The Effectiveness of Mentalization-Based Therapy in Borderline Personality Disorder: A Systematic Review

Xuying Deng[1, *, †] Yu Wang [2, †]

[1] *School of Social Science; University of California, Irvine; CA; United States*
[2] *School of Health, School of Shandong University of Traditional Chinese Medicine, Shandong, China*
[*] *Corresponding author. Email: xuyingd@uci.edu*
[†] *Those authors contributed equally.*

ABSTRACT
This review aims to systematically review the evidence on the effectiveness of mentalization-based therapy (MBT) in the treatment of borderline personality disorder (BPD), particularly in reducing the psychiatric symptoms associated with BPD and its comorbid disorders. Databases PubMed, Psycinfo, and Medline were systematically searched up to September 2021. Randomized controlled trials on the effectiveness of MBT in the context of BPD were eligible to include. Qualitative synthesis was conducted to summarize the studies. A total of 13 studies were finally included. These included eight 8 original studies and five5 follow-up papers. According to these 13 studies, mentalization-based therapy has either superior or equal reductions in psychiatric symptoms when compared with other treatments (supportive group therapy, treatment as usual, structured clinical management, and specialized clinical management). MBT was mainly conducted in the hospital setting (including day care) and delivered in a time-consuming manner. Mentalization based therapy can achieve significant reductions in BPD symptom severity and the severity of comorbid disorders as well as increase quality of life. However, caution is required, as the need for better quality and more wide-ranging carried out research such as randomized controlled trials is pressing. Research is also needed on the proposed mediators of MBT.

Keywords: *Borderline personality disorder, Mentalization-based therapy, Adolescence, group therapy*

1. INTRODUCTION

Borderline personality disorder (BPD) is known as an emotionally unstable personality disorder or borderline pattern personality disorder, which is characterized by chronically unstable interpersonal relationship patterns, distorted self-awareness, and intense emotional reactions (DSM-5). The core features of BPD are a pattern of impetuous and erratic in mood, interpersonal relationships, and self-image. These behavioral or emotional patterns emerge in early adulthood and persist throughout the lifetime [1].

In epidemiological studies of adults in the USA, the prevalence for borderline personality disorder was between 0.5% and 5.9% as assessed by Torgersen and colleagues [2]. The National Epidemiologic Survey on Alcohol and Related Conditions (NESARC) study in the United States demonstrated a lifetime prevalence of 5.9% for BPD, close to four times as high as the average 2-5 years prevalence observed by Torgersen et al. In another study in the United States that evaluated individuals four times between the ages of 14 years and 32 years, the average short-term prevalence of BPD was 1.5% and the cumulative prevalence was 5.5% [3].

Borderline personality disorder is a heterogeneous condition and its symptoms overlap considerably with depressive, schizophrenic, impulsive, dissociative and identity disorders. This overlap is also linked to comorbidity and in clinical practice, it is sometimes difficult to determine if the presenting symptoms are those of borderline personality disorder or a related comorbid condition [4]. The main differences between the core symptoms of borderline personality disorder and other conditions are that the symptoms of borderline personality disorder undergo greater fluctuation and variability: psychotic and paranoid symptoms are transient, depressive symptoms change dramatically over a short period, suicidal ideas may be intense and unbearable but only for a short time, doubts about identity may occur but are short-lived, and disturbances in the continuity of self-experiences are unstable [5].

Research on the causes and risk factors for BPD is

still in its early stages. There's no single reason why some people develop borderline personality disorder (BPD) [6]. However, scientists generally agree that genetic and environmental influences are likely to be involved [7]. Certain events during childhood may also play a role in the development of the disorder, such as those involving emotional, physical and sexual abuse. Loss, neglect and bullying may also contribute [1, 8]. The current theory is that some people are more likely to develop BPD due to their biology or genetics and harmful childhood experiences can further increase the risk.

Mentalization-based therapy is a newly developed psychotherapy for borderline personality disorder since 1999 [9]. It targets on making use of the positive connection between patients and therapists to alleviate the symptoms of BPD. Through working with patients to enhance emotional recognition and connection between patients and therapists, the therapists will focus on the present rather than the past. In the practice, MBT normally starts with a position of curiosity, of being interested in exploring different perspectives of the patient's experience both in relationships outside treatment and with the therapist. The job of the therapists is encouraging patients to mentalize, rather than doing it for them by providing interpretations or by instructing them on how to manage behavior or distress [10]. Oftentimes, MBT is delivered in both group and individual, beyond that the time of MBT is lengthy and time-consuming.

Several reviews have assessed the contribution of psychotherapy to borderline personality disorder, including mentalization-based therapy (MBT). These reviews reported positive results of MBT on the symptomatology of BPD; However, these reviews included only one or two randomized controlled trials (RCTS), all of which were conducted by the treatment's developers. This limited number of inclusions was not able to provide state-of-art evidence to support the effectiveness of MBT when it applied in BPD patients.

Therefore, up to date, the effectiveness of MBT on BPD patients still remains unclear. MBT is now considered a 'promising evidence-based treatment', a systematic aggregation of the evidence for this claim would further guide the practice and facilitate clinical decision. The current systematic review aims to assess the effectiveness of MBT in reducing symptoms in patients with borderline personality disorder, regarding outcomes such as self-harm and negative emotion, and patients' quality of life.

2. METHODS

PRISMA is followed as the guideline in this systematic review.

2.1. Search strategy

Studies were searched for in the three electronic databases, Medline PubMed and PsycINFO in September 2021. The search terms were as follows: '(mentalization-based therapy) AND borderline', 'MBT AND Borderline', 'Effect AND (mentalization-based therapy) AND (personality disorder)', 'Effect AND MBT AND (Personality disorder)', '(mentalization-based treatment) AND borderline', and 'Effect AND (mentalization-based treatment) AND (personality disorder)'.

2.2. Inclusion and exclusion criteria

The following criteria had to be met in order for studies to be included in this review: Only English language papers and the studies of RCT will be considered as eligible. Comorbidity is not excluded in this review. Patients with primary diagnosis as BPD must have undergone, or must currently be undergoing, MBT treatment. BPD was established by commonly used diagnosis such as DSM or ICD. Both adult and adolescent samples were included. Studies considered for inclusion had to have quantitative pre and post treatment measures of either BPD severity or associated measures, such as functioning, depression, anxiety, or quality of life. Reviews, case studies, and qualitative studies were excluded.

2.3. Study selection and qualitative synthesis

Overall, there are 108 records were identified, and after duplicate removal, there are 89 records remained. After screening the title and abstract, 64 articles entered into the stage in which full texts of them were screened. A total of 13 articles met the eligibility criteria and were included in this systematic review. We synthesize these articles based on their features such as demographic information, formats of the MBT, settings of treatment to provide an overview of the effectiveness of the MBT among BPD patients.

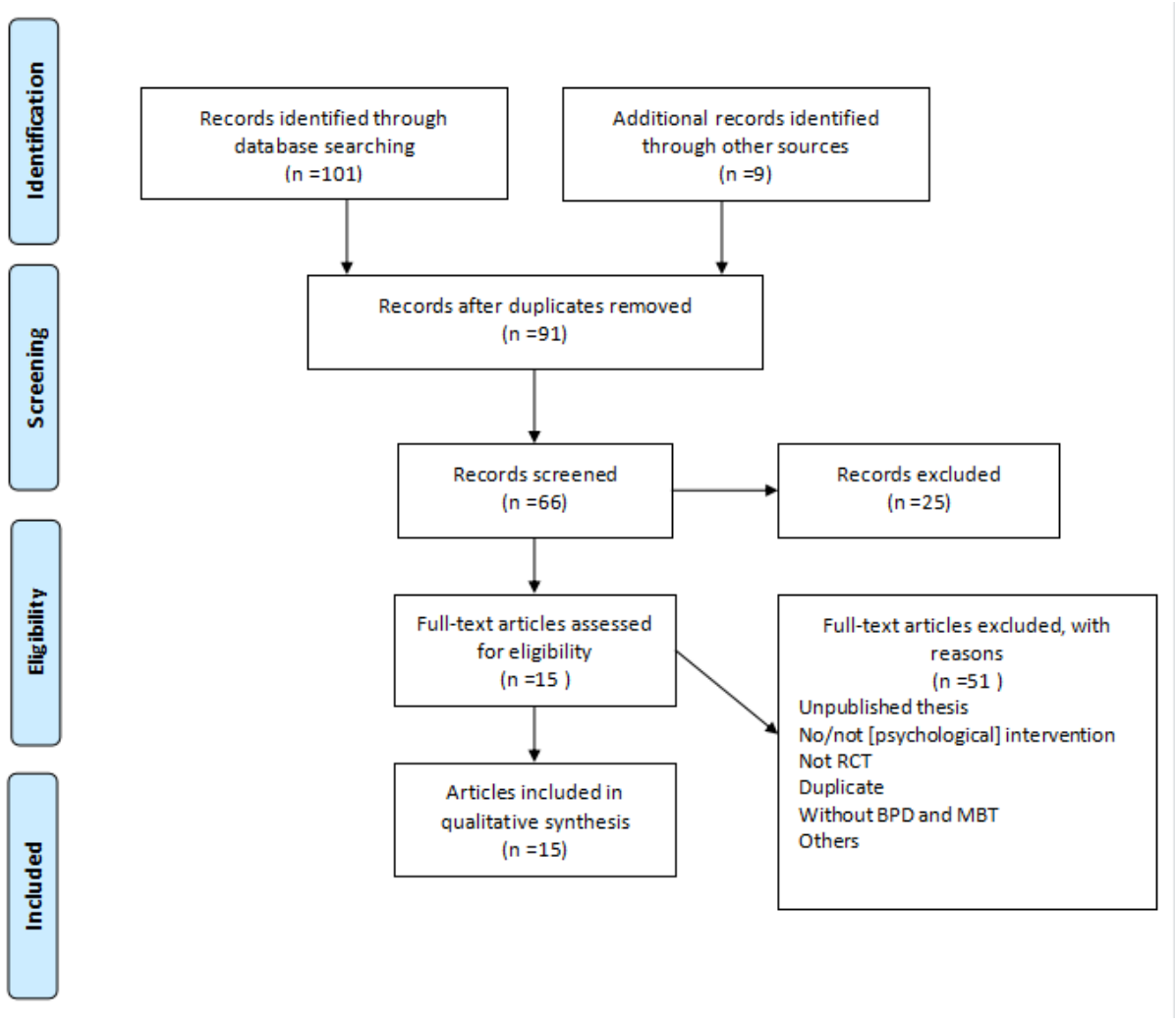

Figure 1 Flowchart of selection

Table 1: Summary of studies included in the review.

First author and year	Type of study	MBT treatment setting	Intervention detail/Length of MBT	Comparison treatment	N (original)	Outcome measure	Follow up	Overall result
Bateman et al., 1999 Bateman et al., 2008	RCT	Outpatient	Self-report every 3 months for SIS and BDI. every 6 months for SCL-90-R; Maximum length of 18 months.	Standard psychiatric care	38	SIS: P<0.001; BDI: P <0,001; SCL-90-R: P<0.05 & P<0.005 at 1 year and 18 months.	8 years	Psychoanalytically oriented partial hospitalization (AKA MBT) is superior to standard psychiatric care for BPD patients. Follow-up supported the original founding, but

								general social function remains impaired.
Bateman et al., 2009	RCT	Outpatient	Assessments conducted every 6 months by independnet evaluators blind to treatment; 18 months.	Structured clinical management (SCM)	134	GAF; SCL-90-R; BDI; SAS-SR; IIP-C	NA	Improvement found in both groups across all outcomes. Participants in the MBT group showed steeper decline in self-reported and clinically significant problems.
Beck et al., 2020 Jorgensen et al., 2021	RCT	Outpatient	3 introductory, psychoeducative sessions, 37 weekly group sessions, 5 individual case formulation sessions, and 6 group sessions for caregivers; 1 year.	Treatment as usual (TAU)	112	BPFS-C; BDI-Y; RISHIA; YSR; ZAN-BPD; CGAS; BPFS-P	3- and 12-months	No evidence indicate superior of either therapy. Follow-up support the primary founding.
Carlyle et al., 2020	RCT	Outpatient	1 hr individual therapy session and 1.5 hrs group therapy session each week; 18 months.	Enhanced therapeutic case management (ETCM)	72	NSSH; SA.	NA	Both groups have significant reduce rate of SA and NSSH. MBT group had higher SA rates and ECTM group had higher NSSH rates.
Jorgensen et al., 2013	RCT	Outpatient	Twice weekly combined MBT and individual & group therapy; 2 years	Supportive group therapy (SGT)	58	24 months; SLC-90-R: SD = 0.8; IIP: SD = 1.2; GSI: SD = 0.8; STAI-T: SD = 56.7; STAI-S: SD = 47.3; SAS-SR:	NA	High pre-post effect size (0.5-2.1) were found in most part of the two groups. Global assessment of

						SD = 2.2; BDI: SD = 18.8; BAI: SD = 13.5; GAF-F: SD = 56.7; GAF-S: SD = 58.5.		functioning show fignigicant outcome in MBT group and higher rate of recovery from BPD in the MBT group.
Kvarstein et al., 2018	RCT	Outpatient	12 sessions of MBT and weekly MBT individual therapy sessions and group sessions (1.5 hr) in the first year, individual sessions reduced in the second and third year, while group sessions remind the same; 36 months.	Psychodynamic group-based treatment (PDT)	345	GAF: r = 0.94; CIP: r = 0.96 BSI-18: NS	NA	Relationship between greater clinical severity was associated with poorer improvement rates were found in PDT group, instead of MBT group. No significant outcomes different of clinical severity were found in MBT group.
Laurenssen et al., 2018 Blankers et al., 2021	RCT	Day Hospital	Data collected every 6 months until 18-month follow-up; 18 months.	Specialist treatment as usual (S-TAU)	95	BPDSI; SCID-I; SCID-II; SSHI; GSI; BSI; BDI-I; IIP-64; PAI-BOR; EuroQol (EQ-5D-3L)	36-months	Both treatments showed significant improvements in all outcome variables. MBT-DH had lower drop-out rates then S-TAU. Follow-up study indicates that MBT-DH leads to higher additional costs in remissions stage.

Philips et al., 2018 Kalteneg ger et al., 2019	RCT	Outpatient	Conbination of individual and group therapy; 18 months.	SUD treatment alone	46	BPDSI-IV: P = 0.001; Drinking: P = 0.01; Days with any drug use: NS; GSI: P < 0.001; IIP = 0.48; DSHI-9: NS; RF: NS	Seconda ry analyses	No significant difference between two groups. Possible higher effectiveness of MBT in reducing sucide attempts rates. Secondary analyses suggests an association between autistic traits and the change of alcohol consumption in patient in MBT.
Rossou w et al., 2021	RCT	Outpatient	Self-harm, risk-taking and mood assessment at 3-monthly intervals until 12 months; 12 months.	Treatment as usual (TAU)	80	RTSHI: P < 0.03; P <0.05; MFQ: P < 0.04; HIF: P < 0.001; ECR: P < 0.03: P < 0.001.	NA	MBT may be effective in reduce self-harm in BPD adolescents.
Smits et al., 2019 Smits et al., 2020	RCT	Day Hospital	Patients were assessed every 6 months from baseline to 18 months after start of treatment; 18 months	Intensice outpatient MBT (MBT-IOP)	114	Global Severity Index of BSI: P = 0.377; SIPP: P = 0.024; IPP: P = 0.056.	3-years	There was no significant difference between the improvements of the two groups, no superior was found of MBT-DH over MBT-IOP on symptom severity, while MBT-DH showed clear tendency towards

								superiority on secondary outcomes. Follow-up indicates that greater improvement was found in participants of MBT-DH during the intensive treatment phase, and better performance was found in participants of MBT-IOP during follow-up.

3. RESULTS

3.1. The treatment effect of MBT in the patients with Concurrent borderline personality disorder (BPD) and substance use disorder (SUD)

Two articles were found from the same cohort of patients diagnosed as borderline personality disorder comorbid with substance use disorder. In this cohort with 46 participants (37 women) in total, 84.8% participants were from Sweden. All of these patients with concurrent BPD and SUD were randomized either to MBT in combination with SUD treatment (n=24) or to SUD treatment alone (n = 22). In the first primary study, Philips et al, 2018 investigated the feasibility and efficacy of MBT for patients with both borderline personality disorder (BPD) and substance use disorder (SUD) [11]. All patients(N=46) were randomly assigned to treatment of MBT combining with SUD treatment and regular SUD treatment. Objective data and self-report measures were examined as outcome variables after 18 months of treatments. Results showed no significant differences between two groups on the outcomes. However, the p-value (p=0.06) of suicide attempts that was achieved by the investigation between the groups (zero for MBT group and 4 for control group) had not reach statistical significance. Ultimately, evidence showed that it is possible that MBT can help to reduce risk of suicide attempts for patients with BPD and SUD.

Then, Kaltenegger et al. 2019 investigated the effect of subclinical autistic characteristics on the outcome in mentalization-based treatment (MBT) of concurrent borderline personality disorder (BPD) and substance use disorder (SUD) in the same cohort [12]. Autistic traits were measured by using the Autism-Spectrum-Quotient. The results showed no association between participants' autistic characteristics and changes in BPD severity over the course of treatment. For all that elevated autistic traits might be associated with a larger potential for improvement in mentalizing capacity or might even facilitate this ability to some extent.

3.2. The treatment effect of Group MBT in BPD patients

Three studies were found using group MBT in the treatment of BPD patients. The first two studies were conducted in Denmark, and the third study was conducted in Norway. Compared with individual therapy, group therapy can save experimental time and solve the problem of shortage of experimental personnel. Through group therapy, the data of the whole group of patients can be analyzed and integrated, making it easier to find the most prominent problems in the case of a large number of subjects. Jorgensen and her colleagues investigated the effectiveness of MBT in the treatment of BPD, using supportive group psychotherapy and TAU as the control group. These studies focused on both adults and minors [13], [14].

Particularly, Jorgensen et al. 2013 provides data from a randomized outcome study comparing the mentalization-based treatment (MBT) and supportive group psychotherapy in the treatment of patients with borderline personality disorder (BPD) [13]. In this randomized and partially controlled design, the outcomes of intensive MBT (individual and group treatments) were compared with less-intensive supportive group therapy. Both groups of participants received biweekly two-year-long treatment. Through analyzing the data from a battery of self-report questionnaires, SCID-II interviews and therapist-rated global assessment of functioning (GAF), the experiment results indicated that both intensive combined MBT and less intensive supportive group psychotherapy showed significant improvements in a variety of psychological and interpersonal measures. Besides, researchers found a trend towards higher recovery rates in the MBT group. This research team conducted another study seven years later to test the long-term effectiveness of MBT-G in an adolescent sample with BPD or BPD features (≥ 4 DSM-5 BPD criteria). A total of 111 patients with BPD (n=106) and those with BPD features (n=5) were randomly assigned into two groups. One group of participants received the modified MBT-G program for one year, and another group of participants received treatment as usual (TAU). Patients were evaluated at 3 and 12 months after treatment. There were no significant differences between the two treatments on the score on the Borderline Personality Features Scale for Children (BPFS-C), clinician-rated BPD symptoms, and global level of functioning as well as self-reported measure of self-harm, depression, externalizing and internalizing symptoms. The results indicated that all groups showed improvement in most clinical and social outcomes at both follow-up points. Mbt-G was not superior to TAU in improving adolescents' borderline features.

Another study (Kvarstein et al. 2018) was to investigate associations between clinical severity and outcomes for patients in MBT and to compare it with psychodynamic group-based treatment programmes (PDT). The sample included 345 patients with BPD (PDT n = 281, MBT n = 64). and the clinical outcomes (global functioning, symptom distress, interpersonal problems) were repeatedly assessed over three years [15]. Linear mixed models were applied to examine the relationship between clinical severity of BPD and recovery rates. The results displayed the clinical severity was associated with poorer rates of improvement in PDT. By contrast, clinical severity was not associated with significant differences in outcomes among MBT patients. Clinical benefits associated with MBT also apply for BPD patients with severe conditions. And the differences in outcomes for patients in MBT and PDT increased significantly as the severity of the disease increased.

3.3. The long-term treatment effect of MBT

Two studies evaluated the long-term treatment effect of MBT on BPD patients and results revealed that the effect of MBT was able to maintain as long as 18 months compared to treatment as usual condition. For example, in the study of Bateman 2008, the mentalization-based treatment (MBT) by partial hospitalization compared to treatment as usual for borderline personality disorder 8 years after entry into a randomized, controlled trial and 5 years after all mentalization-based treatment (MBT) was completed, patients who had received 18 months mentalization-based treatment by partial hospitalization remain better than those receiving treatment as usual, but their general social function remains impaired [16]. From the same research group, Bateman et al. 2009 tested the effectiveness of an 18-month mentalization-based treatment (MBT) approach in an outpatient context versus a structured clinical management (SCM) outpatient approach for treatment of borderline personality disorder. After randomized dividing participants with BPD (N=134) into MBT and SCM, therapists conducted assessments for individual evaluators every 6 months. Structured treatments improve outcomes for individuals with borderline personality disorder [17]. A focus on specific mental processes brings additional benefits to structured clinical support. In terms of training, mentalization-based treatment is relatively undemanding, so it may be useful for implementation into general mental health services.

3.4. The treatment effect of MBT-DH Compared to Other Treatments

Three studies used the ‘Day hospital mentalization-based treatment’ (MBT-DH), a promising treatment for DBT patents, to measure the efficacy of MBT-DH compared to other types of treatment. Two studies were comparing MBT-DH with Specialist treatment as usual (S-TAU), and one study was comparing MBT-DH with Intensive outpatient mentalization-based treatment (MBT-IOP) [18],[19],[20]. A total of 304 participants participated in the three studies; and all three studies used adult samples.

In Laurenssen et al., 2018, researchers investigated the effectiveness of day hospital mentalization-based treatment (MBT-DH) for patients with borderline personality disorder (BPD) in the Netherlands [18]. The investigation was conducted by using a multisite randomized trial, which compared the efficacy between MBT-DH and specialist treatment as usual (S-TAU) that was created individually for aiming patients’ needs. The patients were randomly assigned to each treatment, which was 54 to MBT-DH and 41 to S-TAU. Results showed that both treatments had had a significant effect on improving patients’ total score on the BPDSI, life quality, the severity of symptoms, and interpersonal functioning.

However, no significant evidence shows that MBT-DH was more effective than other regular treatments on any outcome variables. Ultimately, higher acceptability of participation to the assigned group after randomization was found in BPD patients in the MBT-DH group and S-TAU group, 9% in the MBT-DH group, and 34% in the S-TAU group never or refused to took part in the study.

In Blankers et al., 2019, from an economic perspective, researchers had evaluated the cost-utility and cost-effectiveness of MBT-DH compared with S-TAU among BPD patients [19]. Key findings are that MBT-DH is dominated by S-TAU with QALYs as the outcome, while MBT-DH is potentially cost-effective compared with S-TAU with remissions as the outcome. A total of 95 participants were recruited from two treatment institutes from Dutch and randomly assigned to the two treatment groups. The investigation was conducted by using the five-dimensional EuroQol instrument to evaluate the societal costs of patients' remissions with quality-adjusted life years (QALYs) as an outcome variable. Results indicated that MBT-DH was 58% more likely to lead to higher costs on remissions and 35% lead to lower costs on remissions. Therefore, MBT-DH was not considered to be cost-effective compared to S-TAU.

Another study, Smits et al. 2019, conducted a multicentre randomised clinical trial to compare the effectiveness of day hospital MBT (MBT-DH) and intensive outpatient MBT (MBT-IOP) at three sites in the Netherlands [20]. The primary findings are that both groups had significant improvement on the outcomes, including symptom severity (primary outcome), which was assessed by the Brief Symptom Inventory; and personality functioning and self-harm assessment, etc. (secondary outcome). A total of 114 patients were randomly assigned to the two treatments (70 for MBT-DH and 44 for MBT-IOP). Secondary finding shows that MBT-DH has a higher superior tendency toward the secondary outcomes.

Smits et al., 2020, conducted a follow-up study on the original multicenter randomised clinical examined and compared the trajectories, the main effect of time (polynomials), and the interaction effects between day hospital MBT (MBT-DH) and intensive outpatient MBT (MBT-IOP), which were assessed three times after the treatment started (24, 30, 36 months) [21]. There was no significant difference between the improvements of the two groups, of which 83% of patients showed a reduction of their symptom severity and 97% presented improvement in borderline symptomatology. Greater improvement was found in participants of MBT-DH during the intensive treatment phase, and better performance was found in participants of MBT-IOP during follow-up. However, the significant main effect of time (polynomials) showed a great difference in the slopes comparing the MBT-DH and MBT-IOP groups; and significant main interaction effects were found between the two groups.

3.5. The treatment effect of MBT in Adolescents Group

Borderline personality disorder (BPD) usually develops in adolescence and predicts later dysfunction in adulthood. Highly structured evidence-based psychotherapeutic programs, including mentalization-based treatment (MBT), are the first choice of treatment. Previously, the effectiveness of MBT for BPD has mainly been tested with adults, and few RCT has examined the effectiveness of MBT in groups (MBT-G) for adolescent BPD. Two studies conducted the investigations with adolescents [23],[24] as the primary sample population. Both studies compared the efficacy of MBT and TAU. One study presented a 3- and 12-month follow-up for one of the original investigations [14],[23]. They described a slightly better outcome in the MBT group during or right after the treatment than TAU. However, the follow-up study showed that mentalization-based treatment in groups (MBT-G) was less effective in adolescents than TAU.

In addition, self-harm as an outcome measure has been investigated in this group. Rossouw et al., 2012 investigated the effectiveness of mentalization-based treatment for adolescents (MBT-A) who self-harm, compared with treatment as usual (TAU) [24]. Participants were randomly assigned to either the MBT-A group or the TAU group. A total of 80 youth patients (85% of females) took part in the study and were assessed for self-harm, risk-taking, and mood level for baseline. The primary outcome was self-harm, which was assessed by Risk-Taking and Self-Harm Inventory (RTSHI). The secondary outcome was depression level measured by the 13-item Mood and Feelings Questionnaire (MFQ). The mean for TAU was 17.3 (SD = 14.6) and 20.3 for MBT (SD = 17.7). Results indicated that both groups showed significant reductions in self-harm and risk-taking actions. However, greater reduction on self-harm and depression ($p < 0.04$) was found in the linear scale in RTSHI scores for the MBT-A group at the 12-month period, which means that MBT-A has higher effectiveness to adolescent who BPD in reduction self-harm and depression than TAU.

3.6. The treatment effect of MBT-DH to in Reducing Self-Harm Tendency

Non-suicidal self-harm (NSSH) is a feature which is distressing to the BPD patients and their families, results in significant morbidity and has high costs to the health service. In this review, there is one study used the non-suicidal self-harm (NSSH) and attempted suicide to compare the efficacy with MBT and enhanced therapeutic case management (ETCM).

In Carlyle' s 2020 study, reearchers examined the

effectiveness of metallization-based treatment in adults who was diagnosed with BPD and the rates of non-suicidal self-harm (NSSH) and attempted suicide [25]. According to the randomized controlled trial (RCTS) comparing 18 months of MBT with enhanced therapeutic case management (ETCM), the study found MBT had a significant statistical advantage over manualized general treatment in the incidence of attempted suicide. They also demonstrated that MBT is superior to SCM in NSSH, but only lasts for 6 months.

4. DISCUSSION

From 13 studies included in this systematic review, it was found that the effectiveness of mentalization-based therapy was to some extent controversial compared to the control groups which covered a wide range of comparators. Overall, the MBT showed some potential and advantages regarding the treatment of BPD, however, some concerns still remain and have to be discussed.

From the current review, we did not find the significant effectiveness of MBT when compared with the treatment as usual group. It can be explained by the well-developed status of the usual care in the included studies. In the 13 articles we've chosen, all the experiments were done in developed countries such as northern Europe. Even in the process of searching the literature, we rarely found research on the effectiveness of MBT in treating BPD in developing countries. Obviously, in well-developed countries, they have a relatively high level of medical treatment and advanced medical technology. Compared with MBT, other therapies already have systematic treatment procedures, and the clinical workers were less familiar with mentalization-based treatment than other mature therapies. Therefore, this may be the reason why MBT did not have an obvious therapeutic effect on BPD and was relatively expensive than other therapies, for example, Specialist treatment as usual (S-TAU). If this treatment MBT is promoted to other developing countries, it may be that their own health conditions are not very good, and the advantages of MBT will be more prominent.

The current review summarized the trials of MBT since its origin. After 1999 MBT was developed and manualized by Peter Fornagy and Anthony Bateman, there were few published studies which were written about how to use MBT to cure people with BPD or about its efficacy. Because of the limited literature, the summarized results cannot reflect the real consequence of the effectiveness of MBT to treat people suffering from BPD. If MBT and BPD could attract the attention of more psychological workers and scholars to examine MBT in different fields and regions, the future understanding of the effectiveness of MBT in the treatment of BPD will be more in-depth and comprehensive.

However, MBT does not seem to be popularized in a wide range of areas, such as countries in different stages of economic development, and various communities. The study settings in the study of our current review are also limited in only outpatient and day hospital, which is considered to be less extensive than other BPD treatments. This is probably due to the fact that the origin of the MBT was from hospital settings. Future study should explore the possibility of extending this treatment to other settings. As mentioned above, our inclusions implemented MBT in treating BPD mostly in developed countries, which might be the reason that causes it to have less significant effect on the effectiveness. However, improving the traditional research method, such as promoting the treatment in a less formal approach and publicizing it to a broader population may be helpful for researching the effectiveness of MBT compared to other BPD treatments.

5. CONCLUSION

In sum, the current systematic review concluded that mentalization-based treatment has the potential to alleviate the symptoms of borderline personality disorder and improve their quality of life. More well-designed clinical trials are still needed to reach a firm conclusion on its effectiveness and its best setting to deliver the practice.

REFERENCES

[1] Ibrahim, J., Cosgrave, N., & Woolgar, M. (2017). Childhood maltreatment and its link to borderline personality disorder features in children: A systematic review approach. Clinical Child Psychology and Psychiatry, 23(1), 57-76.

[2] Torgersen S., Kringlen E., Cramer V.(2001). The prevalence of personality disorders in a community sample. Arch Gen Psychiatry, 58, 590-596.

[3] Gunderson, J. G., Herpertz, S. C., Skodol, A. E., Torgersen, S., & Zanarini, M. C. (2018). Borderline personality disorder. Nature Reviews Disease Primers, 4, 18029.

[4] Fyer MR, Frances AJ, Sullivan T, et al.(1988). Comorbidity of borderline personality disorder. Archives of General Psychiatry. 45, 348-352.

[5] Yen S, Shea MT.(2001).Recent developments in research of trauma and personality disorders. Current Psychiatry Reports. 3, 52-58.

[6] American Psychiatric Association.(2013). Diagnostic and statistical manual of mental disorders 5th ed. 645, 663-666. Washington, DC: Author.

[7] Gunderson, J. G.(2011). Family Study of Borderline Personality Disorder and Its Sectors of Psychopathology. Archives of General Psychiatry,

68(7), 753.

[8] Zanarini, M. C., Frankenburg, F. R., Reich, D. B., Marino, M. F., Lewis, R. E., Williams, A. A., & Khera, G. S. (2000). Biparental Failure in the Childhood Experiences of Borderline Patients. Journal of Personality Disorders, 14(3), 264–273.

[9] Bateman, A., & Fonagy, P. (1999). Effectiveness of Partial Hospitalization in the Treatment of Borderline Personality Disorder: A Randomized Controlled Trial. American Journal of Psychiatry, 156(10), 1563–1569.

[10] Bender DS, Dolan RT, Skodol AE, et al.(2001). Treatment utilization by patients with personality disorders. American Journal of Psychiatry. 158,295–302.

[11] Philips, B., Wennberg, P., Konradsson, P., & Franck, J. (2018). Mentalization-Based Treatment for Concurrent Borderline Personality Disorder and Substance Use Disorder: A Randomized Controlled Feasibility Study. European Addiction Research, 24(1), 1–8.

[12] Kaltenegger, H. C., Philips, B., & Wennberg, P. (2019). Autistic traits in mentalization-based treatment for concurrent borderline personality disorder and substance use disorder: Secondary analyses of a randomized controlled feasibility study. Scandinavian Journal of Psychology.

[13] Jørgensen, C. R., Freund, C., Bøye, R., Jordet, H., Andersen, D., & Kjølbye, M. (2012). Outcome of mentalization-based and supportive psychotherapy in patients with borderline personality disorder: a randomized trial. Acta Psychiatrica Scandinavica, 127(4), 305–317.

[14] Jørgensen, M. S., Storebø, O. J., Bo, S., Poulsen, S., Gondan, M., Beck, E., Simonsen, E. (2020). Mentalization-based treatment in groups for adolescents with Borderline Personality Disorder: 3- and 12-month follow-up of a randomized controlled trial. European Child & Adolescent Psychiatry.

[15] Kvarstein, E. H., Pedersen, G., Folmo, E., Urnes, Ø., Johansen, M. S., Hummelen, B., Karterud, S. (2018). Mentalization-based treatment or psychodynamic treatment programmes for patients with borderline personality disorder - the impact of clinical severity. Psychology and Psychotherapy: Theory, Research and Practice.

[16] Bateman, A., & Fonagy, P. (2008). 8-Year Follow-Up of Patients Treated for Borderline Personality Disorder: Mentalization-Based Treatment Versus Treatment as Usual. American Journal of Psychiatry, 165(5), 631–638.

[17] Bateman, A., & Fonagy, P. (2009). Randomized Controlled Trial of Outpatient Mentalization-Based Treatment Versus Structured Clinical Management for Borderline Personality Disorder. American Journal of Psychiatry, 166(12), 1355–1364.

[18] Laurenssen, E. M. P., Luyten, P., Kikkert, M. J., Westra, D., Peen, J., Soons, M. B. J., Dekker, J. J. M. (2018). Day hospital mentalization-based treatment v. specialist treatment as usual in patients with borderline personality disorder: randomized controlled trial. Psychological Medicine, 1–8.

[19] Blankers, M., Koppers, D., Laurenssen, E. M. P., Peen, J., Smits, M. L., Luyten, P., Dekker, J. J. M. (2019). Mentalization-Based Treatment Versus Specialist Treatment as Usual for Borderline Personality Disorder: Economic Evaluation Alongside a Randomized Controlled Trial With 36-Month Follow-Up. Journal of Personality Disorders, 1–20.

[20] Smits, M. L., Feenstra, D. J., Eeren, H. V., Bales, D. L., Laurenssen, E. M. P., Blankers, M., … Luyten, P. (2019). Day hospital versus intensive out-patient mentalisation-based treatment for borderline personality disorder: multicentre randomised clinical trial. The British Journal of Psychiatry, 1–6.

[21] Smits, M. L., Feenstra, D. J., Bales, D. L., Blankers, M., Dekker, J. J. M., Lucas, Z., Luyten, P. (2020). Day hospital versus intensive outpatient mentalization-based treatment: 3-year follow-up of patients treated for borderline personality disorder in a multicentre randomized clinical trial - ERRATUM. Psychological Medicine, 1–4.

[22] Beck, E., Bo, S., Jørgensen, M. S., Gondan, M., Poulsen, S., Storebø, O. J., Simonsen, E. (2019). Mentalization-based treatment in groups for adolescents with borderline personality disorder: a randomized controlled trial. Journal of Child Psychology and Psychiatry.

[23] Rossouw, T. I., & Fonagy, P. (2012). Mentalization-Based Treatment for Self-Harm in Adolescents: A Randomized Controlled Trial. Journal of the American Academy of Child & Adolescent Psychiatry, 51(12), 1304–1313.

[24] Carlyle, D., Green, R., Inder, M., Porter, R., Crowe, M., Mulder, R., & Frampton, C. (2020). A Randomized-Controlled Trial of Mentalization-Based Treatment Compared With Structured Case Management for Borderline Personality Disorder in a Mainstream Public Health Service. Frontiers in Psychiatry, 11.