SWEDISH AGENCY FOR HEALTH TECHNOLOGY ASSESSMENT AND ASSESSMENT OF SOCIAL SERVICES

**English Summary**

# Dialectical Behaviour Therapy (DBT) and Mentalization-Based Therapy (MBT)

## A systematic review regarding the effects of DBT and MBT in patients with self-harming behaviour without a diagnosis of BPD, in patients with bulimia or binge eating disorder, and effects of short versions of DBT and MBT.

October 2024. For full report in Swedish see www.sbu/385.

## Conclusions

Effects in diagnoses other than BPD:

- DBT has a better effect than usual care[a] on several important symptoms and self-destructive behaviours in children and adolescents with self-harming behaviour that do not meet the diagnostic criteria for BPD.

Effects of treatment with short versions of DBT:

- Shorter versions of DBT have a better effect than both waiting list and other structured treatment[b] on several important symptoms and self-destructive behaviours in adults with BPD, and in adults with binge eating disorder or bulimia.

Key knowledge gaps:

- Due to the lack of studies that meet our inclusion criteria, we conclude that the following effects remain unknown for:
    - All forms of MBT in patients with self-harming behaviour that do not meet the criteria for BPD, as well as in patients with binge eating disorder or bulimia.
    - Shorter versions of MBT on all of the populations included in this review.
    - All forms of DBT for adults with self-harming behaviour that do not meet the criteria for BPD.

- As a vast majority of the participants in the included studies are female, more studies are needed on boys and men with these difficulties.

a. Usual care refers to several different treatments that are given in an unstructured way to the control group, even if the different treatments are structured in their own right.
b. Other structured treatment refers to specific treatment that is given in the same structured way to the entire control group.

## Background

Dialectical Behaviour Therapy (DBT) and Mentalization-Based Therapy (MBT) are interventions that originally were developed for patients with Borderline Personlity Disorder (BPD). The interventions have later been evaluated and used in patients with other diagnoses than BPD, for instance self-harm, suicidal behaviour, and eating disorders. The original versions of the treatments are extensive interventions, designed with individual as well as group therapy. Later, shorter versions of the treatments have been developed that for instance focus on either group or individual therapy. Especially the versions that focus on group therapy are used to some extent in clinical practice today.

### Aim

The purpose of this systematic review was to evaluate the scientific support for two questions:

1) What are the effects of DBT and MBT in the treatment of:
    a. patients with self-harming behaviour that do not meet the criteria for BPD
    b. patients with binge eating disorder or bulimia?
2) What are the effects of shorter versions of DBT and MBT, for instance versions solely focusing on group therapy?

## Method

We conducted a systematic review and reported int in accordance with the PRISMA statement. The protocol is registered in Prospero (CRD42023459707). Meta-analyses were performed on extracted data from included studies using the inverse variance method and the random effects model in Review Manager 5.4.1 at the end of treatment and at the end of follow-up, respectively. The certainty of the evidence was assessed with GRADE.

## Results

A systematic literature search was conducted in February 2024. The results of this review is based on 53 publications from 42 randomized and controlled studies (Figure 1). Due to multiple populations, interventions, comparisons and outcomes (Table 1), a great number of results from meta-analyses were obtained. As a result of active control treatments and the fact that several of the results from the meta-analyses were based on relatively small number of studies and patients, many results were assessed as a very low level of certainty according to GRADE. None the less, for certain populations, interventions and outcomes, several results were assessed a low, moderate or high level of certainty according to GRADE (Table 2). Most of the participants in the studies were women. However, the results of existing studies on men do not contradict the results of this review.

## Discussion

DBT is a comprehensive and costly treatment. This review concludes that short versions of DBT have an effect on certain outcomes in certain patient populations, and these shorter interventions may be considered if access to treatment needs to be increased and extensive DBT is not fully available.

The results also indicate that DBT in various forms has an effect in at least two populations where the majority of the individuals do not meet the criteria for BPD.

More studies are needed to better understand which patient groups respond to different forms of these treatments. This is especially the case for short versions of MBT, and for MBT in general for patients with other diagnoses than BPD.

**Table 1** Inclusion criteria according to the PICO model.

| | |
|---|---|
| **Population** | Adults, adolescents and children with Borderline personality disorder (BPD), self-harm and/or suicidal behaviour without BPD, binge-eating disorder or bulimia |
| **Intervention** | DBT and MBT. Results for the original versions of the interventions, and the shorter versions of the interventions were reported separately |
| **Control** | Other structured treatment, usual care, waiting list, no intervention |
| **Outcome** | Severity of BPD, self-harming behaviour, episodes of self-harm, suicidal thoughts, suicide attempts, suicide, suicidal gestures, deviant eating behaviours, binge eating episodes, eating disorder-specific psychopathology, vomiting, other compensatory behaviours, emotion regulation, psychosocial functioning, relationship difficulties, mentalization ability, depression, anxiety and negative side effects |

**Figure 1** Flowchart

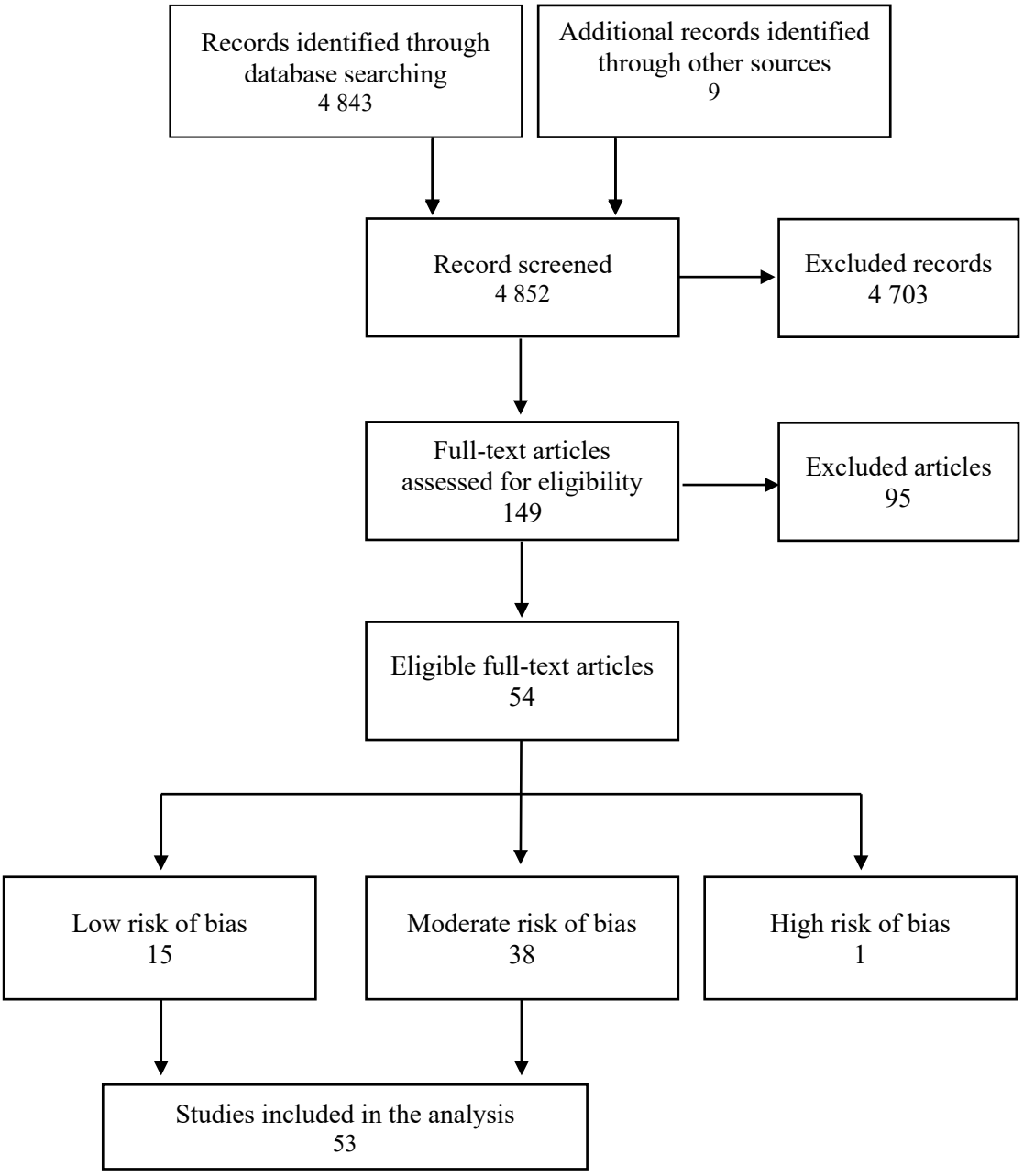

**Table 2** Ratio between the number of results from the meta-analyses assessed as having low, moderate or high certainty according to GRADE at the end of treatment (EOT) and the end of follow-up (EOF) respectively, and the total number of results. The GRADE assessment was made with respect to whether the intervention had a better effect than the control arm (direction of effect).

| **Population with BPD** | **Intervention** | **Control** | **EOT** | **EOF** | **No of studies** | **Participants** |
|---|---|---|---|---|---|---|
| Children and adolescents | MBT | TAU | 0/5 | 0/5 | 2 | 192 |
| Adults | DBT | TAU | 8/14 | 5/11 | 10 | 570 |
| | | OST | 4/10 | 0/6 | 4 | 430 |
| | DBT-ST | WL/NI | 4/6 | 3/5 | 3 | 153 |
| | | TAU | 0/2 | – | 1 | 41 |
| | | OST | 2/11 | 1/11 | 6 | 361 |
| | MBT | OST | 3/11 | 5/10 | 7 | 544 |
| | | | | | | |
| **Population without BPD** | **Intervention** | **Control** | **EOT** | **EOF** | **No of studies** | **Participants** |
| Children and adolescents with SH/SB | DBT | TAU | 3/8 | 1/7 | 2 | 112 |
| Adults with BED/BN | DBT | OST | 0/5 | 0/5 | 1 | 67 |
| | DBT-ST | WL/NI | 5/8 | – | 4 | 176 |
| | | OST | 3/8 | 1/7 | 2 | 137 |
| | DBT-I | WL/NI | 4/8 | – | 2 | 89 |

**Abbreviations:**
BED (Binge-eating disorder), BN (bulimia nervosa), DBT (Dialectical behaviour therapy) DBT-I (DBT-Individual, short version of DBT that focuses on individual therapy), DBT-ST (DBT skills training, short version of DBT that focuses on skills training in group), BPD (Borderline personality disorder), EOF (End of follow-up), EOT (End of treatment), MBT (Mentalization based therapy), OST (Other structured treatment), SH (Self-harm), SB (Suicidal behaviour), TAU (Treatment as usual), WL/NI (Wait list/no intervention).

## Conflict of Interest

In accordance with SBU's requirements, the experts and scientific reviewers participating in this project have submitted statements about conflicts of interest. These documents are available upon request from SBU. SBU has determined that the conditions described in the submissions are compatible with SBU's requirements for objectivity and impartiality.

## Appendices

- Search strategies
- Excluded references
- Characteristics of included studies
- References included in analysis