

Nation strategy failed to this, so spending on health promotion increased only transiently.⁶

Once a target based strategy is agreed, technical challenges remain. Target setting requires an understanding of the current pattern of health in a population. Designing and implementing policies to meet targets requires a high level of public health management skills. Monitoring progress requires knowledge of the natural history of diseases. A key question is how long it will take for new policies to take effect. For some risk factors changes now will affect disease only many years hence, as with smoking and lung cancer. Here, process measures, such as changes in attitudes or behaviour, are more appropriate than outcome measures, such as reduced deaths. For others, such as drunk driving and injuries, the relation is more immediate. This subject is inadequately understood, with events such as the rapid reduction in deaths from cardiovascular disease in eastern Europe since 1989 challenging widely held views.⁷

Perhaps the most important question is whether target setting actually makes any difference to health. The answer seems to be, "it depends." There is no single model of a health policy based on targets, just as there is no single model of government. Each country or region faces a particular set of political, practical, and technical constraints, but if the model takes

account of these the process of target setting can provide a more rational basis for health policy and begin to address problems that might otherwise be ignored.

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- 1 WHO Regional Office for Europe. *Targets for health for all*. Copenhagen: WHO, 1985.
- 2 WHO Regional Office for Europe. *Health 21—health for all in the 21st century*. Copenhagen: WHO, 1999.
- 3 Van de Water HPA, van Hertem LM. *Health policies on target? Review of health target and priority setting in 18 European countries*. Leiden: TNO, 1998.
- 4 Osler M. Why has health in Denmark failed to improve? *Eur J Publ Health* 1999;9:6-7.
- 5 IUHPE. *The evidence of health promotion effectiveness: shaping public health in a new Europe*. Brussels: European Commission, 1999.
- 6 Fulop N, Elston J, Hensher M, McKee M, Walters R. Evaluation of the implementation of the Health of the Nation. In: Department of Health. *The health of the nation—a policy assessed*. London: Stationery Office, 1998.
- 7 McKee M, Zatoński W. How the cardiovascular burden of illness is changing in Eastern Europe. *Evidence-based Cardiovascular Medicine* 1998;2: 39-41.

Childhood obesity: time for action, not complacency

Definitions are unclear, but effective interventions exist

The lack of agreement between different studies over the classification of obesity in children and adolescents makes it impossible to give an overview of the global prevalence of obesity for these age groups. Nevertheless, whatever method is used to classify obesity, studies consistently report a high prevalence of obesity and rates are on the increase.¹ The national studies of health and growth carried out from 1972 to 1990 on English and Scottish children showed a roughly twofold increase in weight for height in all age groups and both sexes.² Similar trends have been observed in Europe and the United States.³ Paediatricians face problems of overweight in around one in four of their patients. Interestingly, childhood obesity is not only confined to industrialised countries.¹ Therefore a rational clinical approach needs to be applied to preventing and treating this disorder.

The most successful weight reduction programmes are those that combine diet and exercise within a framework of behaviour modification.⁴⁻⁵ Limited information is available about the use of aggressive treatment such as drugs and surgery for children, although such treatments are generally discouraged at that age. Evaluation of obese children and adolescents should include assessment of weight for height and body fatness; rule out endocrine and genetic causes; and evaluate other risk factors, such as those for cardiovascular disease, cancer, diabetes, orthopaedic disorders, and psychological problems. Treatment of obesity is most successful if realistic goals are set; a bal-

anced diet is emphasised; a safe rate of weight loss of about 0.5 kg a week is achieved through moderate reduction of energy intake (about 20-25% decrease); increased physical activity is emphasised as much as diet; parental support is strong; and behaviour therapy is provided to help both child and parents achieve the diet, exercise, and behaviour goals.

Dietary assessment helps to identify both the amount eaten and the child's and family's eating patterns. The prescribed diet should be simple, explicit, and unambiguous so that it is easy to implement and monitor and not subject to confusion or easy rationalisation of exceptions. Epstein et al developed the "traffic light diet,"⁶ which defines all foods by their energy content into red (stop), yellow (proceed with caution), and green (go). Children count the number of servings consumed for each colour as well as calories.

To lose 0.5 kg a week, 14.6 MJ (3500 kcal) must be eliminated (2.1 MJ (500 kcal) a day) through a combination of decreased energy intake (diet) and increased energy expenditure (physical activity). Only small reductions in energy intake are recommended for overweight children, as an adequate intake of both energy and nutrients is required for normal growth and development. Reducing the excess energy intake can be achieved by limiting takeaway and ready prepared foods, which tend to be particularly energy dense, and by decreasing portion sizes. Children should be encouraged to eat fewer high fat snacks such as crisps and biscuits and to avoid consuming a large

website
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Additional information on managing childhood obesity appears on the BMJ's website

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proportion of total energy from sweetened drinks. Another approach to dietary change focuses on reshaping long-term food preferences.⁷ However, there are insufficient data to judge the potential benefits of altering food preferences or sensory specific satiety.

The rapid rise in childhood obesity has been mirrored by an explosion of sedentary leisure pursuits for children such as computers, video games, and television watching.⁸ Increased general activity and play rather than competitive sport and structured exercise seem to be more effective.⁹ Adherence may be improved by making the activity enjoyable, increasing the choice over type and level of activities, and providing positive reinforcement of even small achievements. Being active may also compete with snacking and thereby make diet adherence easier.

There is experimental evidence that self monitoring and goal setting result in greater short term weight losses.⁷⁻¹⁰ In establishing both short and longer term goals it is important to make them specific, measurable, challenging, yet achievable. Contracts can be used to help maintain focus on specific behavioural goals and provide a structure for rewarding desired changes.

Three key settings for implementing childhood obesity management support programmes have been identified: the family, the school, and primary care. The provision of education on eating and lifestyle behaviour to parents has been shown significantly to reduce the prevalence of obesity in children of participating families.¹⁰ By directing preventive efforts at the family of susceptible children there is the added bonus that all members of the family are likely to benefit. Holding classroom lessons on nutrition and physical health was accompanied by improvements in indices of fitness and body fat levels.¹¹ Nevertheless, maintaining these programmes in the school curriculum in the long term has proved difficult owing to competition for school time, the need for teacher supervision, and financial limitations.

The delivery of programmes through primary care has received little formal assessment, and its potential role seems to be undervalued and underused.¹² Frequent contact with health professionals from an early age has been identified as an important strategy for effective management of obese children through the provision of advice, encouragement, and support for adopting healthy household eating and exercise patterns at an early stage in life.¹²

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- 1 WHO Consultation on obesity. Global prevalence and secular trends in obesity. In: World Health Organisation. *Obesity preventing and managing the global epidemic*. Geneva: WHO, 1998:17-40.
- 2 Chinn S, Rona RJ. Trends in weight-for-height and triceps skinfold thickness for English and Scottish children, 1972-1982 and 1982-1990. *Paediatr Perinat Epidemiol* 1994;8:90-106.
- 3 Dietz WH. Prevalence of obesity in children. In: Bray GA, Bouchard C, James WPT, eds. *Handbook of obesity*. New York: Marcel Dekker, 1998:93-102.
- 4 Williams CL, Campanaro LA, Squillace M, Bollella M. Management of childhood obesity in pediatric practice. *Ann N Y Acad Sci* 1997;817:225-40.
- 5 WHO Consultation on obesity. Special issues in the management of obesity in childhood and adolescence. In: World Health Organisation. *Obesity preventing and managing the global epidemic*. Geneva: WHO, 1998:231-47.
- 6 Epstein LH, Wing RR, Valoski A. Childhood obesity. *Ped Clin North Am* 1985;32:363-79.
- 7 Robinson TN. Behavioural treatment of childhood and adolescent obesity. *Int J Obes* 1999;23(suppl 2):S52-7.
- 8 Andersen RE, Crespo CJ, Bartlett SJ, Cheskin LJ, Pratt M. Relationship of physical activity and television watching with body weight and level of fitness among children. Results from the Third National Health and Nutrition Examination Survey. *JAMA* 1998;279:938-42.
- 9 Epstein LH. Exercise in the treatment of childhood obesity. *Int J Obes* 1995;19 (suppl 4):S117-21.
- 10 Epstein LH, Valoski A, Wing RR, McCurley J. Ten-year follow-up of behavioural, family-based treatment for obese children. *JAMA* 1990;264:2519-23.
- 11 Gortmaker SL, Peterson K, Wiecha J, Sobol AM, Dixit S, Fox MK, et al. Reducing obesity via a school-based interdisciplinary intervention among youth. *Planet health. Arch Pediatr Adolesc Med* 1999;153:409-18.
- 12 Pronk NP, Boucher J. Systems approach to childhood and adolescent obesity prevention and treatment in a managed care organization. *Int J Obes* 1999;23(suppl 2):S38-42.

Doctor as murderer

Death certification needs tightening up, but it still might not have stopped Shipman

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Harold Shipman, a general practitioner from Greater Manchester, has been convicted of murdering 15 of his patients. Inevitably, his conviction raises serious concerns for clinicians, patients, and society. How could such crimes go undetected? What lessons can be learnt and can similar murders by doctors be prevented in future?

Serial killers in health care like Shipman and Beverly Allitt are particularly shocking because they damage the trust that exists between clinicians and their patients. In 1993 Allitt, a nurse working on a paediatric ward, was convicted of murdering four children, attempting to murder three, and causing grievous bodily harm to six.¹

Like many singlehanded doctors, Harold Shipman had over 3000 patients in his care. His patients seemed to like him. Until the suspicions began to gather that eventually led to his prosecution, few concerns were raised about his clinical competence. Evidence

emerged that he had falsified the notes of some of his patients, but this was not incompetent record keeping; rather, it was done to conceal his crimes.

In 1976 Shipman was convicted of several offences relating to the misuse of pethidine, and this conviction was reported to the General Medical Council. Shipman sought treatment and no further action was taken. This conviction adds to all the other concerns raised, although no evidence of recent drug misuse has been presented. Moreover, it is important not to appear to conclude that drug misusers turn into serial killers. Since the 1970s new procedures have been put in place by the GMC to deal with substance misuse, and other health problems, though a further review may be warranted.

Shipman murdered his patients with injections of diamorphine. Various regulations govern the prescription, storage, recording, and destruction of controlled drugs by doctors and are there to prevent misuse. More

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