Update on binge eating disorder

What general practitioners should know

Tayla Donker, Ignatius Eric Hadinata

This article is part of a longitudinal series on nutrition and diet.

Background

The prevalence of eating disorders in Australia is increasing. Binge eating disorder (BED) is the most prevalent form of disordered eating. Many people with BED are overweight. This compounds the problem due to weight stigma and the typical conception of someone with an eating disorder being underweight, leading to the under-recognition of eating disorders in this population group.

Objective

The aim of this article is to update general practitioners (GPs) on how to screen patients for eating disorders across the entire weight spectrum and to diagnose, treat and monitor patients with BED.

Discussion

GPs have an important role in the screening, assessment, diagnosis and coordination of treatment for patients with eating disorders, including BED. Treatment for BED includes psychological counselling, diet and, at times, medication. These treatments are explored in the paper, alongside the clinical processes for diagnosis and ongoing care.

**DISORDERED EATING** is an important presentation in general practice, affecting approximately one in five Australians, and is on the rise.¹ ² Binge eating disorder (BED) is the most common form of all eating disorders, representing almost half of all eating disorders.³ ⁴ Those with a higher weight are often underdiagnosed and undertreated.⁴ ⁵ Stigma associated with weight and body image can be a barrier to seeking help. Dieting has been identified as a major risk factor for developing disordered eating.¹ ⁶

BED can cause significant comorbidities including obesity, diabetes, hypertension, hyperlipidaemia, coronary heart disease, hepatic steatosis, obstructive sleep apnoea and mood disorders.⁷ Gastric necrosis following acute gastric dilatation is rare, but a potentially fatal complication of binge eating.⁸

**What is BED?**

BED is characterised by recurrent episodes of a loss of control and overeating without the associated inappropriate compensatory behaviour.

It is important to assess the patient against formal diagnostic criteria. The most current diagnostic criteria are published in the *International classifications of diseases 11th revision* (ICD-11).⁹ However, the diagnostic criteria currently recognised by Medicare Australia (e.g. for the Eating Disorder Management Plan eligibility assessment) are those in the *Diagnostic and statistical manual of mental disorders, fifth edition* (DSM-5).¹⁰

The diagnosis of BED requires the following criteria to be met:¹⁰

- recurrent episodes of binge eating
  - once or more a week, over three months or more
  - eating within a two-hour period
  - features of loss of control
- eating a large amount of food or an inability to stop eating
- eating while full
- embarrassment, disgust and distress
- the absence of inappropriate compensatory mechanisms to prevent weight gain (e.g. laxative use, vomiting, exercise, eating restriction)
- symptoms not better accounted for by another medical condition, mental health condition or substance use
- the exclusion of a diagnosis of bulimia nervosa or anorexia nervosa.

**Distinguishing BED from other disorders**

Unlike bulimia nervosa, BED is not regularly followed by an inappropriate compensatory behaviour. If there is regular vomiting, exercise, laxative use
or other behaviour aimed at preventing weight gain, then other diagnoses, such as bulimia nervosa, should be considered.

Similarly, restrictive eating patterns are not prominent in BED. If restrictive eating and weight loss are significant features, then anorexia nervosa or other specified eating or feeding disorder (OSFED) should be considered.

**Screening**

Early identification of BED significantly increases the chances of recovery.11,12 Many patients with BED present with a desire to lose weight. All patients seeking weight loss programs (including bariatric surgery), exhibiting risky behaviours (eg the use of unregulated weight loss pills or laxatives) and with body image concerns should be screened for BED. In addition, it is worth screening patients who suffer from consequences of BED, such as diabetes and fatty liver disease.

Table 1 presents some early warning signs of a patient with an eating disorder.

Two commonly used screening tools are the Sick, Control, One stone, Fat, and Food (SCOFF) questionnaire and the Eating Disorder Screen for Primary Care (ESP).19,20 Originally, these screening tools were created for people presenting with a lower weight. However, the ESP has since been validated for patients across all the entire weight spectrum and is therefore suitable for BED.20

The ESP asks the following questions:20

- Are you satisfied with your eating patterns?
- Do you ever eat in secret?
- Does your weight affect the way you feel about yourself?
- Have any members of your family suffered with an eating disorder?
- Do you currently suffer with, or have you ever suffered in the past, with an eating disorder?

Answering 'no' to Question 1 or 'yes' to any of the other questions indicates a potential eating disorder.

The Binge Eating Scale has been specifically validated for BED.21 However, the length of this questionnaire (16 questions) limits its utility as an initial screening tool.

**Assessment**

Once a patient is suspected of having an eating disorder, a comprehensive assessment should be conducted. Useful templates to conduct these assessments are available (eg from the InsideOut Institute for Eating Disorders17).

For patients with BED, it is particularly useful to focus on:

- nutrition history
- focused binge eating history (including feelings, triggers, environment)
- excluding purging, compensatory behaviour and restrictive patterns
- risk assessment (distress level, self-harm and suicidal thoughts)
- the effect of binge-eating on day-to-day life (self-esteem, social life, work/study, sleep).

A brief system review, examination and an initial set of investigations should also be conducted.17 The severity of the eating disorder can be assessed by using the Eating Disorder Examination Questionnaire (EDE-Q) global score.22

**Treatment**

Treatment of BED primarily involves psychological21,24 and dietary25 treatment. Medication could help and may supplement these treatment strategies.

Psychological treatment ranges from Cognitive Behavioural Therapy (CBT) to Interpersonal Therapy (IPT) and Dialectical Behavioural Therapy (DBT).19,20, 23–27 CBT focuses on changing cognitive distortions and associated behaviours and forming cognitive strategies. CBT-E (Enhanced Cognitive Behavioural Therapy), a specialised form of CBT for eating disorder, has a very extensive evidence base for BED.23,24,26 IPT focuses on resolving interpersonal problems and attachment issues. CBT is more effective than IPT in the short term, although long-term efficacy is similar.26 The evidence base for IPT is not as extensive as that for CBT.26 DBT is a ‘third wave’ adaptation of CBT, designed to help with emotional dysregulation. It is effective, but to a lesser extent than CBT.27 Because DBT specifically is designed to help with emotional dysregulation, it may suit a subset of patients with BED.27

There are several approaches to dietary treatment. One popular approach is the step-wise RAVES (Regularity, Adequacy, Variety, Eating socially, Spontaneity) treatment model designed by dietitian, Shane Jeffreys.25 The steps in the RAVES model, as defined by Jeffreys, are as follows:25

- Regularity: establish a habit of eating regularly five to six times a day
  - helps reduce binge eating episodes
  - regulates blood sugar levels (minimising highs and lows)
  - improves metabolic efficiency

**Table 1. Early warning signs for eating disorder**

<table>
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<tr>
<th>Behavioural</th>
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<tr>
<td>- Eating alone/avoiding in public</td>
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<td>- Skipping meals</td>
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<td>- Calorie counting</td>
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<tr>
<td>- Slow eating/‘picking’ at food</td>
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<td>- Fussy eating</td>
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<tr>
<td>- Excessive and/or compulsive exercise</td>
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<td>- Wearing baggy clothing</td>
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<tr>
<td>- Vomiting and other purging behaviour (laxatives, diet pills)</td>
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<th>Psychological</th>
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<tr>
<td>- Anxiety in particular relating to food</td>
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<td>- Depression</td>
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<tr>
<td>- Social phobia/withdrawal</td>
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<tr>
<td>- Distorted/negative body image</td>
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<tr>
<td>- Guilt around food and exercise</td>
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<tr>
<td>- Obsessive and compulsive behaviour</td>
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<tr>
<td>- Hopelessness</td>
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<tr>
<td>- Low self-esteem</td>
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<tr>
<td>- Poor concentration</td>
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<tr>
<td>- Self-harm and suicidality</td>
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<td>- Insomnia</td>
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<th>Physical</th>
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<tr>
<td>- Cold sensitivity</td>
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<tr>
<td>- Cold and clammy periphery</td>
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<tr>
<td>- Poor dentition, gingivitis and enlarged parotids</td>
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<td>- Brittle nails, brittle hair and skin</td>
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<td>- Halitosis</td>
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<td>- Irregular periods</td>
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<td>- Frequent injuries</td>
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Adequacy: focus on nutritional adequacy, but allow patients to choose ‘safer foods’ initially

Variety
- challenge food beliefs
- no good versus bad food
- explore relationships and trust with food

Eating socially
- establish social connection around eating
- have a conversation around challenges
- develop confidence in eating socially

Spontaneity
- intuitive eating practice
- natural food relationship
- trust and confidence in natural body signals (ie hunger and satiety).

Most patients with BED do not require medication as part of their treatment; however, for some patients, medication can be useful to supplement their treatment (Table 2).

Selective serotonin reuptake inhibitors (SSRIs) can help with both binge eating and depressive symptoms, particularly when combined with CBT. There is some evidence that fluoxetine has a good evidence base for BED and should be started at 10–20 mg daily, increasing by 10–20 mg weekly, to a maximum of 80 mg daily. Weight gain is often a concern with SSRIs, but a randomised controlled trial showed no weight gain with fluoxetine after one year of use. Monitoring for the risk of suicide and suicidal behaviour is good practice when prescribing SSRIs. However, studies indicate that suicide risk is not significantly increased with fluoxetine. Other side effects of fluoxetine include nausea, diarrhoea and vomiting.

Topiramate, an anticonvulsant, was shown to reduce the frequency of binge eating compared with placebo in clinical trials. Topiramate also reduces body weight. Side effects that limit the use of topiramate include headaches and paraesthesia. Other potential side effects include excessive weight loss, fatigue, cognitive disturbance, renal stones and gastrointestinal disturbance. Topiramate can, very rarely, cause acute myopia, leading to closed-angle glaucoma. If promptly detected and treated, these ophthalmic side effects are reversible.

Lisdexamfetamine, a central nervous system stimulant, is currently Australia’s only Therapeutic Goods Administration (TGA)-approved medication for the treatment of BED. Because lisdexamfetamine is a Schedule 8 poison, the involvement of a psychiatrist or paediatrician is generally required when it is prescribed for BED. The patient should be closely monitored for risks of dependency, cardiovascular side effects and excessive weight loss.

Glucagon-like peptide-1 receptor agonists (GLP-1 RA) are being recognised as effective tools in the management of obesity, with both semaglutide and liraglutide currently registered by the TGA. For the treatment of BED, although early data look promising, more clinical trials will be needed to definitively recommend their use in general practice purely for this indication. However, for patients with comorbid type 2 diabetes or obesity, GPs can consider whether it is appropriate to use GLP-1 RA as part of their patient’s diabetes and/or obesity treatment.

### Monitoring
Hospital admission for patients with BED is rare, and is usually related to significant mental health distress, agitation, self-harm or suicide risk. However, other rare complications, including physical and metabolic derangements, can occur.

The patient should have weight, vital signs (including postural pulse and blood pressure), electrocardiogram (ECG), full blood count, electrolytes (including magnesium and phosphate), liver function and mental health risk assessments done.

Refeeding syndrome is a potential risk while treating patients with BED. This should be closely monitored during treatment and recovery, and promptly managed.

Gastric necrosis from acute gastric dilatation is a rare, but important and potentially fatal, consequence of binge eating. It should always be considered in patients with BED presenting with severe abdominal pain and vomiting.

### Table 2. Medication for the treatment of binge eating disorder

<table>
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<tr>
<th>Drug</th>
<th>Dosing</th>
<th>Comments/considerations</th>
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<tbody>
<tr>
<td>Fluoxetine</td>
<td>Starting at 10–20 mg daily, increasing by 10–20 mg/week, maximum 80 mg daily²⁰</td>
<td>There is some evidence that fluoxetine in combination with CBT helps with both binge eating symptoms and depressive symptoms²⁰ At the time of writing, this medication has no TGA or PBS approval for BED</td>
</tr>
<tr>
<td>Topiramate</td>
<td>Starting at 25 mg daily, increasing by 25 mg/week to a maximum of 600 mg daily in divided doses³³,³⁴</td>
<td>Has some evidence of efficacy in BED and bulimia nervosa³³,³⁴ At the time of writing, this medication has no TGA or PBS approval for BED</td>
</tr>
<tr>
<td>Lisdexamfetamine</td>
<td>Starting at 30 mg daily, increasing by 20 mg/week to a maximum of 70 mg daily²⁷</td>
<td>A Schedule 8 poison that requires a permit before prescribing in most Australian jurisdictions, and generally requires a psychiatrist to initiate and monitor Australia’s only TGA-approved medication for treatment of eating disorders</td>
</tr>
</tbody>
</table>

BED, binge eating disorder; CBT, Cognitive Behavioural Therapy; PBS, Pharmaceutical Benefits Scheme; TGA, Therapeutic Goods Administration.
If a patient had previous bariatric surgery, they should be closely monitored for additional physical health complications, such as dumping syndrome and perforation. The EDE-Q is reliable in BED and should be monitored throughout a patient’s treatment.22

Conclusion

GPS play an important role in the screening, treatment and monitoring of patients with eating disorders. BED is the most common type of eating disorder. Here, we present an approach to screen, assess, diagnose and treat patients with BED.

Key points

- Patients with BED are often underdiagnosed and undertreated.
- Screening for eating disorders should be performed in any patient seeking weight loss programs or with other early warning signs.
- A comprehensive history and a systematic physical examination should be completed for any patient with a suspected eating disorder.
- The primary treatment for BED is a combination of psychology and structured dietetic treatment, with medication having a role in a select group of patients.
- During treatment and recovery, it is important to regularly monitor the patient for signs of deterioration in physical and mental health.

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