Adult obesity 2: treatment and management options for weight loss and maintenance

Nurses need to know about the main management options for treating this common condition, and how best to help patients maintain weight loss.

INTRODUCTION
Overweight children become overweight adults (Bibbins-Domingo et al, 2007) and stopping this generational pattern is a major problem for the UK. Jeffery et al (2005) found that only a quarter of parents recognised when their child was overweight and, even when obese, as many as 33% of mothers and 57% of fathers saw their child’s weight as “about right”.

Foresight (2007) reported that 10% of children were obese and a further 20-25% were overweight and, if current trends continue, 40% of Britons will be obese by 2025.

Tackling this serious public health concern involves healthcare professionals at all levels and in all settings. Croker (2007) argued that behavioural strategies help families make sustainable changes together. However, Milligan (2008) was unconvinced, and showed that even large scale programmes, such as family interventions and costly media campaigns, have little evidence of effect in tackling either child or adult obesity.

The economic and psychological impact of obesity on society cannot be overstated (Shan, 2008). Some healthcare professionals still fear they are being asked to treat what is fundamentally a societal problem, but losing weight is an individual responsibility (Pryke and Docherty, 2008). Most now agree that clinical and morbid obesity must be tackled, not least because of the enormous cost of over £1bn per year in the UK (Shan, 2008).

WEIGHT MANAGEMENT STRATEGIES
Treating people who are overweight or obese is undertaken in a variety of settings. After initial assessment, healthcare professionals need to work with patients to try to understand the causes of their condition, teasing out their healthcare beliefs and understanding of their nutritional status.

Food is consumed not just for taste or nutritional value but also for its symbolic value (Helman, 2007). Often patients’ deep rooted misunderstandings about meals and exercise need unravelling. Translating technically complex nutritional issues into an everyday, easy to understand language for patients is an important issue.

NICE (2006) recommended multicomponent interventions with structured programmes run by multiprofessional teams delivered in a variety of settings, aimed at reducing calorie load and increasing physical activity. Targets should be agreed, taking into account patients’ cultural and individual preferences and the general aim should be around a 600kcal/day deficit, using the modified Harris-Benedict equation (Barnett et al, 2009). This formula applies an activity rating factor to the basic metabolic rate calculation to determine an individual’s daily energy expenditure requirements.

NICE also recommended that physical activity is important to everyone; it is a major part of all obesity strategies. There is well documented evidence for including physical activity programmes in weight management programmes (Barnett et al, 2009; NICE, 2006).

To lose weight or maintain weight lost, people should exercise for 60-90 minutes on at least five days per week.

Over 60% of the world’s population are not active enough. The benefits of physical activity have not yet been fully appreciated (Stear, 2004).
particularly beneficial to those who are overweight or obese and have co-morbidities (Stear, 2004).

Evidence points to a structured approach as the most successful, with regular visits to healthcare professionals (Haslam et al, 2009; NICE, 2006; Avenell et al, 2004). This should follow a system which involves eating fewer energy dense nutrients and raising exercise levels (see Box 1 on physical activity).

Therapies for managing patients include motivational interviewing, motivating change and goal setting (Turner, 2007). However, some feel that strategies should focus less on rigorous dietary regimens and, instead, attempt to tackle some of the underlying issues, such as emotional overeating, which can be more successful (MacDonald, 2009). Patients are extremely different in their needs and levels of understanding and even healthcare professionals find it daunting to understand the difference between a low glycaemic index, low carbohydrate or low fat diet.

Showing compassion and understanding are key areas where nurses can help patients; understanding their own personal issues with body size and image can help nurses support patients in the psychologically and emotionally complex task of tackling eating behaviours (MacDonald, 2009).

A one size fits all conventional approach can end up being less than successful and alternative therapies such as neurolinguistic programming or behaviour therapy can have better results (Avenell et al, 2004). Pryke and Docherty (2008) went even further and advocated the need to look at “weight constancy” as an outcome measure, rather than the harder to achieve usual target of losing 5% of initial body weight.

NICE (2006) recommended using diet and exercise interventions first line as part of a multifaceted regimen. Diets should be nutritionally sound and not unnecessarily restrictive. Very low calorie diets are recommended only for obese people who have reached a plateau and should be carefully supervised and medically managed.

When adults do not reach their target weight loss or have reached a plateau on dietary, activity and behavioural change alone, pharmacotherapy may be included in the strategy (NICE, 2006).

Pharmacotherapy

There are only two types of prescription medication for treating excessive weight and obesity, which should be used to reduce health risks in patients who are obese – orlistat and sibutramine – (Royal College of Physicians, 2003). The use of these drugs is governed by NICE (2006) guidance; they should not be used in combination, and the choice of drug should be carefully negotiated between patient and prescriber.

NICE (2006) guidance states that both orlistat and sibutramine should be prescribed only as part of an overall plan for managing obesity in adults who meet certain criteria (see below).

Orlistat 120mg given three times a day with food is a lipase inhibitor, not systemically absorbed, which inhibits pancreatic and gastric lipases. The drug has a mild appetite suppressant effect and fat excretion is increased (Shan, 2008). It is recommended for use in those with a body mass index (BMI) of 30kg/m² or more, or 28kg/m² or more with associated risk factors (NICE, 2006). Side effects include liquid or oily stools and faecal incontinence (British National Formulary, 2009), but these can be minimised by strict adherence to the low fat diet recommended for use with it. It can be continued for over 12 months if deemed appropriate (Barnett et al, 2009; NICE, 2006).

Sibutramine, a centrally acting reuptake inhibitor of noradrenaline, increases the feeling of fullness. This drug has a more powerful systemic effect than orlistat and can result in weight loss by reducing food cravings, although it should not be used by patients for more than a year (NICE, 2006). It is recommended for use in those with a BMI of 30kg/m² or more, or 27kg/m² or more and other obesity related risk factors such as type 2 diabetes or dyslipidaemia. Side effects that have been reported include constipation, insomnia, nausea and palpitations (BNF, 2009).

NICE (2006) recommends that both drugs should only be continued for more than three months if patients have lost at least 5% of their initial body weight since starting drug treatment.

A new innovation – approved by the government in a bid to involve pharmacies in supporting patients to self care – is alli. This is a low dose formulation of orlistat that is available as a pharmacy only drug and does not require a prescription (Finer, 2009). It is suitable for people over 18 with a BMI of 28 kg/m² or more, who commit to a healthy lifestyle (reduced calorie, lower fat diet and increased physical activity) (GlaxoSmithKline, 2009). However, the cost of this drug may be counterproductive in reducing obesity/overweight, as those from lower income groups may not be able to afford it.

SURGERY

For some people, the options of dieting, physical activity and/or pharmacotherapy are not sufficient and NICE (2006) recommended bariatric surgery for certain patients if these have been tried unsuccessfully. There are several types of surgery, including gastric banding, Roux-en-Y gastric bypass, biliopancreatic diversion (BDP) and duodenal switch. Weight reduction is likely to be greatest after BDP but the Roux-en-Y bypass can result in weight loss of as much as 80% of original body weight by four years post operatively (Haslam et al, 2009).

Criteria for bariatric surgery

NICE (2006) developed strict criteria for offering patients bariatric surgery. It is recommended as a treatment option for people with obesity if all of the following are met:

- Patients have a BMI of 40kg/m² or more, or 35–40kg/m² and other significant disease, such as type 2 diabetes or high blood pressure;
- They have tried all appropriate non-surgical measures for at least six months before but have failed to achieve or maintain adequate weight loss;
- They have been receiving or will receive intensive management in a specialist obesity service;
- Patients are fit for anaesthesia and surgery;
- They commit to the need for long term follow up.

Patients with a BMI of >50kg/m² should be offered bariatric surgery as a firstline intervention if they are fit for surgery (NICE, 2006).

What is not always clear to both patients and healthcare professionals is the need for long term follow up, including regular reviews and reappraisals as patients continue on their weight loss journey (Haslam et al, 2009).

WEIGHT MAINTENANCE

As with all modalities for losing weight, maintenance is an important issue. Engaging patients to keep trying to maintain a healthy lifestyle even when results are poor can be extremely demotivating.

After patients have undergone six months of weight loss, programmes that encourage
weight maintenance and prevent weight regain should be put in place, and the combination of continued behaviour therapy, dietary therapy and physical activity is deemed to be the most successful (Barnett et al, 2009).

Weight loss drugs tend to be effective during the course of treatment but weight gain may occur when the course is completed unless patients are motivated to use non-pharmacological methods. Even though surgical options can lead to dramatic weight loss, unless a weight maintenance programme is put in place, there is a tendency for much, if not all, of the weight to be regained.

Pryke and Docherty (2008) advocated focusing more on weight constancy than on weight loss as a measure of success. The Counterweight Project Team (2008) showed that all interventions plateau and weight regain is often no more than the normal 1-2kg/year that the general population put on. This suggests that while patients do reach a plateau on weight loss programmes, they are nonetheless worthwhile to reduce the risks associated with obesity.

CONCLUSION
The obesity epidemic affects all of us and nurses will find that they are increasingly interacting with patients who have varying levels of excessive weight and obesity. Encouraging patients to become aware of their risk status and to engage with activities and programmes in order to reduce their risk of significant disease associated with obesity is the duty of all healthcare professionals.

REFERENCES


References (continued):


