

## Targeted Update

### Cognitive behavioural therapy compared with psychodynamic psychological therapy for binge eating disorder

This is a **Targeted Update** of the Cochrane Review Hay PJ, Stefano SC, Kashyap P. Psychological treatments for bulimia nervosa and bingeing. Cochrane Database of Systematic Reviews 2009, Issue 4. Art. No.: CD000562. DOI: 10.1002/14651858.CD000562.pub3.

Latest search was performed: **6 January 2016**

Results of the search, list of new references, details of updates to methods, study characteristics, risk of bias assessments, and details of data analyses with forest plots can be found in the [Supplementary material](#).

This **Targeted update** was prepared by Hanna Bergman<sup>1</sup> and Nuala Livingstone<sup>2</sup>. Data were taken from the published full review and results of the updating process, carried out by Hanna Bergman<sup>1</sup>, Molly Grimes<sup>1</sup>, Sarah R Davies<sup>3</sup> and Sarah Dawson<sup>3</sup>. The abstract was adapted from the published full review.

<sup>1</sup>Enhance Reviews, UK; <sup>2</sup>Cochrane Editorial Unit, UK; <sup>3</sup>Cochrane Common Mental Disorders Group

Trusted evidence.  
Informed decisions.  
Better health.



### What's a Targeted Update?

Targeted Updates are two to three-page documents that use the Cochrane Review as their foundation, but focus on updating only one or two important comparisons, and the seven most relevant outcomes. They include an updated Summary of Findings table and Abstract, and use Cochrane methodology. The full search results, risk of bias assessments, analyses, and references do not form part of the Targeted Update, but are available as supplementary information. Targeted Updates are intended for use by policy makers.

### What's the context for this Targeted Update?

The Norwegian Health Directorate commissioned this Targeted Update to help develop a guideline.

### What's new

The comparison 'CBT versus interpersonal psychological therapy' was included in this Targeted Update. One new included study with 135 participants was identified.

At end of treatment CBT may make little or no difference to bingeing symptoms compared with interpersonal psychological therapy, and the effect on 100% abstinence from bingeing is very uncertain.

The Cochrane review this Targeted Update is based on has a wider scope, included 48 studies, and concluded that there is a small body of evidence for the efficacy of CBT in bulimia nervosa and similar syndromes, but more and larger trials are needed, particularly for binge eating disorder. Further, there is a need to develop more efficacious therapies for those with both a weight problem and an eating disorder.

The Targeted update '*Cognitive behavioural therapy compared with any other psychological therapy for binge eating disorder*' covers another comparison from the same Cochrane review.

## Cognitive behavioural therapy for binge eating disorder:

- May make little or no difference to mean bingeing symptoms compared with interpersonal psychotherapy;
- Has an uncertain effect on 100% abstinence from binge eating compared with interpersonal psychotherapy; the certainty of the evidence is very low.

### Background

A specific manual-based form of cognitive behavioural therapy (CBT) has been developed for the treatment of binge eating disorder (BED). Other psychotherapies, including psychodynamic psychotherapies are also used to treat BED.

### Objectives

To evaluate the efficacy of CBT compared with psychodynamic psychotherapies in the treatment of adults with BED.

### Search methods

The CCMD-CTR-Studies and References Register was searched on 6 January 2016. ClinicalTrials.gov and the World Health Organization's trials portal (ICTRP) were also searched. Reference lists of all included studies and relevant systematic reviews were checked to identify additional studies.

### Selection criteria

Randomised controlled trials of CBT compared with psychodynamic psychotherapy for adults with BED which applied a standardised outcome methodology and had less than 50% drop-out rate.

### Data collection and analysis

Relative risks (RRs) were calculated for binary outcome data. Mean differences (MDs) or standardised mean differences (SMDs) were calculated for continuous variable outcome data. A random effects model was applied.

### Main Results

We included 2 RCTs, published 2002 and 2006, involving 297 participants in this Targeted Update. No studies evaluating psychoanalytic psychodynamic psychological therapy were found; the included studies compared CBT with interpersonal psychotherapy (IPT).

The risk of bias was unclear for both studies, as the randomisation process and allocation concealment were not adequately described in the reports. Further, blinding is difficult to achieve in this type of study, which could lead to risk of performance and detection bias.

There was low quality evidence that CBT may make little or no difference to bingeing symptoms (MD -0.437, 95% CI -0.912 to 0.057, 2 studies, 232 participants), depressive symptoms (MD 1.29, 95% CI -0.946 to 3.526, 2 studies, 232 participants), and psychosocial/interpersonal functioning (MD -0.045, 95% CI -0.19 to 0.095, 2 studies, 232 participants), compared with IPT. We are uncertain about the effect on 100% abstinence from bingeing, general psychiatric symptoms, and weight; certainty of evidence was very low.

### Implications and conclusions

There is some evidence that CBT compared with IPT in people with BED may make little or no difference to bingeing symptoms, and we are very uncertain about the effect on 100% abstinence

from bingeing. The quality of the evidence was low to very low due to imprecision in the results and unclear risk of bias. Therefore, further research is very likely to have an important impact on these estimates.

### Included studies

Two parallel, placebo-controlled RCTs evaluated the efficacy of group CBT compared with group IPT in doses from 16 to 20 weekly sessions. 257 female and 26 male participants with a DSM-IV diagnosis of BED, mean age from 42.8 to 45.6 years, and BMI >30 were randomized. We report outcomes at end of treatment.

No ongoing studies were identified.

### References:

Tasca GA, Ritchie K, Conrad G, et al.

*Psychotherapy Research* 2006;**16**(1):106-21.

Wilfley DE, Welch RR, Stein RI, et al. *Archives of*

*General Psychiatry* 2002;**59**:713-21.

## Summary of Findings: CBT compared with interpersonal psychotherapy for binge eating disorder at end-of-treatment

**Patients and setting:** Adults diagnosed with binge eating disorder aged >16 years at eating disorder centre or clinic in Canada and the USA.

**Comparison:** Group cognitive behavioural therapy (face-to-face) versus group psychodynamic interpersonal psychological therapy (face-to-face).

Outcome	Plain language summary	Absolute effect		Relative effect (95% CI) N° of participants & studies	Certainty of the evidence (GRADE)
		IPT	CBT		
<b>Number of people who did not show 100% abstinence from binge eating</b>	We are uncertain about the effect of CBT on 100% abstinence from binge eating in people with BED compared with IPT at end-of-treatment.	272 per 1000	209 per 1000	RR 0.77 (0.44 to 1.34) Based on data from 162 participants in 1 study	⊕○○○ VERY LOW <sup>1,2</sup>
		Difference 62 fewer per 1000 (from 152 fewer to 92 more)			
<b>Mean bingeing symptoms</b> Measured by binge days per week and binge days per month, assessed by binge days per week <sup>3</sup>	CBT <b>may make little or no difference</b> on mean bingeing symptoms in people with BED compared with IPT at end-of-treatment.	Mean: 1.11 binge days/week**	Mean: 0.673 binge days/week	MD -0.437 (-0.912 to 0.057)* Based on data from 232 participants in 2 studies	⊕⊕○○ LOW <sup>4,5</sup>
		Difference 0.437 lower (0.912 lower to 0.057 higher)			
<b>Mean depressive symptoms</b> Measured by CES-D and SCL-90-D, assessed by SCL-90-D <sup>6</sup>	CBT <b>may make little or no difference</b> to mean depressive symptoms in people with BED compared with IPT at end-of-treatment.	Mean: 33.6 points**	Mean: 34.89 points	MD 1.29 (-0.946 to 3.526)* Based on data from 232 participants in 2 studies	⊕⊕○○ LOW <sup>4,5</sup>
		Difference 1.29 higher (0.946 lower to 3.526 higher)			
<b>Mean general psychiatric symptoms</b> Measured and assessed by GSI	We are uncertain about the effect of CBT on general psychiatric symptoms in people with BED compared IPT at end-of-treatment.	Mean: 32.3 points**	Mean: 32.8 points	MD 0.5 (-2.2 to 3.2) Based on data from 158 participants in 1 study	⊕○○○ VERY LOW <sup>1,7</sup>
		Difference 0.5 higher (2.2 lower to 3.2 higher)			
<b>Mean psychosocial/interpersonal functioning</b> Measured by IIP and SAS, assessed by SAS <sup>8</sup>	CBT <b>may make little or no difference</b> in improving psychosocial/interpersonal functioning in people with BED compared with IPT at end-of-treatment.	Mean: 1.9 points**	Mean: 1.855 points	MD -0.045 (-0.19 to 0.095)* Based on data from 232 participants in 2 studies	⊕⊕○○ LOW <sup>4,5</sup>
		Difference 0.045 lower (0.19 lower to 0.095 higher)			
<b>Mean weight</b> Measured and assessed by BMI	We are uncertain about the effect of CBT on weight in people with BED compared with IPT at end-of-treatment.	Mean: BMI 37.2**	Mean: BMI 37.73	MD 0.53 (-1.03 to 2.09)* Based on data from 232 participants in 2 studies	⊕○○○ VERY LOW <sup>4,9</sup>
		Difference 0.53 higher (1.03 lower to 2.09 higher)			

BED=Binge Eating Disorder; BMI=Body Mass Index; CBT=Cognitive Behavioural Therapy; CES-D= Center for Epidemiological Studies-Depression Scale; CI= confidence interval; GSI=Global Symptom Index; IIP= Inventory of Interpersonal Problems; IPT=Interpersonal psychotherapy; MD= mean difference; RR= risk ratio; SAS=Social Adjustment Scale; SCL-90-D=Symptom Checklist-90-Revised Depression Subscale; SMD=standardised mean difference

\*Analysed with SMD and back-estimated to MD to enable interpretation (Cochrane Handbook [12.6.4 Re-expressing SMDs using a familiar instrument](#)), see footnotes for further details. \*\*Based on mean score for representative study, see footnotes for further details.

<sup>1</sup> Downgraded one level for risk of bias: The included study reported inadequately on randomisation procedures. <sup>2</sup> Downgraded two levels for imprecision: only one study with 162 participants was included, and confidence intervals were very wide including appreciable benefit for both types of intervention. <sup>3</sup> One of the two studies measured this outcome with binge days per week. Scores were back-estimated to binge days per week from SMD -0.23 (-0.48 to 0.03) using control group SD 1.9 from representative study Tasca 2006. <sup>4</sup> Downgraded one level for risk of bias: The included studies reported inadequately on randomisation procedures. <sup>5</sup> Downgraded one level for imprecision: only 232 participants were included. <sup>6</sup> One of the two studies measured this outcome with SCL-90-D. Scores were back-estimated to SCL-90-D from SMD 0.15 (-0.11 to 0.41) using control group SD 8.6 from representative study Wilfley 2002. <sup>7</sup> Downgraded two levels for imprecision: only one study with 158 participants was included, and confidence intervals were very wide including appreciable benefit for both types of intervention. <sup>8</sup> One of the two studies measured this outcome with SAS. Scores were back-estimated to SAS from SMD -0.09 (-0.38 to 0.19) using control group SD 0.5 from representative study Wilfley 2002. <sup>9</sup> Downgraded two levels for imprecision: only 232 participants were included, and confidence intervals were very wide including appreciable benefit for both types of intervention.

## Forest plot: CBT compared with interpersonal psychotherapy for binge eating disorder at end-of-treatment \*

**Patients and setting:** Adults diagnosed with binge eating disorder aged >16 years at eating disorder centre or clinic in Canada and the USA.

**Comparison:** Group cognitive behavioural therapy (face-to-face) versus group psychodynamic interpersonal psychological therapy (face-to-face).

Outcome	Forest plot	Certainty of the evidence (GRADE)																																																						
<p><b>100% abstinence from binge eating at the end of therapy</b></p> <p>We are uncertain about the effect of CBT on 100% abstinence from binge eating in people with BED compared with IPT at end of treatment because evidence was of very low certainty.</p>	<table border="1"> <thead> <tr> <th rowspan="2">Study or Subgroup</th> <th colspan="2">CBT</th> <th colspan="2">Comparison therapy</th> <th rowspan="2">Weight</th> <th colspan="2">Risk Ratio</th> </tr> <tr> <th>Events</th> <th>Total</th> <th>Events</th> <th>Total</th> <th>M-H, Random, 95% CI</th> <th>M-H, Random, 95% CI</th> </tr> </thead> <tbody> <tr> <td>Wilfley 2002</td> <td>17</td> <td>81</td> <td>22</td> <td>81</td> <td>100.0%</td> <td>0.77</td> <td>[0.44, 1.34]</td> </tr> <tr> <td><b>Total (95% CI)</b></td> <td></td> <td><b>81</b></td> <td></td> <td><b>81</b></td> <td><b>100.0%</b></td> <td><b>0.77</b></td> <td><b>[0.44, 1.34]</b></td> </tr> <tr> <td colspan="8">Total events: 17 / 22</td> </tr> <tr> <td colspan="8">Heterogeneity: Not applicable</td> </tr> <tr> <td colspan="8">Test for overall effect: Z = 0.91 (P = 0.36)</td> </tr> </tbody> </table>	Study or Subgroup	CBT		Comparison therapy		Weight	Risk Ratio		Events	Total	Events	Total	M-H, Random, 95% CI	M-H, Random, 95% CI	Wilfley 2002	17	81	22	81	100.0%	0.77	[0.44, 1.34]	<b>Total (95% CI)</b>		<b>81</b>		<b>81</b>	<b>100.0%</b>	<b>0.77</b>	<b>[0.44, 1.34]</b>	Total events: 17 / 22								Heterogeneity: Not applicable								Test for overall effect: Z = 0.91 (P = 0.36)								⊕○○○ VERY LOW
Study or Subgroup	CBT		Comparison therapy		Weight	Risk Ratio																																																		
	Events	Total	Events	Total		M-H, Random, 95% CI	M-H, Random, 95% CI																																																	
Wilfley 2002	17	81	22	81	100.0%	0.77	[0.44, 1.34]																																																	
<b>Total (95% CI)</b>		<b>81</b>		<b>81</b>	<b>100.0%</b>	<b>0.77</b>	<b>[0.44, 1.34]</b>																																																	
Total events: 17 / 22																																																								
Heterogeneity: Not applicable																																																								
Test for overall effect: Z = 0.91 (P = 0.36)																																																								
<p><b>Mean bingeing symptom scores</b></p> <p>CBT may make little or no difference on mean bingeing symptoms in people with BED compared with IPT at end-of-treatment.</p>	<table border="1"> <thead> <tr> <th rowspan="2">Study or Subgroup</th> <th colspan="2">CBT</th> <th colspan="2">Comparison therapy</th> <th rowspan="2">Weight</th> <th colspan="2">Std. Mean Difference</th> </tr> <tr> <th>Mean</th> <th>SD</th> <th>Mean</th> <th>SD</th> <th>IV, Random, 95% CI</th> <th>IV, Random, 95% CI</th> </tr> </thead> <tbody> <tr> <td>Tasca 2006</td> <td>0.57</td> <td>0.93</td> <td>37</td> <td>1.11</td> <td>31.6%</td> <td>-0.36</td> <td>[-0.82, 0.10]</td> </tr> <tr> <td>Wilfley 2002</td> <td>0.6</td> <td>1.6</td> <td>78</td> <td>0.9</td> <td>68.4%</td> <td>-0.16</td> <td>[-0.48, 0.15]</td> </tr> <tr> <td><b>Total (95% CI)</b></td> <td></td> <td></td> <td><b>115</b></td> <td></td> <td><b>100.0%</b></td> <td><b>-0.23</b></td> <td><b>[-0.48, 0.03]</b></td> </tr> <tr> <td colspan="8">Heterogeneity: Tau<sup>2</sup> = 0.00; Chi<sup>2</sup> = 0.46, df = 1 (P = 0.50); I<sup>2</sup> = 0%</td> </tr> <tr> <td colspan="8">Test for overall effect: Z = 1.71 (P = 0.09)</td> </tr> </tbody> </table>	Study or Subgroup	CBT		Comparison therapy		Weight	Std. Mean Difference		Mean	SD	Mean	SD	IV, Random, 95% CI	IV, Random, 95% CI	Tasca 2006	0.57	0.93	37	1.11	31.6%	-0.36	[-0.82, 0.10]	Wilfley 2002	0.6	1.6	78	0.9	68.4%	-0.16	[-0.48, 0.15]	<b>Total (95% CI)</b>			<b>115</b>		<b>100.0%</b>	<b>-0.23</b>	<b>[-0.48, 0.03]</b>	Heterogeneity: Tau <sup>2</sup> = 0.00; Chi <sup>2</sup> = 0.46, df = 1 (P = 0.50); I <sup>2</sup> = 0%								Test for overall effect: Z = 1.71 (P = 0.09)								⊕⊕○○ LOW
Study or Subgroup	CBT		Comparison therapy		Weight	Std. Mean Difference																																																		
	Mean	SD	Mean	SD		IV, Random, 95% CI	IV, Random, 95% CI																																																	
Tasca 2006	0.57	0.93	37	1.11	31.6%	-0.36	[-0.82, 0.10]																																																	
Wilfley 2002	0.6	1.6	78	0.9	68.4%	-0.16	[-0.48, 0.15]																																																	
<b>Total (95% CI)</b>			<b>115</b>		<b>100.0%</b>	<b>-0.23</b>	<b>[-0.48, 0.03]</b>																																																	
Heterogeneity: Tau <sup>2</sup> = 0.00; Chi <sup>2</sup> = 0.46, df = 1 (P = 0.50); I <sup>2</sup> = 0%																																																								
Test for overall effect: Z = 1.71 (P = 0.09)																																																								

\* Forest plot for primary outcomes. Forest plots for all outcomes are presented in Supplementary materials.