Background

Health promotion is a key concept in nursing practice. It has many definitions, but essentially involves interventions designed to foster public health (Raingruber 2014). The promotion of well-being and prevention of ill health is a requirement of The Code: Professional Standards of Practice and Behaviour for Nurses, Midwives and Nursing Associates (Nursing and Midwifery Council (NMC) 2018). In addition, the Royal College of Nursing (RCN) (2021) encourages nurses to support people to adopt lifestyles that will develop their health, and that of their children, to avoid future health issues. The World Health Organization (WHO) (2021) defines overweight and obesity as abnormal or excessive accumulation of fat that may impair health. The fundamental cause of overweight and obesity is an energy imbalance between calories consumed and calories expended (WHO 2021). Overweight and obese children are likely to remain so into adulthood and are at higher risk of developing type 2 diabetes and early onset cardiovascular disease (Sahoo et al 2015). Body mass index (BMI) is the measure used to determine overweight and obesity in adults. It is defined as weight in kilograms divided by the square of height in metres (kg/m$^2$). Overweight is a BMI greater than or equal to 25 and obesity is a BMI greater than or equal to 30 (WHO 2021). However, BMI in children varies with age and is determined by deviations from WHO growth chart medians (WHO 2021).

Abstract

Childhood obesity is a worldwide public health issue requiring sustained health promotion efforts by multiple healthcare professionals. Children’s nurses are the main providers of education, support and interventions for those who are overweight or obese. Despite sustained health promotion efforts, addressing overweight and obesity in children and young people is an ongoing challenge. This article details a literature review that aimed to identify the barriers that children’s nurses experience when undertaking health promotion to address overweight or obesity with children, young people and their families. Three themes were identified: lack of time, training and resources; parental motivation and response; and the ‘new normal’. Education and work-based training on structured interventions for addressing overweight or obesity are vital. Skills training in broaching challenging conversations with children, young people and their families sensitively and effectively is also important.

Why you should read this article:

- To learn about the barriers that children’s nurses experience when undertaking health promotion to address overweight or obesity with children, young people and their families
- To recognise the importance of children’s nurses having access to education and work-based training on structured interventions for childhood overweight or obesity
- To identify the role of communication skills training in supporting children’s nurses to have sensitive and effective conversations about overweight or obesity with children and young people and their families

Barriers to health promotion with overweight or obese children, young people and their families

Rebecca Johns and Mandy Jane Brimble
Childhood obesity is a major public health issue and challenge in many countries worldwide (Wang and Lim 2012). In 2016, 18% of children and young people aged 5-19 years were overweight or obese worldwide, compared with 4% in 1975 (WHO 2021). Childhood obesity is largely avoidable, so prevention is a priority (Wang and Lim 2012).

Children's nurses can contribute to health promotion activities with children, young people and their families by providing nutritional advice and offering strategies such as weight management programmes (Rabbitt and Coyne 2012). However, children's nurses have experienced barriers when undertaking this vital role due to the sensitivity of the topic, for example challenges in communicating to parents that their child is overweight or obese (Bonde et al 2014). In addition, some parents may react negatively, expressing anger or disbelief, which affects family-centred care as the relationship between the parent and nurse may be damaged (Rabbitt and Coyne 2012). Despite this, it is important that children's nurses discuss this issue appropriately as it is the role of the nurse to act as an advocate for patients and their health (NMC 2018).

Aim
To identify the barriers that children's nurses experience when undertaking health promotion to address overweight or obesity with children, young people and their families. In this review, the term 'child' refers to individuals aged under 18 years, in line with the UNICEF (1989) definition.

Method
The search strategy is outlined in Tables 1-3, which show the search terms, databases searched and results retrieved. Given that childhood obesity is a worldwide epidemic (WHO 2021), research studies from across the globe were included.

Once the year parameters of 2012-21 were applied and results were limited to empirical research articles written in English, 41 articles remained. Duplicates were removed, leaving 28 articles that were screened, after which 15 were excluded. The full texts of the remaining 13 articles were then assessed for eligibility, after which eight articles were excluded – one because its full translation was unavailable and seven because they were outside the scope of the literature review. This left five articles that were included in the review.

The five articles included qualitative and mixed-methods studies (Gerards et al 2012, Regber et al 2013, Kelleher et al 2017, Tanda et al 2017, Cheng et al 2020). These articles were appraised using the Critical Appraisal Skills Programme (CASP) (2021) checklist appropriate to the study type.
Findings

Three themes were identified from the literature:
» Lack of time, training and resources.
» Parental motivation and response.
» The ‘new normal’.

Discussion

Lack of time, training and resources

Time, training and resources are essential for effective health promotion (Nambiar et al 2017). Reduced patient-nurse contact due to time pressures can lead to issues being missed or lack of opportunity to discuss an identified health concern (Carayon and Gurses 2008). Lack of time due to staffing issues is as significant an issue in primary care as it is in acute settings (RCN 2017).

In a qualitative study of youth healthcare professionals – doctors (n=8), nurses (n=6) and management staff (n=2) – in the Netherlands, Gerards et al (2012) aimed to identify why they found it challenging to refer the parents of overweight children to an obesity prevention programme. In total, 16 participants were recruited on a volunteer basis, a 22% response rate. Data were collected via audiotaped, semi-structured interviews which lasted for 20 minutes.

The transcribed data were coded independently by two reviewers, demonstrating inter-rater reliability (Bryman 2016). In Gerards et al’s (2012) study, youth healthcare professionals identified insufficient time, lack of training and a deficit in resources as barriers to promoting healthy weight. Although Gerards et al’s (2012) findings are similar to others, the researchers noted that recruiting participants on a volunteer basis can introduce bias. This is because volunteers tend to be more educated and enthusiastic about the study focus than others (Salkind 2012), which may influence the findings. However, the low response rate of 22% was not acknowledged. While it can be challenging to recruit participants, a low response rate means that findings are not representative of the wider population under study (Saleh and Bista 2017).

Furthermore, Gerards et al’s (2012) sample comprised a similar number of doctors and nurses, so the findings may not be wholly transferable to nurses.

Kelleher et al’s (2017) qualitative study explored the barriers and facilitators experienced by professionals in implementing a childhood weight management programme. The 29 participants, which included nine public health nurses, were recruited using purposive sampling. This is a method of gathering manageable amounts of data, while still achieving an outcome representative of the population under study (Ames et al 2019). The response rate was 76% (n=29/38), which is significantly higher than Gerards et al’s (2012) study and increases the generalisability of the findings. Although the researchers aimed to hold face-to-face interviews, time and scheduling challenges meant that only seven face-to-face interviews were held, with the remaining 22 interviews conducted over the telephone.

Drabble et al (2015) noted that, while many researchers use telephone interviews for qualitative research, it has generally been considered an inferior method compared with face-to-face interviews. Holloway and Galvin (2017) suggested that the reason for this is the lack of in-depth interaction when talking by telephone, for example an absence of social cues. However, Ohlmann (2016) asserted that neither face-to-face nor telephone interviews are superior, with the main consideration being to use the method most appropriate and useful for the project, based on which of the contextual components are most important and relevant. Indeed, Yin (2014) suggested that using the telephone can facilitate relaxation and subsequently more open dialogue. Like Gerards et al (2012), Kelleher et al (2017) found that participants identified insufficient resources, a lack of time and training as barriers to implementing a childhood weight management programme.

In an Australian mixed-methods study, Cheng et al (2020) sought to investigate barriers experienced by child and family health nurses when undertaking healthy weight promotion in two local health districts in Sydney. Data were collected via surveys and phone interviews. All child and family health nurses from the two local health districts were invited, which resulted in 90 respondents completing surveys, a 58% response rate. Survey data were analysed using SPSS Statistics version 22, which revealed that more than 60% of respondents cited a lack of time, due to heavy workloads, and a dearth of educational resources as barriers to promoting healthy weight with infants, young children and their families.

A limitation acknowledged by Cheng et al (2020) is that the survey questionnaire was not validated. The advantage of validated tools is that they have been tested to ensure they are an accurate measure of what is being researched and produce reliable results (Lai 2013). Nevertheless, the survey used by Cheng et al
(2020) was based on theoretical models and had been used previously with child and family health nurses in other jurisdictions.

Only 20 of the 90 respondents in Cheng et al's (2020) study took part in the telephone interviews, as the researchers deemed that data saturation had been achieved at this point. Fusch and Ness (2015) stated that data saturation is achieved when no new codes are generated. Although data saturation is a recognised principle in qualitative research, it is contentious because it is challenging to quantify (Bernard 2012). The 20 interviews conducted by Cheng et al (2020) could be deemed too few. However, the interviews yielded rich data. This confirmed the survey results of lack of time and educational resources as barriers to promoting healthy weight and providing parents with written information to underpin verbal advice.

In summary, the findings of Gerards et al (2012), Kelleher et al (2017) and Cheng et al (2020) demonstrate that lack of time, training and resources are barriers experienced by children's nurses when undertaking health promotion to address overweight or obesity with children, young people and their families.

Parental motivation and response

Parental support, motivation, health beliefs and behaviours are major influences on the overweight or obese child's ability to achieve a healthy weight (Gunnarsdottir et al 2011, Adamo and Brett 2014). Therefore, it is unsurprising that Gerards et al (2012), Regber et al (2013) and Tanda et al (2017) all found that negative parental responses and lack of motivation to engage with health promotion were barriers to efficacy when addressing childhood overweight or obesity.

Gerards et al (2012) identified that barriers to the successful implementation of interventions were parental anger when the topic was raised and/or lack of motivation to engage in suggested activities. In the study by Gerards et al (2012), data analysis involved multiple coders, which increases the richness of the data when compared with single coders (Church et al 2019).

Regber et al (2013) conducted a qualitative study involving 15 nurses. This constituted almost 80% of the target population (n=19), so the findings were representative. One of the aims of the study was to explore nurses’ views on parental responses to their child’s overweight or obesity. Data were collected via semi-structured interviews. Content analysis revealed that when the topic of weight management was raised with parents of overweight or obese children, many reacted negatively towards the nurse. This is similar to Gerards et al's (2012) findings and is a barrier to health promotion. Regber et al (2013) found that nurses sometimes ‘backed down’ or avoided the discussion, so the topic was not fully addressed. However, many felt that showing parents their child's weight and height on a BMI chart was a useful way to start the conversation and provide evidence of the need to address the issue. Furthermore, simply raising the issue may result in the parent moving into the contemplation stage of Prochaska and DiClemente’s (1983) behaviour change model – that is, considering a change in behaviour in the next six months – and subsequent discussions could lead to progress through the other stages.

Although this model was originally developed in relation to smoking cessation, it has been widely used for other aspects of health promotion, including childhood obesity (Park et al 2014). While Regber et al's (2013) findings appear credible, the original transcripts were in Swedish and were translated to English. This may have resulted in bias due to the influence of the translator's interpretation compared with a verbatim translation (Al-Amer et al 2015, Nasri et al 2021).

Tanda et al (2017) conducted a mixed-methods study involving nurse practitioners in Ohio, US, with four aims, including examining the barriers to implementing childhood obesity prevention. A survey was completed by 371 nurses, but after the inclusion criteria were applied the sample was reduced to 155 nurses, yielding a response rate of just 8% from the 2,000 included in the original mailing. Of the sample, 65% (n=100) viewed parental resistance and denial, as well as a lack of parental motivation, as barriers to implementing childhood obesity prevention. Similar to other studies, Tanda et al (2017) used self-reports in their data collection, which poses a risk of bias due to socially or professionally desirable responses (Rosenman et al 2011, Althubaiti 2016). However, anonymity was also a feature of Tanda et al's (2017) survey, which can encourage honesty and subsequently increases the reliability of the results (Rosenman et al 2011).

To summarise, lack of parental motivation and negative responses are barriers that children’s nurses experience when undertaking health promotion to address childhood overweight and obesity. While some of the
studies can be criticised because of translation issues (Regber et al 2013) and self-reported data (Tanda et al 2017), the similarity in findings between these and Gerards et al’s (2012) study suggests that parental motivation and negative responses are credible barriers to promotion of healthy weight.

The ‘new normal’
The increase in overweight and obesity has led to a change in public perceptions, resulting in societal acceptance of additional body weight, which is sometimes regarded as the ‘new normal’ (Coombes 2014, Twarog et al 2016). The findings of this literature review also indicate this to be the case and that when parents did not view their child as overweight or obese it presented a barrier to health promotion activities.

Regber et al (2013) used semi-structured interviews to explore 15 nurses’ views of parental responses to their child being identified as overweight or obese. They found that some parents perceived their child to be of normal size, with some preferring their child to be of a larger frame. Although transcription and analysis were undertaken by one researcher, Regber et al (2013) identified that all authors discussed the transcripts and coding, redeeming some of the reliability lost by single-coder analysis (Nascimento and Steinbruch 2019). Similar findings were identified in Kelleher et al’s (2017) study of the barriers experienced by healthcare professionals when implementing a childhood weight management programme. Interview data were analysed using framework analysis, which has several advantages including easier organisation of data and production of rich data analysis (Gale et al 2013). However, using a preconceived framework can prematurely exclude alternative ways of organising data (Gale et al 2013), which could have resulted in more reliable findings. Kelleher et al (2017) recognised this limitation but stated that additional measures were taken to ensure the data were analysed as extensively as possible to eliminate bias.

The 29 participants in Kelleher et al’s (2017) study perceived that one of the barriers to their health promotion efforts was that many parents were in denial about their child being overweight. The reason for this was because they were of similar appearance to many of their peers, leading to the misconception that this was normal.

Cheng et al (2020) also found that parents of overweight and obese children believed their child to be of a ‘normal size’, thereby creating a barrier to successfully implementing healthy weight interventions. Like Regber et al (2013), Cheng et al (2020) found that some families wanted their children to be of a large frame, because in some cultures it is an indication of wealth. The population of the two Sydney districts included in Cheng et al’s (2020) study are acknowledged to be culturally diverse, hence their observation.

In fact, Sydney is home to a significant number of Aboriginal and Torres Strait Islander peoples (Wade and Gladstone 2019). Despite the culturally diverse population, the scope of Cheng et al’s (2020) study was relatively small, including only two districts in Sydney, which may affect generalisability (Ross and Zaidi 2019). Nevertheless, this is a recognised feature of qualitative studies (Carminati 2018).

In summary, childhood overweight or obesity is becoming increasingly normal in society. Therefore, this is a barrier to health promotion as many parents do not see their child’s weight as a health issue. Although the studies may be criticised for single-coder analysis (Regber et al 2013), framework analysis (Kelleher et al 2017) and a limited scope (Cheng et al 2020), the literature indicates that the ‘new normal’ is a barrier.

Limitations
One limitation of this literature review was the inclusion of only qualitative or mixed-methods studies. Quantitative studies could have provided specific statistics indicating barriers. However, the qualitative and mixed-methods studies provided in-depth understanding of the experiences of children’s nurses and the barriers they face when promoting healthy weight. As not all the studies were from the UK, some of the research may not apply to children’s nurses in the UK. However, childhood obesity is a worldwide issue, so it is important to explore research from across the globe, while being mindful of the influence that different healthcare systems and cultures may have on findings.

Recommendations for education and practice
Children’s nurses should be educated about the public health issue of childhood obesity, including the barriers to promoting a healthy weight with children, young people and their families. In addition to formal pre-registration and post-registration education, in-depth work-based training on structured interventions for addressing overweight and obesity, for example the
Health Exercise and Nutrition for the Really Young programme, have been found to be successful (Brown et al 2013). Skills training in challenging conversations is essential for communicating the issue in a sensitive and effective manner (Omura et al 2017). This would enable children’s nurses to be more knowledgeable and confident when approaching the topic of weight management and might also influence the responses and engagement of children, young people and their families (Bouch 2017).

Misleading parental beliefs about nutrition in the early stages of a child’s life – for example that crying almost always indicates hunger, genetics rather than nutrition determine body weight and that it is not possible to overfeed an infant – can be successfully overcome via educational programmes (Greenway et al 2018). Furthermore, interactive multimedia interventions (computer-based educational programmes using images, animation and sound) can facilitate conversations between healthcare professionals and overweight children (Raaff et al 2014), thereby going some way to overcoming the barrier of parental dismissal or denial. However, parental consent would be required for children and young people to participate in these activities, which may not be given.

Conclusion

The aim of this literature review was to identify the barriers that children’s nurses experience when undertaking health promotion to address overweight or obesity with children and their families. Three themes were identified. Lack of time, training and resources affected the promotion of a healthy lifestyle, an issue which is solvable but requires investment in adequate staffing and physical resources, such as written material to underpin verbal education.

In addition, parental motivation and response was a barrier. Without support or recognition from families it is challenging for children and young people to make healthy lifestyle changes (Moore and Bailey 2013). Finally, the studies indicated that societal norms are changing, resulting in overweight or obese children being seen as of normal weight.

If parents do not recognise or accept that their child is overweight or obese, it is unlikely that they will engage with healthy weight promotion activities, and therefore the efforts of children’s nurses will be ineffective (Coombes 2014). However, avoiding or stepping back from these issues because of parental dismissal or anger would be contrary to the ethos of the United Nations Convention on the Rights of the Child (UNICEF 1989), the paramountcy principle (the child’s best interest and welfare is the first and paramount consideration) outlined in the Children Act 2004 and the Code (NMC 2018). To optimise interactions with parents who are dismissive or in denial, children’s nurses need to be highly skilled in diplomacy, while communicating the health needs identified in their assessment clearly.
Call for papers

Have you got an idea for an article that could improve the health of children and young people? Share your skills, knowledge and experience for the benefit of those receiving care and colleagues. Being published counts towards revalidation.

Nursing Children and Young People welcomes submissions on the following themes:

- Acute care
- Community
- Neonatal care
- Long-term conditions
- Complex care
- Professional issues

Find out more by contacting the editor
Christine Walker at chris.walker@rcni.com

nursingchildrenandyoungpeople.co.uk

volume 34 number 6 / November 2022 / 35