level of distress (wellbeing, problems, functioning, risk). The clinical cut-off score is 9.5. A higher score indicates more problems, while a decreasing score for an individual indicates an improvement in subjective wellbeing (34)



Generalized Anxiety Disorder-7 (35)	GAD-7	Measures severity of anxiety. 0–4 indicating minimal anxiety, 5–9 mild anxiety, 10–14 moderate anxiety, 15–21 severe anxiety (35)
Big Five Inventory-2 Extra Short Form (36)	BFI-2-XS	Big Five personality dimensions
The Inventory of Interpersonal Problems (37)	IIP-32	Interpersonal problems
Experiences in Close Relationships Short version (38)	ECR-R	Attachment anxiety and avoidance
Rosenberg Self-Esteem Scale (39)	RSE	Self-esteem
Emotion Regulation Questionnaire (40)	ERQ	Emotional regulation styles
The Certainty About Mental States Questionnaire and The Reflective Functioning Questionnaire (27,28)	CAMSQ RFQ-8	Mentalization capacity Of note, the version of the RFQ used in this investigation is the unidimensional RFQ-6 due to it being more psychometrically optimized from the original RFQ-8 (27)
The World Health Organization Quality of Life (41)	WHOQOL	One question on Quality of life

STATISTICAL ANALYSIS

All statistical analyses were run with IBM SPSS Statistics Software version 29.0.0.0. Missing sociodemographic information from the self-report surveys were filled in from the interview data. Descriptive data is presented with frequencies and percentages (%) and means and standard deviations (SD). To explore the associations between the self-report measures, normality of outcome distributions were checked before calculating Pearson's correlation coefficients between the self-report measures. Due to non-normal distributions on the BFI-2-XS dimensions, it was left out of the correlation analyses. Internal consistency was explored by calculating the Cronbach's alpha for all self-report measures.

level patients, even if the physician responsible is a consulting psychiatrist. Participants were referred to MBT mainly by another professional (n=24), by referral or the treatment queue of the unit (n=17), and a few of them by another psychiatric care unit (n=9) as presented in [Table 3](#).

RESULTS

Altogether, 53 patients were referred to this study. Three patients either withdrew from the study before the baseline interview (n=2) or did not meet the study's inclusion criteria (n=1). The sample included 50 participants receiving MBT. In this sample, 46 responded to the online self-report survey, and baseline clinical interview data was available for 50 participants. A flowchart of the study population at each stage of the study process is shown in [Figure 1](#).

In Pohde, outpatient psychiatric and mental health services are provided by the healthcare centres at primary and specialized level and specialized psychiatry outpatient clinics at Oulu University Hospital. Some units operate only at primary level, where the patients are classified as primary-

Figure 1. Flowchart of the Mentalization-Based Treatment (MBT) Study.

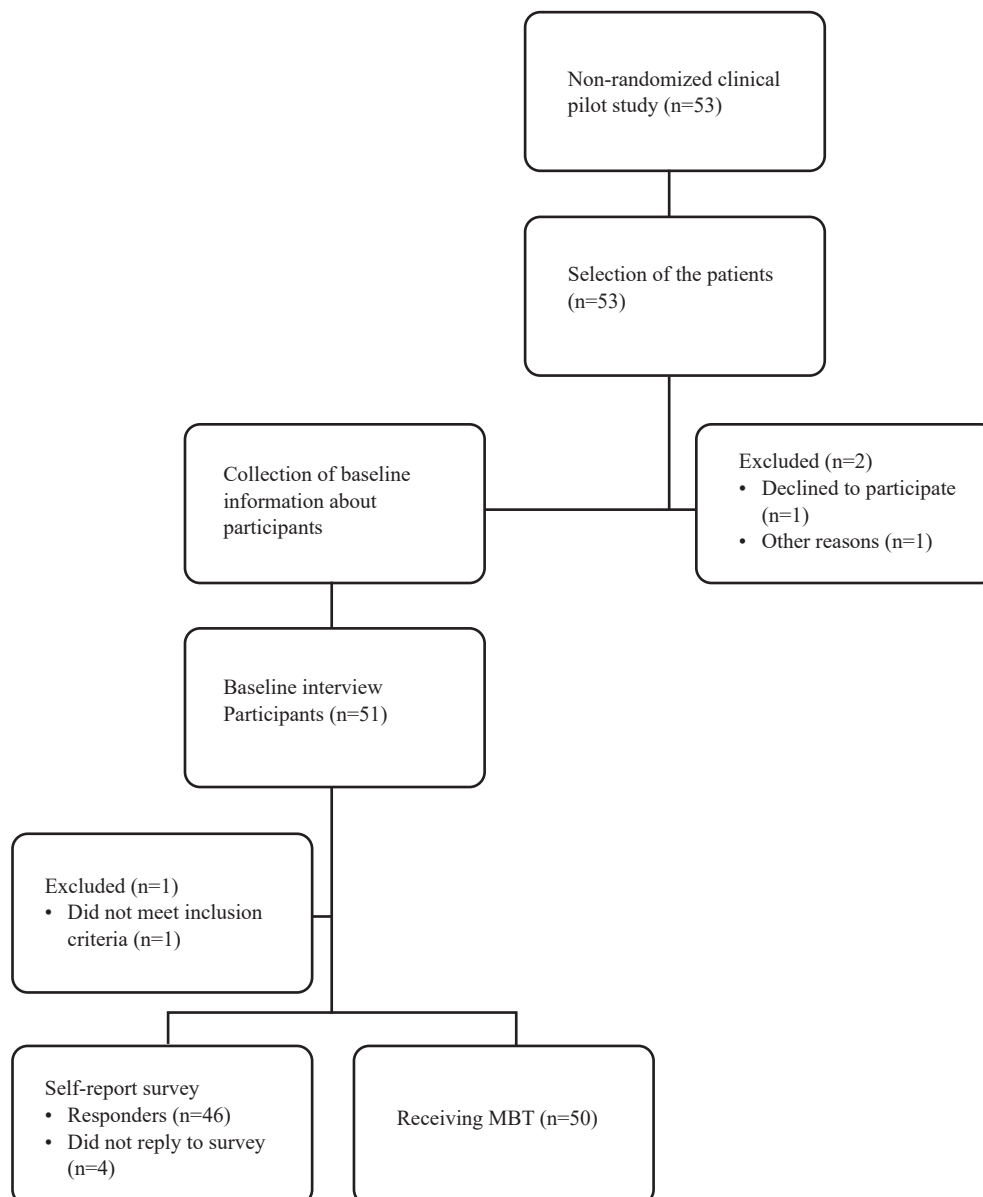


Table 3. Participant referral to Mentalization-Based Treatment (MBT).

Referred to treatment	MBT in primary care	MBT in specialized care
By another professional	8	16
Referral or treatment queue of the unit	5	12
From another psychiatric care unit		9
Total	13	37

SAMPLE CHARACTERISTICS

Sociodemographic Factors

The mean age of the sample was 31.5 years (SD=9.13, range 18–60). The other sociodemographic factors are presented in [Table 4](#). Most of the participants, 37 (74%), were females. Eighty-four per cent of the participants were not married. Additionally, 22% of the participants had a bachelor's degree or higher education, and 38% lived alone or alone with their

children in the household. Furthermore, 54% of the participants did not have any children, and 44% of them had one or more children.

Of the participants, 54% had previously received outpatient care, 34% inpatient care, 20% psychotherapeutic treatment and 10% vocational rehabilitation. Additionally, 42% had an additional physical medical condition.

Table 4. Sociodemographic factors (n=50).

Variable	n (%)
Gender	
Female	37 (74.0 %)
Male or other	13 (26.0 %)
Marital status	
Married	8 (16.0 %)
Not married	42 (84.0 %)
Education	
Comprehensive school	10 (20.0 %)
Vocational school	17 (34.0 %)
High school diploma	10 (20.0 %)
Bachelor's or Master's degree	11 (22.0 %)
Missing data	2 (4.0%)
Living situation	
Lives alone or alone with kids	19 (38.0 %)
Lives with (spouse, roommates, parents etc.) or otherwise	29 (58.0 %)
Missing data	2 (4.0 %)
Number of children	
No children	27 (54.0 %)
One or more children	22 (44.0 %)



Variable	n (%)
Missing data	1 (2.0 %)
Participants	
<i>Who have previously received:</i>	
Psychiatric outpatient care	27 (54.0 %)
Psychiatric inpatient care	17 (34.0 %)
Psychotherapeutic treatment	10 (20.0 %)
Vocational rehabilitation	5 (10.0 %)
Missing data	4 (8.0 %)
<i>Who have:</i>	
Physical medical condition	21 (42.0 %)
Physical medical symptoms	20 (43.5 %)
Missing data	4 (8.0 %)

Clinical Characteristics

The clinical characteristics are presented in [Table 5](#). The most frequently diagnosed Axis I disorders of the participants were depressive disorder (70%), anxiety disorder (62%) and post-traumatic stress disorder (28%). Out of the participants, 42 (84%) had two or more Axis I diagnoses. Additionally, 68%

of the participants were using psychiatric medication. The number of participants who reported having previously been diagnosed with BPD or were suspected of exhibiting symptoms in the sample was 9 (18%). The majority of participants (84%) showed clinically significant depressive symptoms based on MADRS scores.

Table 5. Clinical characteristics (n=50).

Variable	n (%)
MINI Interview, Diagnoses of Axis I disorders	
Depressive disorder	35 (70.0 %)
Anxiety disorders	31 (62.0 %)
Post-traumatic stress disorder	14 (28.0 %)
Psychosis or bipolar disorder	7 (14.0 %)
Substance use disorder	6 (12.0 %)
Obsessive-compulsive disorder	5 (10.0 %)
Eating disorder	4 (8.0 %)
Unspecified mental disorder	1 (2.0 %)



Variable	n (%)
% of participants who reported that their symptoms started before turning 18 years old *	34 (68.0 %)
Number of persons using psychiatric medication, self-reported	34 (68.0 %)
Number of medications, self-reported	
Antidepressants	31 (62.0 %)
Antipsychotics	23 (46.0 %)
Sedatives	9 (18.0 %)
Mood stabilizers	3 (6.0 %)
% of participants who score above the cut-off for clinically significant symptoms	
CORE-OM (9.5) *	43 (93.5 %)
Missing data	4 (8.0 %)
MADRS (10) *	42 (84.0 %)
GAD-7 (5) *	42 (91.3 %)
Missing data	4 (8.0 %)

* Clinical cut-off reference values were used based on the studies: 32,34,35. Abbreviations: MINI = Mini International Neuropsychiatric Interview; CORE-OM = Clinical Outcomes in Routine Evaluation – Outcome; GAD-7 = Generalized Anxiety Disorder-7; MADRS = Montgomery-Åsberg Depression Rating Scale. n = sample size

Primary Outcome Measure

The mean CORE-OM scores and respective dimensions are presented in [Table 6](#). A large-scale investigation utilizing the Finnish translation of the CORE-OM presented a clinical cut-off score of 9.5 (34). In our study 93.5% of the participants scored higher than 9.5 in terms of clinical scores on all items. The scores in this data ranged from 6.5 to 33.2.

Secondary Outcome Measures

The low level of general functioning was reflected by the mean scores of the SOFAS (mean=54.9, SD=11.2), with healthy functioning established as scores ranging from 80–90. Additionally, a score of 50 or below is seen as severe impairment in social- and work-related functioning. In the current investigation 19 participants (38%) exhibited severe impairment. Other secondary outcomes and their respective mean scores are presented in [Table 6](#).

Psychological Symptoms and Wellbeing

The psychological symptoms and wellbeing are presented in [Table 6](#).

The correlation matrix for the self-report measures is presented in [Table 7](#). The CORE-OM demonstrated strong positive correlations with the GAD-7 ($r=0.72$, $p<0.01$), and moderate positive correlations with RFQ-6 ($r=0.47$, $p<0.01$), IIP-32 ($r=0.44$, $p<0.01$) and ECR-R (Anxiety) ($r=0.38$, $p<0.01$). Furthermore, there were strong negative correlations with the RSE ($r=-0.72$, $p<0.01$), and moderate negative correlation with CAMSQ (Self) ($r=-0.46$, $p<0.01$) and ERQ (Reappraisal) ($r=-0.37$, $p<0.05$).

Internal Consistency

The internal consistency for all the self-report measures was from moderate to very high, with Cronbach's alpha ranging from 0.74–0.93. An outlier was the BFI-2-XS where alpha ranged from 0.56–0.67.

Table 6. Psychological symptoms and wellbeing.

Questionnaires (N = 46)	Mean (SD)
CORE-OM	
Clinical scores	18.50 (6.61)
Wellbeing	9.33 (3.43)
Symptoms/problems	27.43 (9.82)
Functioning	22.91 (8.16)
Risk	3.20 (3.76)
Non-risk items	59.67 (19.87)
All items	62.87 (22.47)
BFI-2-XS	
Extraversion	7.20 (2.54)
Agreeableness	10.57 (2.14)
Conscientiousness	9.20 (2.27)
Negative emotionality	12.11 (2.21)
Open-mindedness	9.98 (2.42)
GAD-7	12.02 (5.05)
IIP-32	
Total score	1.80 (0.48)
	57.65 (15.33)
ECR-R	
Anxiety	4.44 (1.26)
Avoidance	3.28 (1.19)
RSE	9.48 (6.11)
ERQ	
Cognitive reappraisal	3.90 (1.48)
Expressive suppression	3.48 (1.31)
CAMSQ	
Self-certainty	4.23 (1.18)
Other-certainty	4.71 (1.15)
Self-Other-Discrepancy	0.47 (1.30)
RFQ-6*	4.38 (1.18)
WHOQOL	2.61 (0.93)
Interview (n=50)	Mean (SD)
MADRS	21.20 (11.49)
SOFAS	54.86 (11.29)
CGI-S	4.20 (0.95)

* = The RFQ-6, uncertainty in mentalizing were scored using the recommendations of Müller et al. (42).

Abbreviations: BFI-2-XS = Big Five Inventory Extra Short Form; CAMSQ = The Certainty About Mental States Questionnaire; CGI-S = Clinical Global Impression – severity; CORE-OM = Clinical Outcomes in Routine Evaluation – Outcome; GAD-7 = Generalized Anxiety Disorder-7; ECR-R = Experiences in Close Relationships Short version; ERQ = Emotion Regulation Questionnaire; IIP-32 = The Inventory of Interpersonal Problems; MADRS = Montgomery-Åsberg Depression Rating Scale; RFQ-6 = The Reflective Functioning Questionnaire; RSE = Rosenberg Self-Esteem Scale; SOFAS = Social and Occupational Functioning Assessment Scale; WHOQOL = The World Health Organization Quality of Life. n = sample size. SD = standard deviation

Table 7. Correlation matrix between the self-report measures, n=46.

Variable	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1. CORE-OM (Clinical score)	-										
2. CAMSQ (Other)	-0.02	-									
3. CAMSQ (Self)	-0.46**	0.38**	-								
4. RFQ-6	0.47**	0.16	-0.39**	-							
5. GAD-7	0.72**	0.08	-0.22	0.43**	-						
6. IIP-32	0.44**	-0.12	-0.29	0.32*	0.49**	-					
7. ECR-R (Anxiety)	0.38**	0.25	0.03	0.40**	0.40**	0.48**	-				
8. ECR-R (Avoidance)	0.18	-0.09	-0.39**	0.19	0.05	0.20	-0.12	-			
9. RSE	-0.72**	0.05	0.36*	-0.27	-0.49**	-0.32*	-0.23	0.00	-		
10. ERQ (Reappraisal)	-0.37*	0.00	0.33*	0.00	-0.22	-0.08	-0.03	0.00	0.19	-	
11. ERQ (Suppression)	0.19	-0.20	-0.32*	0.14	0.13	0.38*	-0.16	0.53**	-0.31*	0.16	-

Pearson's correlation coefficients, ** = $p < 0.01$, * = $p < 0.05$

BFI-2-XS was excluded due to non-normal distribution of its dimensions

Abbreviations: CAMSQ = The Certainty About Mental States Questionnaire; CORE-OM = Clinical Outcomes in Routine Evaluation – Outcome; GAD-7 = Generalized Anxiety Disorder-7; ECR-R = Experiences in Close Relationships Short version; ERQ = Emotion Regulation Questionnaire; IIP-32 = The Inventory of Interpersonal Problems; RFQ-6 = The Reflective Functioning Questionnaire; RSE = Rosenberg Self-Esteem Scale; WHOQOL = The World Health Organization Quality of Life

DISCUSSION

According to the results the patients included in the study were referred to treatment from various sources, including both primary healthcare and specialized mental health services, reflecting the widespread need for psychosocial interventions in mental healthcare. The majority of participants were women, unmarried and had a mean age of 31.5 years. Most participants were already receiving outpatient psychiatric care but only a few had previously received psychotherapeutic treatment. A third of the participants had been in psychiatric inpatient care, and an equal size of participants reported symptom onset before the age of 18. Approximately one third were currently using psychiatric medications, most commonly antidepressants. Although the study's inclusion criteria influenced the composition of the

patient sample, it is noteworthy that a substantial proportion of participants met the diagnostic criteria for at least two mental disorders. According to the MINI interview, the most common diagnoses were depression, anxiety disorders and post-traumatic stress disorder, following the inclusion criteria. Eighty-four per cent of participants scored above the cut-off for clinically significant depressive symptoms. On average, participants exhibited moderate to marked levels of clinical score on CORE-OM and reduced psychosocial functioning, indicating a clear need for mental health treatment.

The results of correlation between baseline measures indicate that an increased clinical score of CORE-OM is associated with greater anxiety, uncertainty in mentalizing ability, interpersonal problems and attachment anxiety. The positive correlation between the CORE-OM and RFQ-6 indicates

that individuals with higher levels of psychological distress may struggle to understand and reflect on their own and others' mental states. Furthermore, as the primary outcome measure of this study, CORE-OM's clinical scores were associated with a multitude of the other measures used (Table 7), which reflects its relation to multiple facets of psychopathology and suitability for use in this study with no specific disorder or symptom-specific groupings.

In this kind of study, it is important that the patients' wellbeing and their psychological symptoms are of same range as in other similar studies. The baseline mean clinical scores on CORE-OM (mean=18.5, SD=6.6) and IIP-32 (1.8 (0.5)) are comparable to previous studies using clinical samples internationally and in Finland (CORE-OM: 18.3 (7.1) & 16.7 (6.6) (34,43) IIP-32: 1.7-3.16 (44,45,46)). These comparisons highlight that the clinical characteristics of this study sample are equivalent to established literature. They also secure the suitability of these measures in this kind of investigation. This kind of control is needed to ensure the comparability of the results of this study to previous research surrounding MBT.

The internal consistency for all the self-report measures was from moderate to very high, indicating reliability of the measures based on this sample. Additionally, the outlier results for the BFI-2-XS are consistent with the original psychometric evaluation of the measure ($\alpha=0.51-0.72$), which is explained by its brief length (three items per personality dimension) and its focus on content validity rather than internal consistency (36).

A significant strength of this study is that it is the first to evaluate the effectiveness of individual MBT in the Finnish population and in the context of the stepped mental healthcare system, where MBT is provided as an individual outpatient service. Although the effectiveness of MBT has been examined internationally, differences in service structures limit the generalizability of those findings to the Finnish stepped mental healthcare context. A key strength of this study is that it includes a group of patients diagnosed with a range of severe mental disorders. Notably, our findings extend previous research by examining treatment outcomes not only in patients with BPD, but also in those with other complex psychiatric conditions.

Our study examines a group of patients diagnosed with a range of severe mental disorders. The mentalization paradigm offers one viable approach for a patient who does not fit into a specific diagnostic category. Mentalization can be thought of as a key factor in functional mental health (salutogenesis), while a lack of mentalization may indicate underlying psychopathology (19). Additionally, psychopathology can be further examined transdiagnostically using the concept of the psychopathology factor (p-factor) (47).

According to the results, most participants (66%) who were referred to MBT were already receiving outpatient psychiatric care. However, only 20% of all participants had received psychotherapeutic treatment. This highlights the lack of availability of psychosocial treatments at higher steps of mental healthcare. The results also indicate a high level of comorbidity among patients with severe psychiatric disorders, which makes it difficult to select effective psychosocial treatment. Previous studies, such as Juul et al. (48), have shown that baseline clinical characteristics related to psychiatric comorbidity and symptoms were relatively similar to the present study, with the most common diagnoses being anxiety disorders, depressive disorders and post-traumatic stress disorder. Sociodemographic characteristics, including gender, age and marital status, are also comparable. However, the sample in the Juul et al. (48) study was significantly larger, and all participants had a diagnosis of BPD. At this stage of our study, we do not yet have precise data on diagnoses of personality disorders, since due to resources, it was not possible to conduct diagnostic interviews for personality disorders at baseline. However, we will be able to collect the data on diagnosed personality disorders and other diagnoses from the medical records later on. Compared to previous studies, our study includes more diagnostically diverse patients, which may reflect the broader spectrum seen in general mental health services. This study may therefore help to define more targeted treatment approaches for patients in these diagnostic groups.

This study has strengths and obvious limitations. First, the study design is a non-randomized clinical pilot study conducted only in the Wellbeing Services County of North Ostrobothnia. Therefore, we will not be able to make definitive causal conclusions about the effectiveness of MBT. Second, the MBT practitioners are newly qualified, and the practitioners' professional experience in practicing MBT may affect the patient selection and future analyses in treatment outcomes. Third, in the future the relatively small sample size makes identifying significant relationships from the data difficult. A small number of participants reduces statistical power and makes generalization difficult. A limited sample may not be representative of the broader population, as participants may have characteristics such as higher motivation. Fourth, personality functioning and disorders were not explicitly assessed in this study, although indications of personality dysfunction can be seen in the mean values of the ECR-R and the IIP-32. Furthermore, several factors influence the suitability and effectiveness of MBT, including clinical setting, the competence of the MBT practitioner, heterogeneous context and the complexity of psychiatric presentation in patients.

This is the first study to evaluate the effectiveness of MBT within Finland's public mental health service system. The article describes the types of patients referred to MBT, which may also reflect the profile of patients referred in the future. Although the sample size is limited, it is sufficient to yield results regarding changes in patients' psychological wellbeing. This study is also among the few that have examined psychotherapeutic treatment within the framework of Finland's mental healthcare service system.

CONCLUSION

There is a clear need for MBT, as patients were referred to MBT from different sources. The patients presented with a wide range of clinically significant symptoms and comorbidities. It was notable that relatively few of them had previously received psychotherapy. This study provides valuable insights that have the potential to improve care for patients with severe mental health problems in real-world clinical settings and in the context of the stepped mental healthcare system. As a result, new knowledge about MBT's implementation, evaluation and effectiveness can be shared nationally. However, further research is necessary to evaluate the effectiveness of MBT in complex clinical environments, especially among transdiagnostic psychiatric patient populations. This pilot study provides a base for future studies on the effectiveness of individual MBT.

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