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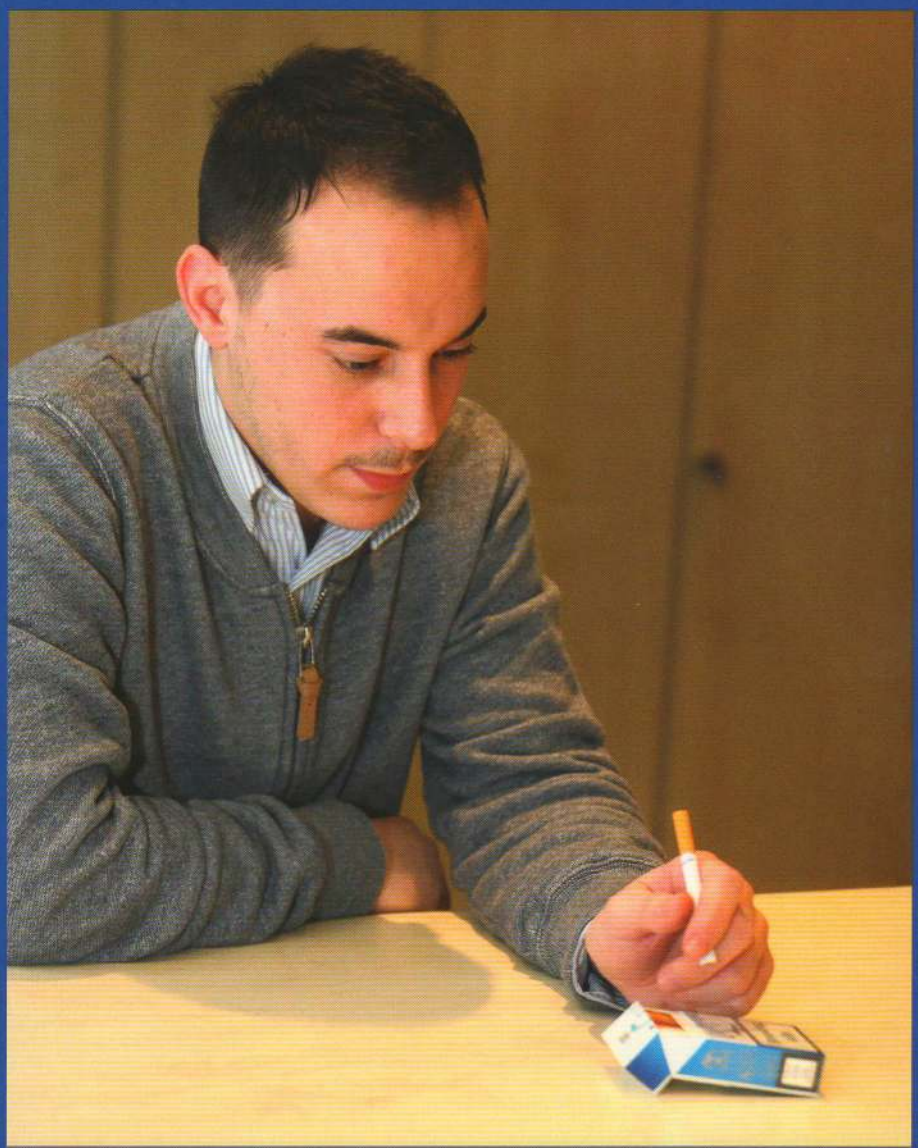

Clinical Focus:

Respiratory

Ensuring support for people quitting smoking

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Clinical Focus

LUCIE CARILER

Respiratory

Ensuring support for people quitting smoking

Many people struggle to stop smoking without professional support. Jennifer Percival identifies the role practice nurses can play in helping people quit.

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LUCIE CARILER

Quote of the month

'I became a nurse because I wanted to make a difference. No matter how small or insignificant the deed or act, I always accept it as an achievement.'

Verna Balfour (p. 102)

More therapy options for obesity needed

Tony Leeds identifies the need for a wider range of evidence-based, cost-effective, and safe interventions for weight loss and weight loss maintenance

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Key words: Obesity, weight loss solutions, gastric surgery, dieting

Obesity is a truly global pandemic expected to affect 1.5 billion people by 2015 (World Health Organization, 2013). It is not a future problem, it is here and now, blighting lives, and costing the NHS millions of pounds (£4.2 billion pounds in 2007) (National Audit Office, 2013). Practice nurses are in the front line.

Also in the front line are the specialists and gastric surgeons who help prepare patients—some weighing nearly 250 kg (40 stone)—for gastric surgery. Our job is to make their surgical journey safer and improve outcomes. Specialists also help others who do not qualify for surgery to lose weight through non-surgical techniques.

Surgeons can help an increasing number of people, but practice nurses and their colleagues in primary care can directly change the UK's obesity problems by helping patients take steps to prevent them reaching such a serious state of ill health and obesity that they need surgery.

Obesity may be one of the most common health issues faced by patients in general practice. It is associated with diabetes, hypertension, heart disease and even cancer (World Cancer Research Fund (WCRF), 2007), yet it could be argued that, in general across the UK, the approach to obesity is backward, a bit like heart medicine in the 1950s.

Obesity is, for example, one of the subjects least taught to primary health professionals in training. Practice nurses will almost certainly have had more training on nutrition and diet-related matters than their GP colleagues, and this is an area where nurses can potentially have a much greater impact on patients. Practice nurses could have a positive impact on their patients' health in two areas in particular:

- Helping a patient with type 2 diabetes lose 5–10% of their initial body weight (up to 10 kg (1.5 stone) can help them improve their metabolism with probable reduction of complications (Franz, 2007)
- Helping a (non-diabetic) patient lose 5–10 kg will help reduce their chance of heart disease and stroke by lowering their blood pressure (Harsha et al, 2008).

These achievements could also halt these patients' year-on-year weight gain if they are given long-term support.

But it is important to ensure that the strategy chosen is the most appropriate for the individual patient. Someone who is 190 kg (30 stone) may not get far on conventional dieting alone—or if they do, it will take them many months, or even years, to achieve the weight loss needed.

There are two groups of patients for whom the NHS has a ready answer: those with up to 10 kg (1.5 stone) to lose, and the very obese, i.e. those with a body mass index (BMI) greater than 40 kg/m^2.

Modest weight loss solutions

Following the withdrawal by regulatory authorities of two effective drugs, the typical general practice has just one drug in its armoury: orlistat. This can be effective but needs to be given with good dietary advice to give the best results and avoid side effects.

Conventional dietary advice provided in a structured manner and underpinned by behavioural therapy techniques can give good weight loss and maintenance, particularly in compliant non-impulsive characters in whom there is scope for change (Elfhag and Rössner, 2005).

Options for the severely obese

Surgery is often regarded by clinicians and patients as the only option for the severely obese. To qualify for surgery, someone must have a BMI of 40 kg/m^2 or more (or a BMI of 35 kg/m^2 if they have a health complaint such as diabetes) (National Institute for Health and Clinical Excellence (NICE), 2006). Despite these recommendations, however, in some parts of the UK surgery is only funded by the NHS if the person has a BMI greater than 50 kg/m^2. For an average woman of 163 cm (5 foot 4 inches), a BMI of 40 kg/m^2 means a weight of about 108 kg (about 17 stone).

At that weight the strain on the body is very great. As well as a risk to her heart, she will have an increased risk of some cancers, high blood pressure and type 2 diabetes. Her knees and hips will probably also be crumbling with arthritis.

Table 1. What patients might not tell you

Excess weight is debilitating in many ways. Patients will often not reveal the full effect on their lives to a health professional for fear of embarrassment. Effects on quality of life include difficulty climbing stairs and playing with children and grandchildren. Other effects include:

Isolation and loneliness	Being overweight can prompt a rapid spiral to disability as exercise becomes more difficult, employment becomes impractical and a person's world centres on the living room, the TV and comfort eating
Impaired sleep	Impaired sleep from the pain of osteoarthritis, further reducing quality of life, but early evidence from Australia (Anandacoomarasamy et al, 2012) suggests that osteoarthritis can be slowed down and possibly reversed given sufficient weight loss
Self-esteem	Self-esteem is impaired for a variety of reasons, including practical issues related to personal hygiene
Abuse from others	Verbal abuse from others is an unfortunate consequence of obesity and causes much anguish

For many, doctors as well as patients, surgery is seen as a quick fix. Alarmingly, there have been anecdotal reports of patients admitting that they had put on weight in a bid to qualify for surgery. Although shocking, it demonstrates some people's desperation to find a way to lose weight.

Gastric surgery is difficult to bear physically and can cause emotional difficulties (Kinzl, 2002). The different types of surgery—such as the insertion of a gastric band that narrows the stomach to form an 'hourglass' and gastric bypass—have different effects but all need to be managed carefully afterwards.

After this type of surgery a meal will rarely be any more than a few small cubes of food, so there is little opportunity to enjoy a traditional meal with the family, for example. If someone does eat more than their tiny portion they may suffer discomfort and regurgitation (Avriel et al, 2012) .

With such a small intake and reduced absorption they always need additional nutrients from supplements (Endocrine Society, 2010). Appropriate aftercare is necessary to avoid further problems with malnutrition and often this aftercare is limited.

Those with a bypass will need extra oral vitamins and minerals and regular injections of vitamin B_{12}. There are other potential problems such as bone-thinning, and some find that the operation—which comes with the usual risks of surgery, including infections—does not work as well as expected in the long term.

For some patients surgery can give very good results with great improvements in diabetes, blood pressure, sleep problems and reduced risk of heart disease (Picot et al, 2009). However, a gastric band and gastric bypass are charged at between £8500 and £14,000. Although documentary sources suggest lower figures, true costs may be higher if there are complications (Picot et al, 2009).

Surgery costs can be recouped through drug savings in just over 2 years for those with diabetes (Picot et al, 2009), but as was highlighted by Martin et al (2012), postoperative medical care is not always perfect because there is a lack of recognition of the need for regular reviews especially 2 years after surgery.

Even if all goes well, patients need to be reviewed regularly and appropriately, and this costs money, and is often not fully available.

So it could be asked why is surgery so popular? One reason is that credible alternatives are not offered. With 0.5 million people in the UK with a BMI of 40 kg/m² or greater (Grieve et al, 2011), there is no way in which the NHS has the resources to pay for all of them to have a band or a bypass.

Mind the gap

The two extremes of traditional weight loss options—surgery and conventional dieting—have left a void into which the weight-loss needs of the majority of the obese population fall. However, programmes such as the Scotland-based Counterweight have demonstrated impressive weight loss and maintenance delivered in general practice in patients with a BMI both below and above 40 kg/m².

Counterweight was developed to help people lose 5–10% of their body weight (as recommended by the Scottish Intercollegiate Guidelines Network (SIGN) (2010) and NICE (2006). This has been delivered to 6700 people and has helped many of those stop the weight-gain spiral (Bell-Higgs et al, 2012).

However, it was recognized that Counterweight was seeing more and more people who were heavily overweight (i.e. those with a BMI greater than 40 kg/m²), who needed to lose more than 5–10% of their body weight. SIGN (2010) recommends a weight

Table 2. The cost of obesity

The 2007 Foresight report predicted that the direct economic costs of overweight and obesity would be £6.4 billion a year by 2015, and that the wider costs of elevated body mass index, including the impact on the economy of sickness absence, for example, would be £27 billion. The Foresight report predicted that in 10 years:

- 35–40% of people in the UK could be obese
- Diabetes cases could soar by 40%, doubling the medication bill to £1.4 million
- The cost of treating high blood pressure could rise further beyond the threefold increase in general practice prescriptions for antihypertensives incurred between 2000 and 2010
- A 100% increase in knee replacement surgery and a doubling of annual costs to £1.5 million (based on £803 million costs in 2009/10 and a 29% rise in 4 years)

From: Government Office for Science, 2007

loss of greater than 15–20% for those with a BMI greater than 35 kg/m². Weight loss of greater than 15 kg or 15% has been shown to normalize blood glucose and insulin (Wing and Phelan, 2005; Dixon et al, 2008).

These findings have led to the development of Counterweight Plus, a non-surgical intervention of a total diet replacement liquid formula diet 800 kcal/day along with a weight loss maintenance programme to help achieve a minimum weight loss of 15 kg (2.5 stone).

Counterweight took this next step by conducting a feasibility trial during 2010–2011, training practice nurses and dietitians to deliver the year-long programme of total diet replacement, food reintroduction and weight loss maintenance.

Counterweight has shown that by the end of the 12-month programme, patients who followed all stages of the programme according to the protocol had maintained a weight loss of 15 kg (2.5 stone) compared to a loss of 6.5 kg (just over 1 stone) for those who had not followed all the stages as per protocol (Lean et al, 2013). In total, 33% of all patients enrolled maintained a weight loss of 15 kg or more at 12 months (Lean et al, 2013).

This feasibility trial is the latest in a sequence of research which has shown that formula diet programmes can give good weight loss and maintenance in obese people with medical problems such as in those with osteoarthritis, sleep apnoea or diabetes (Christensen et al, 2011; Johansson et al, 2011; Snel, et al, 2012).

Conclusions

Health professionals have a need for a wider range of evidence-based, cost-effective, and safe interventions for weight loss and weight loss maintenance to offer patients with specific medical conditions. Counterweight Plus is one such option, but more are needed.

Conflict of interest: Tony Leeds is Medical Director of Cambridge Weight Plan.

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KEY POINTS

- Health professionals have a need for a wider range of therapy options for patients suffering from obesity
- Surgery and conventional dieting have left a void into which the weight-loss needs of the majority of the obese population fall
- Counterweight Plus has been developed as a non-surgical weight management solution for individuals with greater weight-loss needs
- Practice nurses will almost certainly have had more training on nutrition and dieting than their GP colleagues, and so are in a better position to offer patients weight-loss advice