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Tackling obesity in adults in primary care

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FIGURE 1
There is a 40% increased risk of death from cardiovascular disease for every 5 kg/m^2 increase in BMI above 25 kg/m^2

How should obesity be diagnosed?

How can patients be encouraged to lose weight?

Which patients should be referred?

OBESITY IS A GROWING PROBLEM AND ONE WHICH GPs WILL SEE MANY TIMES IN AN average day. It may not be the main reason for the visit, but obesity is often a major contributing cause of disease, particularly diabetes and heart disease, and is also related to psychological disturbance and depression.

In England in 2008, 66% of men and 57% of women had a BMI >25 kg/m^2; within this 24% of men and 25% of women were obese with a BMI >30 kg/m^2. [1]

The relative risk of diabetes in overweight men is 2.40 and in obese men 6.74 compared with men with a BMI in the normal range. The respective relative risks in women are 3.92 and 12.41.[2]

There is a 40% increased risk of death from cardiovascular disease for every 5 kg/m^2 increase in BMI above 25 kg/m^2. [3]

While trying to tackle obesity may seem like very hard work for little gain, having a structured approach to dealing with overweight and obese patients will make it easier to broach the subject and enable evidence-based advice to be given that will be helpful to all patients.

DIAGNOSIS

Overweight and obesity are diagnosed simply by use of the body mass index (BMI); this is calculated by dividing the weight (kg) by the square of the height (m). The WHO categories for BMI[4] are shown in table 1, p32.

BMI has been criticised for misclassifying people who are very muscular as overweight as it does not take account of fat mass, particularly abdominal fat which carries the highest risk for metabolic disease. To get round this problem waist circumference has emerged as an alternative, or addition, to BMI for risk prediction. Measuring waist circumference can be cumbersome as it is virtually impossible to measure the same place each time, resulting in larger errors than BMI and it can also »

be intrusive for patients. However, recent studies have shown that BMI is just as good at predicting future risk of cardiovascular disease and death as waist circumference.[5]

When checking BMI, particularly in younger men, you should consider whether they are very muscular (the so-called rugby player physique) and apply commonsense. The majority of younger men, while being muscular, are not as muscular as professional sportsmen and are also carrying excess fat. Waist circumference is particularly helpful in these cases. Instructions for measuring waist circumference and cutoffs are given in table 2, left.[4, 6]

Certain ethnic groups including South Asians, Chinese and Japanese are at higher risk of adverse effects, such as diabetes, for a given BMI. For this reason lower BMI cutoffs have been proposed but a consensus has not yet been reached. Current thinking is that these individuals should be considered overweight at BMI >23 kg/m^2 and obese at BMI>27.5 kg/m^2, the waist circumference cutoff for men in these groups is 90 cm.[7]

Overweight and obesity is close to becoming a problem for the majority of the population. Some patients may come to the surgery specifically for advice on their weight, some may be receiving care for an obesity-related disease e.g. diabetes (but not receiving specific obesity management), while others may be attending for a different reason and not be aware that their weight is an issue. BMI is a simple test to perform and consideration should be given to monitoring patients' weight and offering guidance whenever appropriate.

Table 1

WHO classification of body mass index (BMI)

BMI kg/m^2	Definition
<18.5	underweight
18.5 - 24.9	normal range
25 - 29.9	overweight
30 - 34.9	obesity I
35 - 39.9	obesity II
≥ 40	obesity III

Table 2

How to measure waist circumference

- The patient should be relaxed with arms crossed on the chest and feet shoulder-width apart
- Measure at the height of the uppermost border of the iliac crest
- Ensure the tape is horizontal to the floor, is snug without indenting the individual's skin, and is not twisted or caught on clothing
- Measure the waist at the end of a normal expiration to the nearest 0.1 cm

Cutoff values [1,3]

- 94 cm men (90 cm for Asian men)
- 80 cm women

Table 3

Small sustainable changes to diet and eating behaviour

Help the patient identify an area they can change

- high-sugar drinks
- portion size
- high-fat food choice
- >3 meals/day
- snacks

Consider the approach

- cutting out snacks/unhealthy choices
- substituting unhealthy choices with healthier choices
- decreasing portion size

Behavioural strategies

- set achievable goals – e.g. one change every few months
- explore with the patient why certain dietary factors are important to change
- discuss why these may be difficult
- discuss coping strategies for times of temptation – e.g. food substitution
- encourage self-monitoring of eating behaviour

HEALTH RISKS

Obesity is a risk factor for many serious and complicated diseases. The increasing prevalence of obesity will bring huge excess costs to the NHS. Obesity is associated with an increased risk of:

- diabetes[8]
- cardiovascular disease – MI and stroke[9]
- fertility problems[10]
- fatty liver and cirrhosis[11]
- osteoarthritis and mobility problems[12]
- pregnancy and delivery complications[13]
- obstructive sleep apnoea[14]
- asthma[15]

GP MANAGEMENT

Obesity treatment centres on lifestyle interventions. No obesity treatment will ever simply involve taking a tablet but instead involves gradual sustained changes in eating, food choices, and behaviour. The best evidence suggests that patients should be offered a combination of advice on dietary change and increasing physical activity which includes behavioural components.

In areas where referral to a formal weight management service is not available, dealing with this during a 10-minute appointment can seem impossible. However, most patients are usually well aware of where they are going wrong but find it difficult to change a habit of a lifetime.

Encouragement to make small changes in a sustained way can make significant differences to energy balance, see table 3, left. Explaining sources of hidden calories, such as high-sugar fruit drinks, low-fat yoghurts and ready prepared foods, along with encouraging patients to read food labels, also helps.

Physical activity targets can seem an impossible goal to many people; the current recommendation for sustained weight loss is 225-300 minutes a week of moderate intensity physical activity[16] (increased heart rate and breathing but still able to converse). Examples of suitable physical activity include brisk walking or jogging, cycling, playing team sports such as football or hockey or participation in an aerobics class. It should be remembered that for some obese patients, simply walking will be exercise enough to increase heart rate and breathing.

The main message here is that unless you are going to do huge amounts of exercise, it is not enough alone to lose weight and dietary restriction is required. However, physical activity is good for health and wellbeing and small changes towards an active lifestyle will also burn calories.

Drug treatment is a useful addition when lifestyle measures alone are not effective; and should always be given along with, not instead of, lifestyle advice. Only orlistat is currently licensed for use in the UK, however, many new therapies are in development.

BARIATRIC SURGERY

There is increasing evidence for the effectiveness of bariatric surgery in treating obesity-related disease, particularly diabetes.[17] There are two main procedures: gastric banding when an inflatable band is placed around the stomach reducing the space available for food, and gastric bypass where a small pouch of stomach is connected to the jejunum bypassing the duodenum and causing a degree of malabsorption. Both procedures are now thought to produce at least part of their effect »

SPECIAL REPORT
OBESITY

key points

SELECTED BY
Dr Peter Saul
GP, Wrexham and associate GP Dean for North Wales

Obesity is a growing problem. In England in 2008, 66% of men and 57% of women had a BMI >25 kg/m^2; within this 24% of men and 25% of women were obese with a BMI >30 kg/m^2. BMI, which is calculated by dividing the weight (kg) by the square of the height (m), has been criticised for misclassifying people who are very muscular as overweight as it does not take account of fat mass, particularly abdominal fat which carries the highest risk for metabolic disease. Waist circumference has emerged as an alternative, or addition, to BMI for risk prediction. When checking BMI, particularly in younger men, consider whether they are very muscular (the so-called rugby player physique) and apply commonsense.

Obesity is often a major contributing cause of disease, particularly diabetes and heart disease. The relative risk (RR) of diabetes in overweight men is 2.40 and in obese men 6.74 compared with men with a BMI in the normal range. The respective RR values in women are 3.92 and 12.41. There is a 40% increased risk of death from cardiovascular disease for every 5 kg/m^2 increase in BMI above 25 kg/m^2. Obesity is also associated with a raised risk of: fertility problems, fatty liver, cirrhosis, osteoarthritis and mobility problems, pregnancy complications, obstructive sleep apnoea and asthma. Certain ethnic groups e.g. South Asians, Chinese and Japanese are at higher risk of adverse effects, such as diabetes, for a given BMI. For this reason lower BMI cutoffs have been proposed.

The best evidence suggests that patients should be offered a combination of advice on dietary change and increasing physical activity which includes behavioural components. Encouragement to make small changes in a sustained way can make significant differences to energy balance. Physical activity should be of moderate intensity (increased heart rate and breathing but still able to converse).

Drug treatment is a useful addition when lifestyle measures alone are not effective; it should always be given along with, not instead of, lifestyle advice. Evidence is increasing for the effectiveness of bariatric surgery in treating obesity-related disease, particularly diabetes. There are two main procedures, gastric banding and gastric bypass. Both procedures are now thought to produce at least part of their effect through changes in gut hormone control of appetite. Most bariatric surgical centres only take referrals from NHS weight management clinics and have strict criteria around attendance at appointments and attempts at pre-operative weight loss. The focus of specialist weight management services is usually on patients with severe and/or complicated obesity.

There can be a mismatch between those patients who seek treatment and those with the greatest need. Men, individuals from deprived backgrounds and those with chronic disease should not be overlooked for weight management just because they are not seeking it.

through changes in gut hormone control of appetite. Gastric banding requires follow up to ensure that the band is correctly inflated to control appetite and deal with any complications of band slippage or erosion. Gastric bypass patients require lifelong nutritional monitoring.

Both NICE[18] and SIGN[16] have published evidence-based guidelines on the management of obesity.

The guidance recommends bariatric surgery for patients with obesity-related disease and a BMI >35 kg/m^2, athough NICE also states that it should be available to those with a BMI >40 kg/m^2 and no obesity-related comorbidities. However guidance and practice are very different. Routes of access for, and availability of, bariatric surgery vary across the country. Most bariatric surgical centres only take referrals from NHS weight management clinics and programmes and have strict criteria around attendance at appointments and attempts at preoperative weight loss. Only a very small proportion of the eligible population are being treated.

WEIGHT MANAGEMENT SERVICES

Obviously not every overweight and obese patient can be seen in a specialist weight management service. Local protocols apply as to which patients should be referred, but usually the focus is on those with severe and/or complicated obesity, such as patients with sleep apnoea, diabetes, mobility problems or a BMI >35 kg/m^2.

There can be a mismatch between those patients who seek treatment and those with the greatest need and most to gain from treatment. Men, individuals from deprived backgrounds and those with chronic disease should not be overlooked for weight management just because they are not seeking it; efforts should be made to engage these groups whenever possible and raise the issue of obesity treatment.

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Useful information

For GPs
The National Obesity Forum
www.nationalobesityforum.org.uk

The readiness ruler to assess willingness to change is available at:
www.healthscotland.com/uploads/documents/2976-Healthy_Living_Readiness_Ruler_2_pages.pdf

For patients
Helpful details on small dietary changes and recipes can be found at:
www.nhs.uk/change4life/Pages/Default.aspx

We welcome your feedback

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