**CHILD OBESITY 2: RECOMMENDED STRATEGIES AND INTERVENTIONS**

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This is a two-part unit on childhood obesity. Part 1 explored its prevalence and various causes. This second part examines the effectiveness of current interventions to halt childhood obesity.

**INTRODUCTION**

There is a lack of evidence on the effectiveness of interventions to reduce obesity levels in children and young adults. While prevention strategies such as behavioural change and awareness campaigns feature highly, questions remain about their success. Greater use of social marketing campaigns on exercise and healthy eating may be more effective in prevention. There is also a need for more defined guidelines on regional responsibility and multi-agency cooperation.

**TARGETS AND STRATEGIES**

In response to rising levels of childhood obesity, the English government proposed a number of interventions. Public service agreement targets were set in 2004, with 2006 given as the date for publication of delivery plans.

The objective was to halt the increase in obesity in children aged 11 and under. The Department of Health, Department for Culture, Media and Sport and the Department for Education and Skills were key stakeholders (National Audit Office, 2006).

The complexity of the problem lies in the diverse social, ethnic and economic backgrounds of young people, and the need for multi-agency coordination and partnership to deliver change.

**LEARNING OBJECTIVES**

1. Be aware of the evidence on effectiveness of interventions to combat child obesity.

2. Know about the strategies needed for successful behavioural change.

Planned interventions targeted the imbalance of calorie consumption and expenditure. The main focus was to improve diet and increase physical activity. More specific measures include behavioural change strategies through family and school-based interventions. Parental participation in these strategies is believed to be essential (NAO, 2006).

Another area for review is advertising campaigns aimed at children and adolescents, with possible introduction of legislation to regulate the influence of the food industry (Hastings et al, 2003).

The central theme is one of behavioural change or adopting healthy lifestyles, beginning at an early age and continuing into adulthood. National advertising campaigns and practical interventions focusing on family participation in initiatives in schools and communities form the basis of current public health policies (NAO, 2006).

**REVIEWS THE EVIDENCE**

A meta-analysis found little evidence supporting success of multifacteted approaches such as school-based interventions (Mulvihill and Quigley, 2003). It found targeting parents and children together in family-based interventions had mixed reviews in terms of success and evidence was inconclusive on the effectiveness of these strategies.

A Cochrane review also found a lack of evidence supporting the effectiveness of interventions to tackle child and adolescent obesity (Campbell et al, 2002). It highlighted data limitations of existing studies, which affected the evaluation process. The authors suggested that several changes needed to be made, with future larger-scale studies incorporating appropriate methodology to provide evidence of benefit.

Campbell et al (2002) found that due to limitations in the data it was difficult to draw conclusions. They identified unreliable outcome measurements such as:

- BMI reporting;
- Lack of process indicators;
- Lack of sustainability and ability to generalise results.

**INTERVENTIONS**

Planned initiatives include an obesity social marketing campaign, using a multi-agency strategy involving the food and leisure industries. The initial stage is a national activity programme targeting children aged 2–10, parents and carers. In addition, obesity management care pathways and weight-loss guidelines have been developed, focusing on education for health professionals (NICE, 2006).

NICE guidance on obesity includes two quick reference guides that summarise the recommendations for professionals. The first is for local authorities, schools, early years providers and workplaces, and it also contains general advice for members of the public on weight management. The second is for the NHS (see www.nice.org.uk/CG43).

An ‘obesity toolkit’ to develop local strategies is available to stakeholders and partnerships (National Heart Forum, 2007), providing a starting point for developing local strategies that reflect national priorities through multidisciplinary teamwork. Its purpose is to act as a resource, providing tools and information on developing obesity strategies that reflect local needs. It can be downloaded at www.heartforum.org.uk.

However, there are a number of concerns about how effective these interventions will be. Previous media campaigns have been costly and largely ineffective. The concept of communicating risk about unhealthy lifestyle behaviours has not led to significant risk
factor modification (Cook and Bellis, 2001). In a study on a number of behavioural change models, Baranowski et al (2003) also concluded that, while each contributed to obesity prevention strategies, substantial research was required to validate findings. Interestingly, the concept of social marketing was suggested as being able to contribute substantially to the organisation and strategy of behavioural change programmes. The concept of perceived self-interest forms the basis of social marketing (Baranowski et al, 2003). Change is endorsed or advocated as being in the consumers’ best interests or their perceived best or own interest.

As we live in a consumer society, perhaps the concept of selling health as a valued commodity may be the most effective approach to address the obesity epidemic. This is a view echoed by senior stakeholders and highlighted by the inclusion of a social marketing approach to change in the national strategy on obesity (DH, 2007).

**DELIVERING INTERVENTIONS**

Worryingly, it has been suggested that problems with delivery – rather than issues around the effectiveness of interventions – will hinder strategies to halt rising levels of childhood obesity. The ability to actually deliver interventions at population level is giving greater cause for concern.

This resulted from PSA targets in England being set almost two years before the publication of a delivery plan. The outcome is a lack of direction and agency responsibility being passed down to local stakeholders (NAO, 2006).

In response to the concerns highlighted, NICE (2006) developed a guideline on preventing, identifying, managing and treating child and adult obesity. This provides a much more comprehensive and directive strategy. Evidence of the effectiveness of interventions and sources of information form key components; levels of evidence are graded according to the data source and type of study undertaken.

The guidance contains a number of recommendations focusing on cross-government working to build effective prevention strategies, as well as others for obesity management interventions.

**Nursing actions**

It is important that nurses in both primary and acute care recognise and provide management plans for children who are overweight or obese. This should involve early recognition of a developing health issue such as an increase in BMI.

Providing opportunities through the establishment of nurse-led clinics which monitor children identified as overweight or obese within the school environment or GP practice may be the way forward. Within these clinics, engagement with families in developing a management plan for structured and sensible weight-loss techniques and referrals to community activity schemes could take place on a more individualised level.

Agreed protocols need to be developed for onward referrals for more structured input from specialised agencies such as dietetic services when clinical markers indicate this is required.

As obesity has been clearly identified as a risk factor for a number of health conditions, monitoring for the development of clinical signs of these (for example type 2 diabetes) needs to form part of a comprehensive, multifaceted management approach.

Nurses involved in managing overweight and obese children would be required to provide expert clinical and psychological interventions at appropriate intervals from initial assessment through to intervention.

**KEY REFERENCES**


The full reference list for this unit is available in Portfolio Pages at nursingtimes.net

**MULTI-AGENCY WORKING**

There is clearly a need for multi-agency collaboration between the NHS, local authorities, schools, workplaces, community and commercial enterprises involved in planning and delivering interventions.

In Scotland, obesity has been identified as an emerging priority. With the new pharmacy contract, which includes greater involvement in public health, pharmacists may also become involved in managing obesity.

In both Wales and Northern Ireland, joint strategies involving increased physical activity and healthy eating initiatives form the basis of national strategies targeting obesity.

In England multi-sector working has also laid the foundation for the implementation of a number of strategies, with identified local sector targets and a national delivery plan.

However, if adults and children are to be engaged in and maintain behavioural change, the gap between theoretical concepts and the delivery of interventions needs to be closed.

This remains the challenge for all those involved in delivering effective and appropriate interventions to prevent and manage obesity.

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