Primary care screening and brief counselling for overweight or mildly obese children does not improve BMI, nutrition or physical activity

Fiona Milligan


LEAP 2 randomised controlled trial

Childhood obesity is endemic in developed countries, and there are cost implications attached to what is being described as a public health crisis—costs to individual health and quality of life, and healthcare costs. Identifying interventions that are effective in targeting prevention and management of obesity is crucial to improving morbidity and mortality.

The study by Wake and colleagues examined whether surveillance and structured interventions within a primary care setting (in this instance GP practices) were effective in reducing childhood obesity. The study design was a randomized controlled trial within a baseline cross-sectional survey of body mass index (BMI). Randomisation and outcome measurement but not participants were blinded to assignment to either an intervention or a control arm. The intervention group was invited to attend four standard consultations at the GP practice that used behavioural change strategies and literature to improve diet and activity levels.

The authors concluded that “primary care screening followed by brief counselling did not improve BMI, physical activity or nutrition in the targeted group”. Therefore this approach was not cost-effective in terms of either health benefits or financial costs to the healthcare system.

Blinding and allocation were appropriate, and the study design was robust in terms of extraction and appraisal criteria. Data collection and statistical analysis of the results were rigorous, and the outcome analysis suggests that the intervention was not effective when a cost–benefit analysis is made. However, economic cost analysis should be used only where there is evidence that a healthcare intervention works.

A 2002 meta-analysis of systematic reviews of the effectiveness of using behavioural change interventions in obesity strategies was inconclusive in supporting this approach. There is nothing new or innovative in this piece of research; rather, the evidence remains homogeneous, and the outcomes of this study are not unexpected. What the study does highlight is the need for larger cross-sectional studies looking at multiagency interventions that address the many variables that influence obesity.

Within the evidence hierarchy, randomised controlled trials are the gold standard; however, in research into behavioural change strategies that influence health, they may be less appropriate. Random assignment of participants to intervention and control groups may influence the effectiveness of the intervention because the element of personal choice is not taken into account. In behavioural change strategies active participation is required for the intervention to be evaluated effectively. The attrition rate in this study supports this. The authors do acknowledge that the recruitment methodology, low participant numbers and duration of the intervention may have influenced outcomes. These factors may affect the external validity and generalisability of the conclusions reached. Cross-sectional studies tend to produce more information on the effectiveness of particular interventions because of their longitudinal nature. Health improvements through behavioural change interventions tend not to be immediate; therefore, success or otherwise is difficult to measure in the short term.

Outcome data from the LEAP trial may provide more conclusive evidence of effective interventions that produce long-term maintenance of changed behaviours.

Current public health strategies targeting obesity in the UK have embraced a multiagency approach to interventions at the population level. It is recognised that the individual decides whether to adopt or participate in a particular behaviour but that environmental, socioeconomic and cultural beliefs or learnt behaviours are significant factors influencing this choice.

Emerging evidence suggests that this approach may be working: current data indicate a 17% reduction in the predicted number of girls aged 2–11 years classed as overweight, with a 5% drop in boys of the same age.
The EPODE study, a community intervention with multiple stakeholders rolled out over a number of cities in France, has reported actual rather than predicted weight loss. Initial outcome data indicate that one region, which initially had 19% of children classified as overweight in 2004, saw a reduction of 5.5% within 1 year.6

National policies in a number of countries have been increasingly directed towards changes at wider strategic and community levels rather than brief interventions by single agencies.6 Primary care screening will be an important component of these interventions, as early identification and appropriate intervention are integral to the success of population-wide strategies.

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References
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