Obesity and diabetes: A psychological perspective

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Article points

1. Obesity is not simply a medical, lifestyle and health awareness problem; it can also represent a way of managing difficult emotions.
2. Eating can be a strategy for coping with emotional distress; until people are equipped with alternative strategies for dealing with their emotions, the desire to use food to cope will persist.
3. Psychological interventions can equip people who eat to cope with emotional distress with alternative strategies, but currently only a minority have access to psychological therapy.
4. Awareness about the use of food for non-hunger reasons needs to be raised at public health, as well as individual, levels.

Key words

- Lifestyle choice
- Psychology
- Self-esteem

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Obesity is commonly viewed by healthcare professionals as a medical, lifestyle, and health awareness problem. In this article, the author discusses some of the less commonly discussed psychological issues that complicate relationships between food, weight and emotional affect among people who are obese, and stresses that the traditional advice to "eat less, move more" is an unhelpful simplification. Suggestions are provided for the time-short healthcare professional to assist them in reflecting on the psychological factors associated with overeating with their patients during routine practice.

Current health education messages for those with weight management and dysglycaemia focus on improving diet and increasing exercise, yet healthcare professionals involved in the care of those populations know that for every person who can implement this advice, there are many more who struggle to do so (Brotons et al, 2003). Thus, in the majority of cases, the inability to comply with these health goals can lead to a sense of failure, increased hopelessness, and decreased motivation – for both the person in question and the healthcare professional (Hörnsten et al, 2008).

The role of psychology in eating behaviour is too often limited to questions of "motivation", with "low motivation" being described as the key reason an individual is unable to implement weight loss–increased exercise advice. However, the term motivation can be misleading.

Motivation has been defined as "the act or an instance of providing a reason to act in a certain way" (www.dictionary.com). The use of the word "reason" is key; for those who fail to comply with the lifestyle messages provided, the health reasons provided are not enough. What is absent in this conversation is that – in any decision to be made – both cognitive and emotional reasoning occurs.

There are a number of well-understood and widely recognised factors that promote progressive weight gain (Buckroyd, 2011):

- An obesogenic environment which provides an abundance of calorie dense, readily available and inexpensive food.
- A collective lifestyle that renders physical effort largely unnecessary, leaving individuals ever more sedentary.
- A common latent genetic tendency to weight gain.
- The taking of certain medications (e.g. those blood-glucose-lowering and antipsychotic agents that are independently associated with weight gain).

These factors will be familiar to readers of this journal and, as such, are not the focus of this article.

Flaws in the current weight loss paradigm: Maintaining weight loss is difficult for most people

Despite short-term benefits, traditional diet and exercise programmes – even those with cognitive and behavioural therapy components – have been relatively ineffective in achieving long-term weight loss. Garner and Wooley (1991) were among the first to observe the overwhelming failure of behavioural and dietary treatments for obesity to produce lasting weight loss, reporting that most individuals will regain most or all of the weight initially lost within 4–5 years. Likewise, Wing and Phelan (2005)

report that only 20% of overweight people succeed in maintaining a weight loss of ≥10% for 1 year. In short, maintaining weight loss by willpower alone is not achievable for most people.

Teixeira et al (2005) sought to predict weight-loss treatment (i.e. a reduced calorie diet, sometimes with exercise and a behaviour modification component) outcomes by identifying significant predictors of weight loss. They reported that people who benefited from this treatment were those who had (i) few previous weight loss attempts, and (ii) an autonomous, self-motivated, cognitive style. Teixeira et al's (2005) research suggests that the current approach to weight management (i.e. caloric restriction, exercise and behaviour modification) is effective for only a subset of people with specific characteristics that – from experience – describe ≤20% of obese people encountered in routine clinical practice.

These studies suggest that identifying and delivering meaningful public health messages and effective therapeutic options for weight management is a far more complex task than current perceptions allow. The British Psychological Society Obesity Working Group's (2011) guidelines capture this idea well: "Changing eating behaviour, for many people, is a psychologically and emotionally far more complex task than has so far been recognised." So what is it that remains unacknowledged about eating behaviour among obese people that makes it so challenging to achieve and maintain weight loss?

Emotional regulation and food consumption

Food consumption for non-hunger reasons is common, and it is important to recognise that there are normative levels of emotional eating (Waller and Osman, 1998). It is not problematic to use food as an emotional regulator some of the time; however, the situation becomes pathological when food becomes the primary way of dealing with emotions.

Canetti et al (2002) examined the relationship between emotions and food intake and established that for both normal weight as well as overweight people, negative emotions increase food consumption, but found that the influence of emotions on eating behaviour is stronger in obese than non-obese people. Popkess-Vawter et al (1998) studied overweight women and found that relationship dynamics that left them feeling powerless or controlled were triggers for overeating. Epel et al (2001) artificially induced stress in participants and discovered it promoted "comfort food intake". Schoemaker et al (2002) and Freeman and Gil (2004) both reported that stress triggers binge eating. Byrne et al (2003) studied obese women who had lost a substantial amount of weight and then regained it and identified the use of eating to regulate mood or to distract from unpleasant thoughts and moods as a key common characteristic.

Who struggles with emotional eating to the extent it leads to obesity?

There is a substantial body of evidence that suggests many of those who routinely use food for affect regulation have a history of significant psychological issues. Insecure early attachment relationships and adverse childhood experiences have been identified as key indicators.

Insecure early attachment relationships and eating disorders

Attachment theory proposes that early experiences with parental caregivers are central to:

- Shaping the success or failure of the individual's future relationships.
- Strengthening or damaging individuals' abilities to be conscious of their feelings.
- Determining an individual's ability to self-calm.
- Determining an individual's ability to recover from misfortune.

Thus, a "secure" early attachment allows the individual to fare well in many emotional domains in adult life, while those with an "insecure" early attachment are more vulnerable to emotional struggle (Ciechanowski et al, 2001). Schore's (2002) model identifies enduring neurological structural changes as a result of traumatic attachments leading to inefficient stress coping mechanisms in adults.

Page points

1. Identifying and delivering meaningful public health messages and effective therapeutic options for weight management is a far more complex task than current perceptions allow.
2. Food consumption for non-hunger reasons is common, but becomes pathological when food becomes the primary way of dealing with emotions.
3. There is a substantial body of evidence that suggests many of those who routinely use food for affect regulation have a history of significant psychological issues; insecure early attachment relationships and adverse childhood experiences have been identified as key indicators.

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1. By comparison with a control group of always-slender adults, obese participants in one study had a significantly higher prevalence of childhood sexual abuse, nonsexual childhood abuse, early parental loss, parental alcoholism, chronic depression and marital family dysfunction in their adult lives.
2. Research suggests that the impact of adverse childhood experiences on adult health status is both strong and cumulative.
3. Given the noted failures of diet and exercise programmes to achieve and maintain weight loss in the majority of obese people, recent years have seen a move towards bariatric surgery as a primary treatment for obesity.

Ward et al's (2000) review found insecure attachment to be common among those with eating disorders. This finding was echoed by Troisi et al (2005) who reported that those with eating disorders have a high frequency of adverse early experiences with their attachment figures and a high prevalence of insecure attachment. Relatedly, Ciechanowski et al (2004) found that avoidant attachment patterns were associated with poorer self-management among people with diabetes.

Adverse childhood experiences and their ongoing impact on weight management

An early researcher in this area (Felitti, 1993) examined the dropout rate of a weight-loss programme and observed that 55% of participants did not complete the programme despite the fact that these individuals had been losing – not gaining – weight up to the point they discontinued. This finding highlighted that achievement of treatment goals alone was enough to explain recidivism.

Interviews with this population revealed that, by comparison with a control group of always-slender adults, the obese participants had a significantly higher prevalence of childhood sexual abuse, nonsexual childhood abuse, early parental loss, parental alcoholism, chronic depression, and marital family dysfunction in their adult lives. Furthermore, obese participants reported using obesity as a sexually protective device, and overeating to manage emotional distress.

This research prompted an epidemiological study (Felitti et al, 1998) designed to examine the relationship between childhood abuse and family dysfunction (described as adverse childhood experiences [ACEs]) and many of the leading causes of adult mortality. Categories of childhood abuse were identified as part of Felitti et al's (1998) study as: psychological, physical or sexual; violence against mother; or living with household members who were substance abusers, mentally ill, suicidal or ever imprisoned.

Of the 9508 respondents, 52% reported at least one category of exposure, and one-fourth reported two or more categories. When compared to those who had experienced none, respondents who had experienced four or more categories of childhood exposure had a 1.4- to 1.6-fold increased risk of severe obesity (BMI $\geq$35 kg/m^2) and inactivity (no participation in recreational physical activity in the past month). Felitti et al (1998) concluded that these findings suggest that the impact of ACEs on adult health status is both strong and cumulative.

Following this important work, a number of other researchers provided supporting data. In 2001, Wonderlich et al reported a positive correlation between those with a history of sexual abuse and binge eating. Likewise, the majority (69%) of participants in Grilo et al's (2005) study of bariatric surgery patients reported sexual mistreatment. Thus, overeating and obesity could be characterised as protective solutions to unrecognised childhood problems (Felitti, 2003).

Treating the symptom: Bariatric surgery and psychological distress

Given the noted failures of diet and exercise programmes to achieve and maintain weight loss in the majority of obese people, recent years have seen a move towards bariatric surgery as a primary treatment for obesity.

Current NICE (2006) guidance recommends that people with a BMI $\geq$40 kg/m^2 (or $\geq$35 kg/m^2 in the presence of comorbidities, of which diabetes is one) should be offered bariatric surgery. However, with estimates that half the UK population will be obese by 2050 (McPherson et al, 2007), a high-risk, surgical procedure that requires long-term follow-up by a highly skilled, multidisciplinary team of healthcare professionals is a poor primary treatment modality.

That the incidence of trauma, childhood abuse, sexual abuse, low self-esteem and depression is high among people presenting for bariatric surgery (Rowston et al, 1992; Walfish, 2004; Gustafson et al, 2006) is consistent with the data already presented for the general obese population. Despite this, access to psychological services for obese people in the UK is, in the main, limited to screening for eating disorders and preparation for bariatric surgery.

That people may be motivated to say the "right" things to a psychologist in order to

be eligible for surgery withstanding, access to psychology services for patients seeking bariatric surgery is positive. However, it could be argued that psychological intervention of such limited scope in a population with such high psychological burdens is little more than a "sticking plaster" approach to the root causes of obesity. The real task for our health services may be to offer people support in developing skills in emotional intelligence, self-soothing, self-esteem and relationship functioning, rather than focusing on surgically induced weight loss.

Addressing emotional eating in routine healthcare appointments

While some healthcare professionals see the value in encouraging their obese patients to address the psychological distress associated with overeating, they may feel that little can be achieved within a time-pressured routine consultation. However, healthcare professionals should be mindful that simply identifying the psychological element of overeating can be therapeutic.

A suggested script for presenting some of the psychological aspects of overeating to the patient during a short consultation is given in *Box 1*. In *Box 2*, further reading and a list of overeating support groups that might be beneficial to the patient are provided.

Conclusion

If the literature described here is deemed to be persuasive, it makes sense to incorporate psychological therapy into the treatment of obese people, and not simply as part of the work-up to bariatric surgery. Those with a BMI ≥40 kg/m^2 are far too numerous to all be offered bariatric surgery, and constitute a group who are already exceedingly costly to the NHS. Such people's health might well be improved by psychological interventions that enriched mental health. More research is warranted.

Underlying the call to include psychological treatment in the care of obese people is perhaps a far more fundamental need – identified by Buckroyd (2011) – to pay attention to the way that children are brought up – and the way in which we manage our lives as adults – if we are to reduce psychological distress and curb the increasing recourse to compulsive and addictive behaviours of all kinds, including in relation to food. There is a need to raise awareness of the role of emotional eating in all of our lives to – as Buckroyd (2011) puts it – "enable distress to be expressed in words, rather than in deeds." ■

Box 1. A suggested script for presenting some of the psychological aspects of overeating to the patient during a short consultation.

"We are becoming more familiar with the non-medical reasons why people struggle with their weight – and we know that life can be difficult, and eating can be a way of coping with feelings, as well as boredom and distraction. Food makes us all feel good! We may not have time to explore this in much depth today, but can I invite you to think about the times you eat for non-hunger reasons, and think what else you may be able to do? I can also point you in the direction of some reading, and some support groups, if you would like?"

Box 2. Further reading and support groups for overeating.

Recommended reading

- *Breaking Free From Emotional Eating* (Roth, 2003)
- *Diabetes and Wellbeing: Managing the Psychological and Emotional Challenges of Diabetes Types 1 and 2* (Nash, 2013)
- *End Emotional Eating: Using Dialectical Behavior Therapy Skills to Cope with Difficult Emotions and Develop a Healthy Relationship to Food* (Taitz, 2012)
- *The Beck Diet Solution: Train Your Brain to Think Like a Thin Person* (Beck, 2009)

Support groups

- Positive Diabetes
  www.PositiveDiabetes.com/blog
- Overeaters Anonymous UK (a 12-step programme, similar to Alcoholics Anonymous)
  www.oagb.org.uk
- Beyond Chocolate (free online support forum)
  www.beyondchocolate.co.uk

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"There is a need to raise awareness of the role of emotional eating in all of our lives."

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