

Executive summary

Aim

Binge eating disorder (BED) is a new formal diagnosis in DSM-5, although it has been defined in previous version of the DSM since 1994 as a research category, and used in clinical settings for nearly 20 years. The aim of this systematic review was to evaluate the efficacy of treatments for BED.

Conclusions

- ▶ Several different treatments for BED result in remission (defined as cessation of binge episodes) or decreased frequency of binge eating episodes.
- ▶ Both CBT and IPT result in remission, or decreased frequency of binge eating episodes up to one year after end of treatment. No conclusions are presented for follow ups beyond one year due to few studies. At end of treatment, guided self-help, based on CBT, results in remission and decreased frequency of binge eating episodes.
- ▶ SSRI and lisdexamfetamine result in remission and decreased frequency of binge eating episodes at end of treatment. The effect of psychopharmacology beyond the end of treatment is unknown.
- ▶ Future research should investigate the long term and adverse effects, cost-effectiveness, the effect of treatments for children and adolescents, and the effect of treatments on quality of life.

Background

Binge eating disorder is associated with psychological and physical suffering and is perceived as shameful by those with the condition. The diagnostic criteria for BED include recurrent episodes of binge eating associated with at least three of the following; eating

much more rapidly than normal, eating until feeling uncomfortably full, eating large amounts of food when not feeling physically hungry, eating alone because of embarrassment, and/or feeling disgusted with oneself, depressed or very guilty after overeating. BED is similar to Bulimia Nervosa regarding the binge eating episodes but does not involve purging, or other compensatory behaviours. In contrast to other eating disorders a considerable proportion of individuals with BED are overweight or obese.

In the general population, 1–4% are estimated to meet criteria for BED. The lifetime comorbidity with other psychiatric disorders is estimated to 70%. Many individuals with BED never seek treatment and those who do wait approximately between 10 to 19 years.

Method

The systematic review was conducted according to the PRISMA statement. Inclusion criteria were individuals with binge eating disorder (full or subthreshold) and psychological, behavioural, pharmacological, and combination interventions. Controlled clinical studies, with and without randomisation were included. Five different databases were searched until November 2015. The methodological quality of eligible studies was assessed and only studies with moderate or low risk of bias were included in the analysis. GRADE was used to evaluate the certainty/quality of the evidence (strong (⊕⊕⊕⊕), moderate (⊕⊕⊕○), low (⊕⊕○○) and very low (⊕○○○)).

Main results

Altogether 44 studies in 53 publications were identified fulfilling inclusion and quality criteria. All were randomised. Approximately half of them could be included in a meta-analysis. We found evidence for several interventions for the short-term outcome of binge eating disorder (i.e. post-treatment outcome). The main results are presented in Table 1. There was a lack of cost analyses in these studies.

Table 1 Summary of the main results.

Intervention	Outcome			
	Remission (95% CI)	Binge eating frequency (95% CI)	EDE-Q total (95% CI)	BMI (95% CI)
Psychological treatments				
CBT compared to waiting list* (4 RCTs)	Increased RD 0.40 (0.30, 0.50) (⊕⊕⊕○)	Reduced SMD -0.83 (-1.11, -0.55) (⊕⊕○○)	Reduced MD -0.50 (-0.88, -0.12) (⊕⊕○○)	Unclear (⊕○○○)
Self-help compared to waiting list* (8 RCTs)	Increased RD 0.25 (0.12, 0.38) (⊕⊕⊕○)	Reduced (⊕⊕○○)	Reduced (⊕⊕⊕○)	Unclear (⊕○○○)
IPT compared to CBT (2 RCTs)	Equivalent, post treatment and at 1 year follow up (⊕⊕○○)	Equivalent, post treatment and at 1 year follow up (⊕⊕○○)	Unclear (⊕○○○)	Equivalent, post treatment and at 1 year follow up (⊕⊕○○)
BWL compared to CBT (4 RCTs)	Post treatment: unclear (⊕○○○) 1 year: CBT superior (⊕⊕○○)	CBT superior both at post treatment and at 1 year follow up (⊕⊕○○)	Unclear (⊕○○○)	post treatment: unclear (⊕○○○) 1 year: CBT superior (⊕⊕○○)
Pharmacological treatments				
SSRI compared to placebo* (6 RCTs)	Increased RD 0.15 (0.02, 0.27) (⊕⊕○○)	Reduced SMD -0.45 (-0.82, -0.09) (⊕⊕○○)	Unclear (⊕○○○)	Unclear (⊕○○○)
Lisdexamfetamine compared to placebo* (3 RCTs)	Increased RD 0.25 (0.19, 0.31) (⊕⊕○○)	Reduced SMD -0.76 (-0.99, -0.53) (⊕⊕○○)	Unclear (⊕○○○)	Weight loss MD -5.23 (-6.25, -3.94) (⊕○○○)

* Post treatment

EDE-Q = Eating Disorder Examination Questionnaire; **MD** = Mean difference; **RCT** = Randomised Controlled trial; **RD** = Risk difference; **SMD** = Standardised mean difference

Consequences

The conclusion from this systematic review is that there are several different treatments that are effective for BED. However, the long-term effect is unknown for most of the interventions since the majority of the studies only analysed effects post treatment, except for CBT and IPT.

Psychological therapy may be more effective than pharmacologic but no direct comparison has been done. Indirect comparisons are difficult since studies have used either waiting list or placebo as control condition.

With respect to pharmacological treatments, the adverse effects associated with SSRI and lisdexamfetamine described for other disorders are also present for persons with BED. The risk for adverse events from psychological treatments is unknown. No studies reported any adverse events but it is unclear whether this was systematically investigated.

Despite the fact that patients with BED are known to have reduced quality of life, most studies had not evaluated if this was improved or changed after the treatment. In addition, health economic studies are lacking.

Project group

Experts

Ata Ghaderi (Chair), Sanna Aila Gustafsson, Thomas Parling, Maria Råstam

SBU

Jenny Odeberg (Project Manager)
Agneta Brolund
Harald Gyllensvärd
Emelie Heintz
Therese Kedebing
Agneta Pettersson

SBU Assessments no 248 (2016)
www.sbu.se/en • registrator@sbu.se
Graphic Design: Anna Edling, SBU