



postnote

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EATING DISORDERS

1.1 million people in the UK are estimated to be directly affected by eating disorders¹. These represent a significant public health concern due to their severe physical and emotional consequences and high rate of recurrence. They often develop during adolescence, thus impacting on social development and education. This POSTnote reviews the prevalence, possible causes and treatment of eating disorders, and highlights issues relevant to government policy in this area.

What are eating disorders?

An eating disorder is a psychological condition characterised by a persistent, severe disturbance in a person's eating attitudes and behaviour. Eating disorders are typically classified according to guidelines known as the DSM-IV², or the ICD-10³. These identify two main types of eating disorder (see Box 1):

- Anorexia nervosa (AN), in which a person maintains a low body weight due to a preoccupation with body weight and shape. This is achieved by drastically reducing calorie intake, and sometimes by excessive exercise, self-induced vomiting or laxative abuse. AN patients often have a greatly distorted body image, and a strong conviction that weight loss is desirable.
- Bulimia nervosa (BN), characterised by repeated periods of binge eating, followed by compensatory behaviour such as purging, fasting or excessive exercise. Purging can take the form of self-induced vomiting, or misuse of laxatives or other drugs. During a binge, the person has a sense of loss of control over eating, and both bingeing and purging are often accompanied by feelings of guilt or shame. People with BN are often secretive about this behaviour.

Many people with an eating disorder do not meet the full criteria for a diagnosis of AN or BN. ICD-10 therefore includes two further categories: Atypical Anorexia Nervosa and Atypical Bulimia Nervosa. DSM-IV instead includes a category of 'eating disorder not otherwise specified', which includes the condition of Binge Eating

Disorder (BED). People with BED engage in frequent binge eating but do not show the compensatory behaviours that are characteristic of BN.

Box 1 Classification of eating disorders

A diagnosis of AN requires all of the following features:

- a body weight at least 15% below that considered normal for a person's age and height, and refusal to maintain weight at a normal level;
- an intense fear of gaining weight or becoming fat;
- a distorted perception of one's body weight and shape, for example a conviction that one is overweight, and ideas of self-image and self worth that are strongly influenced by body weight;
- amenorrhoea (the absence of menstrual periods) in female patients, for at least three consecutive months.

A diagnosis of BN requires all of the following features:

- recurrent episodes of binge eating, in which the person eats an unusually large amount of food, whilst experiencing a sense of lack of control over eating;
- recurrent inappropriate compensatory behaviour, such as self-induced vomiting, misuse of medication, fasting or excessive exercise;
- a self-image that is unduly influenced by body weight or shape.

The behaviours described above must have occurred on average at least twice a week for at least three months.

Physical and emotional consequences

AN in particular leads to severe physical complications, mainly as a result of poor nutrition. These include muscle weakness, a loss of bone density (raising the risk of fractures), heart problems, and hormonal disruption leading to amenorrhoea (absence of menstruation) in women. Emotional disturbance, including symptoms of anxiety or depression, is also common. People often become socially isolated, and their education or work life can suffer. Many patients never work, and do not go on to start a family. AN in childhood can disrupt puberty and stunt a child's growth. It can also pose a severe burden to the child's family, including younger siblings.

Physical consequences of BN are mainly a result of the purging behaviour. Repeated vomiting causes acid damage to the teeth, and in some cases dehydration. BN sufferers may also experience lethargy, fatigue, and digestive complaints. Mood disturbances such as anxiety are also common, and may affect social relationships. Self-harm and alcohol or drug abuse may also occur.

Complications of BED are due mainly to the severe obesity common in this condition, and therefore include heart disease, stroke, diabetes and high blood pressure, as well as psychological effects such as low self esteem.

Development of illness and outcome

Eating disorders typically develop in the late teens to mid twenties, but can affect people of all ages. The average age of onset is 16-17 for AN, and 18-19 for BN.

Research into the long-term outlook for patients with AN is based mainly on people who receive medical care for their condition. On average, just under half of these might be expected to recover completely. The remainder will continue to be affected, and around 1 in 20 patients will die from the condition. This mortality rate is higher than for any other psychiatric illness.

For BN, around 50% of those who receive treatment are likely to be symptom-free ten years on. 20% will still have the full form of the disorder, with the remaining 30% either having chronic symptoms that do not meet the criteria for full BN, or having a pattern of relapses and remissions. However, many people with BN do not receive treatment, and most of these will continue to suffer from BN, or to experience relapses and remissions.

The scale of the problem

As many people with an eating disorder do not receive treatment, the prevalence of these conditions is best estimated from large-scale population studies. The most recent of these, conducted in the US, estimated an adult female's lifetime risk of developing an eating disorder as almost 1 in 100 for AN, and 1.5 per 100 for BN⁴. These may be underestimates, as people under 18 were not surveyed. In addition, there are many people who show features of AN or BN, but who do not meet criteria for a full diagnosis. This study also estimated the lifetime risk for developing BED at around 3.5 per 100 in females.

In both AN and BN, 75-90% of those affected are female, which is likely to be due to both biological and social factors. An accurate estimate of the number of males affected is difficult because of the rarity of these disorders. Both BN and BED appear to have become more common in the last 50 years, although the increase in BN may now be levelling off. There is some evidence that AN has become more common in young people.

Of those with eating disorders who do receive NHS treatment, most are seen as outpatients. Some, mainly those with AN, will require a hospital stay. The average length of a hospital stay for an eating disorder is 51 days⁴, and a significant proportion of inpatients in child

and adolescent psychiatric services are eating disorder patients. A 1999 survey found that almost 25% of such patients were being treated for an eating disorder⁵. The financial burden posed by eating disorders has never been properly estimated, but is likely to be substantial⁶.

Underlying causes

No single factor can predict whether a person will develop an eating disorder. Although much about their causes is still unknown, several factors have been identified as important:

- **Biological:** AN, BN and BED are all likely to have a genetic component. Abnormal levels of the brain chemicals serotonin and dopamine have also been linked with eating disorders.
- **Eating and weight-related:** Obesity, dieting, or irregular eating habits are all risk factors for an eating disorder.
- **Life events:** Going through puberty at an earlier age is another risk factor. In addition, traumatic events such as bereavement or parental separation can trigger an eating disorder if a person is particularly vulnerable.
- **Social pressure:** This comes from friends and family, as well as wider influences such as the media. Being bullied early in life about one's weight is one example. The fashion and advertising industries, especially sectors targeted at teenage girls, are often cited as one of the causes of eating disorders. There is evidence that exposure to western media can indeed influence eating attitudes and behaviours⁷, but this is likely to be a major factor for only a small minority of people.

Identification and treatment

People with an eating disorder rarely seek a GP's help for their condition unless prompted, but will often visit with physical complaints or emotional issues related to their disorder. In the case of children, concerned parents or teachers may alert a health professional. People with AN and BN can be ambivalent about treatment. This is often due to a fear of gaining weight, either from being coerced into eating more, or from being prevented from purging.

In 2004 the National Institute for Health and Clinical Excellence (NICE), under instruction from the Department of Health, commissioned a set of guidelines covering the treatment of eating disorders in adults and children over the age of 8⁸. These were developed through a collaboration between various professions involved in the management of eating disorders. Patients and their carers were also involved in this process.

For AN, there have been few systematic studies of the efficacy of various forms of treatment, partly due to a lack of funding. NICE recommends a range of therapies to be considered for treating AN (listed in Box 2). Irrespective of the therapy used, a good therapeutic relationship with the patient is likely to be key to improvement. In general, treatment is more likely to be effective early on in a disorder, before habits become ingrained. There is currently little evidence that drugs can be used to treat AN³. NICE suggests that unless there are severe physical complications, AN patients should be treated as outpatients, rather than in residential units.

Box 2 Therapies for treating eating disorders

- **Cognitive analytic therapy:** The aim of this short term therapy is for the patient to recognise problematic patterns of behaviour and understand their origins, as well as how coping mechanisms they have developed over time might be worsening these problems.
- **Cognitive behaviour therapy (CBT):** This is a structured therapy based on the idea that our thoughts, feelings, behaviours and physical sensations interact. It involves challenging unhelpful thoughts and beliefs, thus reducing the negative emotions and problematic behaviours that accompany them. A specific form of CBT for eating disorders focuses on modifying unhealthy eating and weight control behaviours, and unhelpful ideas related to weight, shape and appearance.
- **Interpersonal psychotherapy:** This focuses on interpersonal problems such as disputes or conflicts, difficulties with role transitions, complicated grief or interpersonal skills deficits, that may trigger or maintain an eating disorder. There is no specific focus on eating disorder symptoms.
- **Focal psychodynamic therapy:** This is concerned with how a person's relationships with others may mirror the relationships they had during childhood and how this links with eating disorder symptoms.
- **Family therapy:** This highlights the family as being the key resource in a person's recovery. Family therapy for AN is symptom oriented, emphasising the family's role in the restoration of normal weight and eating.
- **Guided self-help:** CBT has been translated into self-help formats such as books or web-based approaches. The efficacy of working through a self-help programme can be enhanced by guidance from a therapist.

For BN, NICE also recommends outpatient treatment for most patients, with therapy comprising either guided self-help or CBT (Box 2). This may be combined with certain antidepressants, which are currently the only drugs recommended for BN. These can reduce bingeing and purging behaviour, and by raising the patient's mood may also help him or her to engage in the psychological therapy.

For BED, as with BN, NICE recommends either CBT (Box 2) or a self-help programme. Certain antidepressants can also be effective. Other than for BED, there is currently little evidence to guide the management of atypical eating disorders³.

Impact of mental health legislation

Mental health legislation allows the treatment of patients against their will, and could in principle be invoked if an eating disorder patient was refusing treatment. However, this would only occur if a patient was at a severe level of physical or psychological risk. The majority of eating disorder patients do not reach this level of risk.

Issues

The NICE guidelines have largely been welcomed by both patient groups and clinicians. However, the outlook for eating disorder patients could be improved by action in certain key areas. These include the improvement of referral strategies and service provision (particularly for young people), funding of further research, and possible changes within the fashion and advertising industries.

Timely detection and referral

GPs act as the 'gatekeepers' to specialist services and it is thus important that they identify and refer cases appropriately. NICE recommends that patients are engaged and treated as early as possible and certainly, in the case of AN, before weight loss becomes severe. However, there is evidence that these guidelines are not always followed⁹. A survey of 236 GPs in London and the surrounding counties found that adherence to these, and to other published guidelines was limited, and that referral habits varied markedly among GPs¹⁰. In practice, an AN patient's weight might commonly fall far below the diagnostic criterion before help becomes available. A tendency for GPs to monitor a patient's condition rather than opting for immediate referral may exacerbate this.

A key component to early detection is the practice of GPs querying patients about their eating habits even when they visit with other complaints⁴. This applies to patients of all ages, as eating disorders may pass unrecognised in those outside the typical 'at-risk' age group. Due to the high level of media attention which AN receives, it might be appropriate to raise GPs' awareness of the fact that most eating disorder cases are not AN, and might occur in people who are not significantly underweight.

Improving GP awareness

Given the volume of written material already received by GPs, other ways of disseminating information might be useful. This could entail briefer guidelines specifically targeted at GPs. Informal consultation networks between GPs and specialists could also be effective. GPs tend to be better informed in regions which have a specialist service for eating disorders. Coverage of eating disorders in medical school curricula, and in continuing professional development are also key components. NICE has recently introduced an implementation support programme, which includes initiatives for improving GP awareness. This will come into effect when the 2004 guidelines are reviewed in January 2008.

Service provision

Despite NICE recommendations, specialist treatment is often unavailable locally. Wales, for example, currently has no specialist services. Even in south east England, where services are concentrated, there are areas of poor provision, including some parts of London¹¹. A survey by the Royal College of Psychiatrists (RCP) in 2000¹² found that only 50% of health authorities in the UK had a specialist service within their area.

Spending on specialist eating disorder services is under the control of Primary Care Trusts (PCTs). Each PCT covers ~250,000 people and is thus too small to warrant its own specialist unit. This can lead to the referral of patients to specialist services a long way away. Cooperation between neighbouring trusts might improve this situation. NICE currently produces guides on specialist healthcare sectors for PCT commissioners, but has no plans for a guide for eating disorders. A web-based directory of services could help to inform PCT commissioners where their nearest specialist service is.

Access to psychological therapies

Access to timely and local treatment depends on the availability of practitioners trained in psychological therapies. The Department of Health's 'Improving Access to Psychological Therapies' programme was designed to increase the availability of therapies including CBT and guided self-help. Currently, this covers two demonstration sites (Newham and Doncaster). Benefits are due to be assessed in March 2008, with a view to improving provision nationwide over the next 5-10 years.

Related to this issue is the type of therapy that is offered. NICE places emphasis on evidence-based treatments, for example CBT or guided self-help in BN. Some clinicians have suggested that the form of therapy provided varies among specialist services, with some services providing therapies for which there is little supporting evidence. As there has been no systematic nationwide audit of the implementation of NICE guidelines, it is unclear how common these experiences are across the UK.

Vulnerable groups

The issue of local access to services is particularly important for children and adolescents, as NICE recommends family involvement in treatment. The RCP report⁵ found that child and adolescent services were more unevenly distributed across the UK than those for adults. Four regions, covering 25% of the UK population, had no available specialist service for this age group.

A key issue for this group is that the treatment provided is age-appropriate. There is wide variation across the UK in how services are organised to provide this. Over half of eating disorder patients under 13 need some inpatient treatment. This might take place at a unit specialising in eating disorders in young people, or a child or adolescent psychiatric ward, but most go to a general paediatric ward. This can be adequate if combined with outpatient or day patient services at a local specialist eating disorder clinic, but better cooperation between paediatricians and specialist service providers is needed to ensure this. Admitting patients under 16 to an adult psychiatric ward is likely to be detrimental, and this practice is set to be abolished by the end of 2008.

Certain age groups are at risk of suffering discontinuities in the care provided. One example is the transition from child and adolescent services to adult care. Continuity of care is also an issue for university students. There is a need for better mental health services linked to universities, but also for good communication with treatment providers in a student's home town.

Pregnant women are another vulnerable group. Those who have suffered from eating disorders often experience a post-natal relapse. The fear of passing on an eating disorder to the child is also common. A screening programme built into the routine ante-natal check-up system could help to identify those at risk.

Influence of the media and fashion industries

Social pressure, in which the fashion and advertising industries play a part, is one of a number of factors that may contribute to eating disorders in some cases. There are many ways in which responsible behaviour within these industries might be promoted. The Academy for Eating Disorders has published a suggested code of practice which targets the fashion industry¹³. The head of BEAT, formerly the Eating Disorders Association, has suggested that a requirement not to use models who appear to be unhealthy might be more effective than strict criteria of minimum body weight.

Research

The UK is a world leader in research into eating disorders, but robust evidence is still lacking in many areas. A priority in such research is the development and assessment of effective treatments. Research so far has focussed mainly on BN, and on adults. NICE recommends further research into treatments for all eating disorders, including treatment for patients who do not respond to CBT. One under-researched area is the treatment of children and adolescents. Another is into effective therapies for AN. In April 2007 the Department of Health awarded £2 million to fund research into treatment and early intervention strategies for AN. Research could also be directed towards ways to prevent eating disorders, for example by assessing the benefits of preventative strategies such as promoting self esteem within vulnerable age groups (e.g. in secondary schools).

Endnotes

- 1 *Something's got to change*, BEAT, 2007
- 2 *Diagnostic and Statistical Manual of Mental Disorders, 4th revision*, American Psychiatric Association
- 3 *International Classification of Diseases, 10th edition*, World Health Organisation
- 4 *UK Hospital Episode Statistics*. Department of Health, 2004
- 5 O'Herlihy, A *et al*, *Clinical Child Psychology and Psychiatry*, 9 (2004)
- 6 Simon, J *et al*, *Psychological Medicine*, 35(2005)
- 7 Becker, E *et al*, *British Journal of Psychiatry*, 2002
- 8 *Core interventions in the treatment and management of anorexia nervosa, bulimia nervosa and related eating disorders*. NICE, 2004
- 9 Currin, L *et al*, *International Journal of Eating Disorders*, 40 (2007)
- 10 *Entry into specialist services for the eating disorders: Audit of clinical pathways through primary and secondary care*. Schmidt *et al*, 2006
- 11 *Guidelines for provision of eating disorder services in London*. London Network Group, August 2006
- 12 *Eating disorders in the UK: policies for service development and training*. Royal College of Psychiatrists, 2000
- 13 www.aedweb.org/public/AED_Guidelines_for_Fashion_Industry.pdf

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