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Treatment of obesity: theory into practice

Sara F. L. Kirk

Division of Public Health, Nuffield Institute for Health, The University of Leeds, 71–75 Clarendon Road, Leeds LS2 9PL, UK

The purpose of the present paper is to outline the current situation in the management of obesity in adults, and to make some suggestions as to how health professionals involved in obesity treatment can best address this growing problem. Dietitians and nutritionists have long been involved in the treatment of obesity, and have a vital role to play in the battle to reverse the increasing prevalence of this major public health problem. However, the current management of obesity is far from ideal. There is evidence to suggest that in general health care, even when there are clearly effective clinical interventions, health professionals may not practise in the best way. Furthermore, some professionals may also hold negative attitudes towards the obese. These are the subject of a systematic review on improving health professionals' practice and organization of care in obesity treatment, the preliminary findings of which will be discussed in the present paper (Harvey *et al.* 1998*a,b*). A new approach to obesity is required, encompassing effective treatment and prevention strategies. A greater understanding of the problems faced by the obese individual in attempting to lose weight is also needed, with a range of treatment approaches on offer to acknowledge the heterogeneity of obesity. Those health professionals involved in obesity treatment must consider the impact of dietary advice given in a consultation against the impact of environmental cues that assail the patient as soon as they leave the room. Tackling the obesity epidemic requires action at the individual and population level if we are to see any reduction in prevalence.

Obesity management: Dietary advice for obesity

As long ago as 1953, being overweight was seen as ‘the leading health problem among middle-aged and older people’ (Dublin, 1953). As we approach the millennium, this statement still holds true, despite the proliferation of literature available on the treatment and management of overweight and obesity in the intervening half century. Moreover, the situation is getting worse, with more people being affected and to a greater degree (World Health Organization, 1998). Dietitians and nutritionists have long been involved in the treatment of obesity and, along with other health professionals, have a vital role to play in the battle to reverse the increasing prevalence of this major public health problem. However, the current management of obesity is far from ideal, and despite its prevalence it has

been estimated that only a small proportion of patients ever receive treatment, about 20 % in European countries (Hoffmann-La Roche Inc., 1995). This leaves a huge number of patients to fend for themselves in an increasingly obesogenic environment, at the mercy of a slimming industry worth billions of pounds annually, and in a culture that actively promotes the thin ideal (Wiseman *et al.* 1992). Furthermore, those who actually do receive treatment within existing health service provision are not guaranteed effective help, with evidence that some health professionals hold negative attitudes towards obesity that may influence their practice (Cade & O’Connell, 1991). The purpose of the present paper is to outline the current situation in the management of obesity in adults, and to make some

Corresponding author: Dr Sara F. L. Kirk, fax +44 (0)113 233 3952, email s.f.l.kirk@leeds.ac.uk

suggestions as to how health professionals involved in obesity treatment can best address this growing problem.

The current management of obesity

Although the increasing prevalence of obesity throughout the world requires a more coordinated strategy targeting prevention and treatment (World Health Organization, 1998), current treatment strategies are numerous and vary widely in effectiveness (Glenny *et al.* 1997). Surgery has been found to be the most effective and possibly cost-effective approach for reducing weight in the morbidly obese, although surgical treatment does carry risks and should only be used when less invasive methods have failed (National Institutes of Health Technology Assessment Conference Statement, 1992). Substantial health benefits are seen following surgery, with patients who lose 20–30 kg at a rate of 4.5 kg/month for the first 6 months showing a marked fall in blood lipids (Pories *et al.* 1992). Combinations of diet, exercise, behavioural and drug treatments have also been found to have some limited effect in treating obesity in adults. However, one of the problems encountered with the literature on obesity treatments is the lack of long-term follow-up and maintenance strategies. More evaluation of interventions is needed, particularly in the UK; of the ninety-nine studies included in the systematic review on obesity treatment, over 90 % were studies conducted in North America (Glenny *et al.* 1997).

While evidence from such systematic reviews is now accumulating as to the treatment strategies most likely to be effective, there is also evidence to suggest that in general health care, even when there are clearly effective clinical interventions, health professionals may not practise in the best way (Ketley & Woods, 1993). Potential barriers to effective obesity management may include knowledge about effective treatment strategies and access to appropriate support to implement changes in practice. Furthermore, health professionals, including dietitians, involved in obesity treatment may themselves lack confidence in their ability to treat obesity, which could influence their treatment approach (Cade & O'Connell, 1991; Hoppé & Ogden, 1997). Success rates for treatments vary, and treating the obese is often viewed as not being professionally rewarding. For example, in the study by Cade & O'Connell (1991), although 98 % of general practitioners believed it was part of their role to counsel patients with a weight problem, only 26 % thought that this was professionally rewarding. Dissatisfaction with success rates in treating obesity have also led to some people disputing whether obesity should be treated at all (Wooley & Garner, 1991), and it is not surprising that dietitians and other health professionals are disillusioned with obesity treatment when it has been suggested that 90 % of slimming diets fail (Blackburn *et al.* 1989). However, what such findings fail to address is the number of people who do lose weight, either with or without professional help. For example, Jeffery *et al.* (1984), in their study of weight loss in a general population, found that successful weight loss in these populations was more common than would be expected from reviewing the weight-loss literature. So what are the factors that distinguish those who are successful from those who are not?

Characteristics of successful dieters

A survey of the literature on individuals who are successful at dieting to lose weight is likely to reveal a lot more about unsuccessful dieters than about those who are successful at losing weight. The literature on dietary restraint and dieting failure is extensive (for example, see Herman & Polivy, 1980; Ruderman, 1986), with dietary restraint implicated in the development of binge eating and eating disorders (Polivy & Herman, 1985; Wardle, 1987). Yet some people do lose weight and maintain this loss, although the mechanisms behind this are unclear (Lowe & Kleifield, 1988; Westenhoefer *et al.* 1994). In an attempt to identify predictors of success at weight loss, Kayman *et al.* (1990) studied maintenance and relapse after weight loss in women and found differences in eating behaviour between the two groups. Relapsers ate significantly more snacks than maintainers, and tended to skip meals more frequently. Maintainers, although using similar strategies to lose weight, used these strategies in ways that were specific to their own lifestyles. These usually included regular exercise and a new eating style of reduced fat and sugar and less foods than previously eaten, which they persisted with until new patterns were established. My own research into the cognitions held by successful and unsuccessful dieters also found that the successful dieters studied reported a more regular eating pattern and differed in the way in which they construed food on the dimension of 'good tasting' compared with the unsuccessful dieters studied. In other words, those dieters who had successfully lost and maintained their reduced weight were more likely to view healthy foods as good tasting than subjects in the unsuccessful group. Although only exploratory, these findings suggest that a cognitive shift may be necessary to enable successful dieters to maintain their restraint in the face of temptation from diet-breaking foods (Kirk & Hill, 1997).

Another key factor to consider is the importance of weight-maintenance strategies in any treatment programme. Perri *et al.* (1993) outlined a range of strategies that have been tested as maintenance strategies, including ongoing professional contact, skills training and social support. Thus, patients do well if they have regular support from a health professional, or some other means of support, e.g. self-help groups. The role of physical activity is also paramount to both treatment and maintenance. Individuals incorporating some physical activity into their daily routine tend to be more successful at weight maintenance than those who do not (Pavlou *et al.* 1989), but the importance of increased activity as a part of treatment is often neglected (Fox & Dirkin, 1992). Treatment programmes in the future should therefore aim to include an exercise component and provide adequate long-term support, incorporating an element of skills training and relapse prevention techniques. These findings do have implications for current treatment of obesity, particularly in terms of resources and the involvement of multidisciplinary teams to address the range of issues involved (Scottish Intercollegiate Guidelines Network, 1996). There are also implications for the training of health professionals to ensure they are equipped with the skills to confidently promote such treatment strategies. At the moment though, we know little about how health

professionals manage obesity, let alone how practice might need to be changed to meet these challenges.

How can health professionals' management of obesity be improved?

The negative attitudes seen towards obesity, coupled with the unrealistic expectations often expressed by obese patients (Garrow, 1992), mean that there is room for improvement in health professionals' current management of obesity. But how can this be achieved? This is a question currently being addressed by a systematic review, which aims to describe the types of interventions that have been employed in the management of obesity, and evaluate their effectiveness in improving health professionals' practice or the organization of care (Harvey *et al.* 1998*a,b*). Although still in progress, preliminary results have found that a 'shared care' approach, in which general practitioners are encouraged to treat obesity and work in collaboration with the hospital service, may be one strategy worthy of consideration (Richman *et al.* 1996), although the effect of the intervention was only short term. In another study, Rogers *et al.* (1982) reported on a randomized controlled trial in the USA, using a computerized medical record system, developed to provide physicians with concise and current information about patients and recommendations for good care. This was compared with patients for whom there were only manual records available. In each case they compared whether dietary advice or a dietary review took place. They found small differences in provider behaviour and weight loss over a 2-year period, with patients for whom a computerized record was available receiving more frequent dietary advice or review and correspondingly showing greater weight loss, suggesting better care and outcome of care from this relatively simple intervention. Overall, our findings from this review are disappointing. Very little work is available in this area, and it is difficult to provide recommendations for improving obesity management from the available evidence. Future research should focus on good quality interventions on improving health professionals' management of obesity.

Dietary advice and physical activity are two of the main modifiable factors in the management of obesity. One of the core skills of dietitians lies in their ability to translate complex nutritional information into more simple dietary messages. However, the dietary management of obesity must also be set in the context of the wider issues of obesity. It has been suggested that the failure of many conventional obesity treatments arises from the assumption that the fundamental problem of obesity lies with overeating (Bennett, 1987), with dieting universally seen as the answer to the problem. However, we must consider the impact of dietary advice given in a consultation against the impact of environmental cues that assail the patient as soon as they leave the room. This dichotomy is summarized by Mant (1997), who stated that 'the effectiveness of intervention in general practice will always be constrained by the effectiveness of public food policy and legislation'. By treating the individual in isolation without fully considering the impact of an obesity-inducing environment, are we not setting them up to fail? Even the practice of giving 'advice' may be a

barrier to treatment, implying that people need to be told what to do, when the literature suggests that people do know what they should be eating (Goode *et al.* 1996; Hansbro *et al.* 1997).

A more client-centred approach to managing dietary change has recently encouraged a move away from the traditional 'advice giving' consultation to one allowing a more open and honest therapeutic relationship to be developed (Prochaska *et al.* 1992; Health Education Authority, 1995). The advantage of this is that both the patient and the therapist are more able to have their expectations met, while one important disadvantage is that such strategies may take more time. Brief interventions have been developed using this model as part of the *Helping People Change* package (Health Education Authority, 1994) in an attempt to address the time constraints faced by health care workers.

It is also important to consider who should treat obesity and which setting would be most appropriate. Doctors are seen by their patients to be the most credible source of health information; however, even when doctors are aware of the importance of obesity management, they and other health professionals often have limited time and resources to spend on management and monitoring (Hiddink *et al.* 1995). In dietetics, the amount of time devoted to dealing with obese patients also varies, with 86 % of dietetic managers only allocating up to 30 min for a new appointment to treat obesity (Cowburn, 1998); although it is not clear how this compares with other conditions requiring dietetic intervention.

There are currently only approximately 4000 state-registered dietitians in the UK, 2555 of whom work within the National Health Service, with just 1000 of these estimated to work in community or primary health care settings (British Dietetic Association, personal communication). Thus, dietitians may be able to manage their time more effectively by training other members of the health care team to give dietary advice. Nutrition training is not a prominent feature of the training of many health workers (Helman, 1997), despite the fact that often dietary advice may be given by professionals other than dietitians or nutritionists, and a demand exists for more nutrition training (Cadman & Wiles, 1996). Dietitians and nutritionists are therefore ideally placed to provide this support to other health professionals involved in obesity treatment.

The psychological impact of obesity must also be considered by health professionals involved in managing obesity, since it is estimated that approximately one-third of patients presenting for obesity treatment may have some form of binge eating disorder (Marcus, 1994), and people who binge eat are reported to be less successful than others in obesity treatment (Spitzer *et al.* 1992). The American Dietetic Association (Pace *et al.* 1991) posed the following question: 'the quest to lose weight sometimes masks psychological and interpersonal problems that need to be addressed... we must ask ourselves whether we are responding adequately when clients need more help than we can offer...'. In cases where a psychological problem is apparent, prompt referral on to a suitably-qualified psychologist or counsellor may be necessary, if such help is not already available as part of a team approach to treatment.

Targeting the health risks of obesity

Obesity is a chronic condition which has an impact on a range of other disease states, and while obesity *per se* is not always taken seriously, co-morbidity may be (World Health Organization, 1998). Obesity is not just about an excess of energy intake over expenditure. There are also differing degrees of excess fatness and distribution of fat which may affect risk, since centrally-deposited fat stores are a key risk factor for CHD and non-insulin-dependent diabetes mellitus (Lapidus *et al.* 1984; Larsson *et al.* 1984). Even modest weight losses can have beneficial effects on health outcomes, with weight losses of up to 10 % leading to improvements in glycaemic control, blood pressure and cholesterol levels (Goldstein, 1992). Encouraging modest weight losses by setting more realistic targets is one important step, requiring consideration of the range of factors influencing the weight of individual patients, such as age, family history and medical history (Garrow, 1992). Obesity is not a homogeneous condition, and treatment strategies must be developed to reflect this, with treatment options tailored to each individual based on a thorough assessment (British Dietetic Association, 1997). It is not only health professionals who need to focus on setting realistic goals; patients themselves need to be encouraged to adopt sensible eating and exercise habits, no mean feat when under constant pressure from the media and commercial interests to lose unrealistic amounts of weight in unfeasibly short spaces of time.

Applying the brakes: the importance of strategies for prevention

So far, the present paper has focused on the treatment of obesity. So what of the prevention of weight gain in the first place? There is now strong evidence to support the view that obesity is preventable (Gill, 1997), although further evaluation of obesity prevention initiatives is required. According to Egger & Swinburn (1997) there is a need to move away from the traditional view of obesity as a personal disorder that requires treatment. While treatment of obesity is necessary, health professionals need to consider the impact of the environment on individuals, and accept that as long as we live in an environment conducive to obesity, individuals will struggle to swim against the tide. Strategies aimed at modifying the environment include encouraging greater access to physical activity, improved labelling of food products, and subsidies for healthier foods (Gill, 1997). However, Gill states that for such strategies to be successful would require 'the acceptance that the management of obesity is not just the responsibility of individuals, their families or health professionals, but requires a commitment from all sectors of society'. Dietitians and nutritionists have a vital role to play in the prevention of obesity at all levels, through lobbying for improved food labelling or restrictions on advertising of high-fat foods, involvement in the development of local and national food and nutrition policies, or by facilitating local initiatives such as workplace interventions and community-based health promotion strategies. Health education messages have been attacked as contributing to eating disorders by Hartley

(1996), who stated that 'some dietary advice, both from health professionals and the commercial sector, is inappropriate for the majority of recipients'. However, while the prevalence of eating disorders is of great concern, it must be put into the context of the far greater prevalence of obesity. It is important that dietitians and nutritionists take a lead in developing innovative ways of promoting the often jaded and misinterpreted 'healthy eating' messages, so that they are delivered in a balanced way and heeded by those they are aimed at.

Meeting the challenge of obesity

The increasing prevalence of obesity is undoubtedly a serious public health issue, and as such must be addressed at the population level as well as tackling the problem from an individual perspective. For years, the focus has been on treatment of obesity, with prevention strategies often ignored. The rapidly increasing prevalence of obesity means that effective prevention strategies have to be developed alongside effective treatments. The prevention of obesity should become a priority, with health professionals playing an important role within their area of work.

Until successful strategies for prevention are in place, we must continue to evaluate current practice, and strive to improve the treatments on offer. Gaps in our level of knowledge about obesity centre on the lack of such effective treatment strategies that work in the longer term. Future research should therefore focus on the effectiveness of obesity treatments that incorporate more long-term follow-up. There is a need for health professionals involved in obesity treatment to devote more time to treating obesity, perhaps by offering more appointments and for longer duration, as these strategies do seem to be more effective. The adoption of standards and guidelines for effective obesity management, such as those produced by the Scottish Intercollegiate Guidelines Network (1996), already mentioned, should be encouraged. We need to have a greater understanding of the problems faced by the obese individual in attempting to lose weight, and tailor the treatments offered accordingly. If dietitians cannot offer this level of input, which will require additional resources, then it may be more appropriate to be involved in training others to do this more effectively, although this too has resource implications. Other options include greater use of more informal networks, buddy systems, self-help groups, and partnerships with commercial slimming organizations; possibly working with such groups to accredit their programmes to ensure patients are not putting themselves at risk by using unsafe dieting practices.

Finally, we need to treat obesity as a chronic illness, requiring a lifelong, coordinated approach, and ensure that those dealing with the problem treat it more seriously. There are very few specialist clinics for the treatment of obesity, in contrast to those that exist for other conditions such as diabetes mellitus. Only when we address the wider issues of the environment, as well as the individual, and our own attitudes towards the problem, can we ever hope to meet the challenge posed by this important condition.

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