CHILDHOOD OBESITY: THE CHALLENGES FOR NURSES

It is vital that nurses understand the factors that can lead to weight problems and engage with young people and their families to promote healthy diets and lifestyles, say Sarah Penn and Joanne Kerr

NEARLY 30% of children aged 2-15 years are overweight or obese, along with more than 60% of adults in England (Department of Health (DH) 2013). Obesity can affect the self-esteem and activity levels of children, while in later life it is a leading risk factor for type 2 diabetes, cancer and cardiovascular disease (DH 2013).

On one level, obesity is a simple problem: if more energy goes into the human body than is used up, people gain weight, but when weight reaches obesity levels, negative health consequences occur. The problems are more complicated in children, who have constantly changing degrees of autonomy and rely on others to guide their lifestyle and set the preferences they will take with them through life.

Recent research suggests parents can contribute to their child’s weight by passing on ‘obese’ genes (Fernandez et al 2012). The ongoing impact that childhood eating, sleeping and leisure habits have on unhealthy weight gain is also recognised. These factors are all mediated by parents or guardians and depend on their parenting skills. More so than adults, children are part of networks of relations that must be engaged with if any lasting change is to be effected. Family break-up and conflict, early attachment, neglect and discipline are all factors shown to contribute to child development and health.

The Mandala diagram of health lends a useful structure to the influences at work on each child, with family at the heart of their human ecosystem (Hancock 1985) (Figure 1, page 18). However, as the diagram suggests, parents and families are themselves subject to wider social, economic and environmental influences. The essential parenting factors of sleep, diet and leisure are mediated by the social circumstances of a family, something demonstrated in Champion et al’s (2012) study of paternal work patterns and obesity.

Like many health problems, childhood obesity follows the social gradient (Marmot 2010). Studies have shown direct links between economic deprivation and obesity; theorists have described an ‘obesogenic environment’, in which unhealthy food and lifestyle choices are encouraged above healthy ones (Jones et al 2007). Social trends around diet, transport and leisure choices are embedded in neighbourhood factors such as road safety, green spaces, food outlets and leisure facilities.

Bandura’s social learning/cognitive theory (Bandura 1977) provides some insight into how the
By offering family-centred care, nurses can help empower children and their families to change lifestyles.
The personal behaviour of a child or parent is bound up with environmental influences and socially influenced beliefs (Figure 2).

**Interventions**

It is in the context of the intricately linked causes discussed earlier that health promotion obesity intervention must be delivered. Interventions can be divided into those that focus on prevention and those that offer treatment. Given the diversity of causative factors, it is unsurprising that evidence shows the efficacy of multifactorial interventions. A Cochrane review found encouraging results for programmes involving children, schools and parents in improving diet, exercise patterns and culture (Waters et al. 2011).

Projects such as APPLE (A Pilot Programme for Lifestyle and Exercise) in New Zealand (McAuley et al. 2010) and Healthy Kids, Healthy Futures in the United States (Agrawal et al. 2012) had positive results for preventing weight gain in childhood populations through programmes addressing the wide range of influences at work.

The importance of parental engagement can be seen even more starkly in Daniels et al.'s (2012) trial of the NOURISH infant feeding programme. By offering intensive support to first-time mothers when their babies were 4-6 months old the programme lowered obesity risk factors, although its long-term efficacy is yet to be tested. Successful prevention programmes tackle the challenge of obesity on many levels of the Mandala model.

These themes continue in treatment programmes. The triad of connected influences described by Bandura’s (1977) social learning theory is supported by research into the

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**Figure 1** The Mandala of health model of the human ecosystem

(Adapted from Hancock 1985)
psychosocial aspects of weight loss or gain in school-age children in America (Jacobson and Melnyk 2011). Personal beliefs were shown to influence and be affected by weight, with negative personal beliefs contributing to obesity, and obesity leading to poor self-image, self-esteem and self-efficacy.

The importance of parents as agents of their child’s weight change has been demonstrated in research by Gerards et al (2012a). This looked specifically at the Triple-P parenting intervention, which offers parents a range of strategies to avoid or tackle behavioural issues, and found that it was useful in treating childhood obesity.

A Cochrane review of papers about treatment found that programmes involving lifestyle or family interventions were the most successful (Oude Luttikhuis 2009), although medical intervention should be considered for teenagers. However, the review also described substantial gaps and inconsistencies in the evidence available for long-term outcomes.

A study into the efficacy of family-based behavioural therapy in the United Kingdom found no significant difference in obesity-related outcomes for those who received the therapy compared with those who did not (Croker et al 2012). Given the comparative cost of such intensive programmes, any inconsistencies in the evidence base are likely to make commissioners wary of committing funds.

Nursing barriers
The response to childhood obesity requires many layers of change, from parenting skills at one end of the spectrum to local planning policy and government strategy at the other. A children’s nurse, however, cannot deal with whole-scale social change but can help individual children to achieve a healthy weight. This section will address the specific barriers nurses may face and offer possible solutions for overcoming them.

The first problem for any nurse wishing to perform health promotion is engaging the child and family. Banks et al (2011) encountered problems recruiting families to an obesity intervention programme run by GPs in Bristol. The study involved identifying obese children and writing to parents to offer a GP consultation and secondary care. Out of nearly 300 letters sent, only 19 accepted the offer and received secondary care. The study did not analyse why this had occurred, but other studies offer possible explanations.

The team behind the Triple-P parenting intervention (Gerards 2012a) investigated the barriers that healthcare workers perceived to hinder successful engagement (Gerards 2012b). The main challenge was seen to be parental denial that their child was overweight and a reluctance to discuss the issue. However, the study also found that professionals felt they did not have good enough communication skills to tackle the issue effectively. The latest guidance issued by the National Childhood Measurement Programme acknowledges the difficulties inherent in talking to parents about their child’s weight. It recommends use of the term ‘very overweight’ instead of ‘obese’ in recognition of the latter term’s emotional stigma.

Communication and interpersonal skills are important when it comes to encouraging and supporting behavioural change. This was seen in the HENRY (Health, Exercise, Nutrition for the Really Young) programme in the UK (Willis et al 2012), which gave healthcare workers the knowledge and confidence to raise difficult issues and support families.

Further research has demonstrated how nursing support can be improved. A North American study of 192 healthcare professionals found significant gaps in knowledge about current guidelines and evidence (Spivack et al 2010). Other studies suggest nursing knowledge should extend to include psychosocial difficulties confronting children and their families. Bullying and rejection (Gunnarsdottir 2012), and stigmatisation and vulnerability (Lorentzen et al 2012) impede success in childhood obesity programmes. Additionally, social factors such as costs, facilities and work commitments were found to be barriers in the New Zealand APPLE project (Williden et al 2006).

Nurses must also navigate ethical issues when tackling childhood obesity. Public health issues can promote debates about the freedom of individuals...
One children’s nurse cannot change social currents, but the nursing profession can advocate for the health of children
to choose unhealthy lifestyles versus the duty of the state to educate and prevent ill health.

The issue of obesity is even more fraught with ethical conflict. Diet and physical activity are two of the most fundamental and personal lifestyle choices individuals can make, and yet the financial consequences of obesity are borne by the public purse. Childhood obesity complicates an already contentious issue; children depend on their parents for the food choices they make, either because their parents feed them directly or because they influence their preferences. In this sense, obesity is a consequence of dietary neglect, with parental choices causing detriment to a child’s health and wellbeing.

Nurses need to confront the main obstacles experienced by families and children, which are financial, psychological and social. They must also overcome their own limitations in terms of communicating with families (Steele et al 2011) and personal weight issues. The parents’ and child’s freedom to choose an unhealthy lifestyle versus state responsibility to children’s wellbeing when they deliver interventions must also be balanced.

While nurses cannot effect social change on their own, they can use their knowledge of social context to inform the advice and support they offer to families and develop their communication skills to include motivational techniques, health education and empowerment.

Strategy
Nurses depend on governments for clinical guidance and on commissioners for successful evidence-based intervention programmes to enable health promotion. The English government updated its strategy on obesity in 2011 (DH 2011a), superseding Healthy Weight, Healthy Lives (DH 2008), which was commissioned under the previous administration. The latter was an intervention policy that put £372 million towards initiatives on breastfeeding, compulsory cooking in schools, a ban on junk food advertisements during children’s television programmes, and free swimming sessions.

A policy that developed from this strategy was the Change4Life marketing campaign, which was criticised for skirting round the issue of obesity (Piggin and Lee 2011) and for being sponsored by ‘unhealthy’ food and drink companies. However, the Liberal Dose review (Reeves 2010) endorsed the approach, claiming that it achieved a balance between protecting the choice and autonomy of adults while protecting the nation’s children from an ‘obesogenic environment’.

The strategy changed in 2011 (DH 2011a), heralding a more localised model, with central government offering less in the way of direct funding and policy programmes but putting more power in the hands of local authorities, individual schools and GP commissioners. Funding was cut for the Change4Life scheme, changing it from a proactive central government marketing campaign to a light-touch brand which can be used by commercial and independent partners (DH 2011a). Guidelines for retailers wishing to include their products were relaxed to allow more partners to participate (DH 2012).

This strategy change fits with the theory of empowerment by giving control to smaller organisations to tailor obesity policy to local needs (National Institute for Health and Care Excellence 2011). However, such a move can also be regarded as an abdication of government responsibility (UK Faculty of Public Health (UK FPH) 2011). For example, a study in Bristol found that cuts to government provision of free swimming sessions for the under-16s had a negative effect on the most deprived groups (Audrey et al 2012). Similarly, the Academies Act 2011 exempts academy schools from statutory provision of healthy food, promoting localised choice at the expense of health protection (Kaklamanou et al 2012).

Health professionals have argued for taxation on high sugar, high fat foods, compulsory calorie reduction and bans on junk food advertising (UK FPH 2011). However, the English government has favoured the voluntary Public Health Responsibility Deal (DH 2011b), in which food and drink companies make pledges to lower the calorie content of their foods. While this protects ethical principles of autonomy and choice, it directs responsibility away from central government towards companies, local authorities and individuals.

UK FPH (2011) has criticised the government for not doing enough to tackle a problem that is as widespread and damaging as obesity. It calls for more ‘upstream’ action to tackle the underlying causes of obesity, such as obesogenic environments, food advertising, school meals and food pricing, instead of ‘downstream’ programmes that encourage individuals to take responsibility for their own weight.
Children cannot assume responsibility for their own lifestyle choices independent of family, social, environmental and economic influences. This is supported by literature advocating active government intervention to alleviate health inequalities (Marmot 2010). The overwhelming impact of structural factors can be seen in the cost of food, with statistics suggesting it is getting less affordable for the poorest families to eat healthily (Holding et al 2013).

Conclusion
One children's nurse cannot change these strong social currents, but the nursing profession as a whole can advocate for the health of the children nurses care for. Part of the role of nurses should be to influence and enable the change. Beyond this day-to-day approach, nursing leaders can act as advocates for supportive government strategies and speak out where they feel direction is lacking. At strategic and practice level, an awareness of the structural factors underpinning obesity – environment, economics and society – can help nurses provide informed, relevant and workable care, advocacy and advice to families.

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References


UK Faculty of Public Health (2013) UK Faculty of Public Health Response to ‘Healthy Lives, Healthy People: A Call to Action on Obesity in England”, tinyurl.com/8x7nrn6 (Last accessed: January 14 2013.)

