

## **NNSC Position Paper**

# **TRAINING NEEDS ASSESSMENT QUESTIONNAIRE – Combating childhood and adolescent overweight & obesity**

November 2009

This research and review was carried out by the National Nutrition Surveillance Centre, in partnership with the Health Service Executive (HSE), as part of the HSE Framework for Action on Obesity



## **Abstract**

Overweight and obesity is a growing concern in Ireland and in particular in Irish children and adolescents. The National Nutrition Surveillance Centre (NNSC) in partnership with the Health Service Executive (HSE) as part of the HSE Framework for Action on Obesity assessed the training needs of health professionals working in the area of childhood and adolescent overweight and obesity. A questionnaire was developed in order to identify the knowledge, needs, and attitudes of healthcare professionals with regard to the prevention and management of childhood/adolescent overweight and obesity. Dietitians, GPs, and Practice Nurses were targeted in this questionnaire. The response rate among the three groups was: GPs 37% (n=220), Practice Nurses 13.7% (n=41), and Dietitians 18% (n=81). These healthcare professionals have the opportunity to endorse health promotion regarding childhood/adolescent overweight and obesity prevention due to their frequent contact with parents (84%), children (85%) and adolescents (77%). The responses from the Healthcare professionals indicated that they needed further training in the prevention and management of childhood/adolescent overweight and obesity – more than two-thirds of the healthcare professionals felt they needed further training. There was also interest in improving their skills in order to manage or treat obesity in this group with more than three-quarters of health care professionals expressing a high interest in improving their behavioural management strategies. The barriers to management of childhood overweight/obesity include a busy workload – more than half of the healthcare professionals feel that lack of clinical time is a major barrier in the treatment of childhood/adolescent overweight and obesity and more than half of the healthcare professionals believe lack of support services is a major barrier in the treatment of childhood/adolescent overweight and obesity.

## Introduction

Childhood obesity has been identified by Gable *et al*<sup>1</sup> as the greatest public health risk to today's children. In response, the National Nutrition Surveillance Centre, in partnership with the Health Service Executive (HSE), as part of the HSE Framework for Action on Obesity assessed the training needs of health professionals working in the area of childhood and adolescent overweight and obesity. 'The Training Needs Assessment Questionnaire – Combating childhood/adolescent overweight and obesity' was designed by the NNSC in the School of Public Health and Population Science, UCD. The aim of this research study is to identify the knowledge, the needs, and the attitudes of healthcare professionals with regard to the prevention and management of childhood/adolescent overweight and obesity. Dietitians, GPs, and Practice Nurses were targeted in this questionnaire as they have an important role in the prevention and management of childhood/adolescent overweight and obesity due to their frequent contact with parents, children and adolescents.

The World Health Organisation<sup>2</sup> has defined overweight and obesity as abnormal or excessive fat accumulation that may impair health and the body mass index (BMI) is considered to be the best available population marker for monitoring trends in obesity. This method is widely used in adult populations and cut off points of 25Kg/m<sup>2</sup> and 30Kg/m<sup>2</sup> are recognised worldwide as definitions of adult overweight and obesity, respectively. To define overweight or obesity in a child/adolescent is much more difficult as children's body fat content changes as they grow and is different for boys and girls. Cole *et al*<sup>3</sup> developed a definition of childhood overweight and obesity based on a collection of international data for BMI and cut off points relating to adult overweight and obesity. These charts and the associated cut offs are now recommended for use in international comparisons of occurrence of overweight and obesity in childhood populations and are recognised as the IOTF cut off points. New growth charts are currently being developed for Ireland and will be used for clinical assessment of overweight and obese children.

The National Task Force on Obesity have estimated there could be more than 300,000 overweight and obese children in Ireland and these numbers are most likely rising at a rate of over 10,000 per year<sup>4</sup>. In Ireland several surveys in different age groups have been conducted to assess the prevalence of childhood/adolescent overweight and obesity (table 1). It should be pointed out that there are no agreed

criteria or standards for assessing Irish children for obesity therefore, it is difficult to estimate the true incidence of overweight and obesity in children in Ireland. The WHO European Childhood Obesity Surveillance Initiative Ireland<sup>5</sup> was the most recent study conducted - it recorded the weight, height, and waist circumference of 2,420 7-year-olds. The study revealed that 19% of girls and 13% of boys were overweight and 8% of girls and 5% of boys were obese. The Longitudinal Study of Children – Growing up in Ireland<sup>6</sup>, published in 2008 included 8,500 9-year-old children, their parents and teachers. The study revealed that 22% of girls and 17% of boys were overweight and 8% of girls and 6% of boys were obese. The National Children’s Food Survey<sup>7</sup> conducted a study on approximately 600 Irish 5-12 year olds between 2003 and 2004. This study found that the occurrence of obesity in boys varied from 4.1 to 11.2% and in girls from 9.3 to 16.3% depending on which method was used. Furthermore, the North South Survey 2002 established that the incidence of overweight and obesity among 4 to 16 year olds was 23% in boys and 28% in girls<sup>8</sup>.

Study	Subjects	Overweight		Obese	
		Girls	Boys	Girls	Boys
WHO <sup>5</sup>	7 yr olds (n=2420)	19%	13%	8%	5%
Growing Up in Ireland <sup>6</sup>	9 yr olds (n=8500)	22%	17%	8%	6%
National Children’s Food Survey <sup>7</sup>	5-12 yr olds (n=600)	11.6- 19.6%	10.5- 15.3%	9.3-16.3%	4.1- 11.2%
North-South Survey <sup>8</sup>	4-16 yr olds (n=17499)	28% (including obese)	7%	23% (including obese)	6%

**Table 1.** The prevalence of childhood/adolescent overweight and obesity

Childhood obesity is strongly associated with risk factors for diabetes, orthopedic problems, mental disorders, and is linked to underachievement in school and to lower self-esteem<sup>9</sup>. Childhood obesity is also a risk factor for adulthood obesity, the WHO European Region state that over 60% of children who are overweight before puberty will be overweight in early adulthood. The National Taskforce on Obesity estimate

that each year in Ireland there are 2,000 premature deaths which are related to obesity with a cost of approximately €4 billion to the healthcare services<sup>4</sup>. The high incidence of childhood and adolescent overweight and obesity, with implications for short term and impending long-term health problems has highlighted the need for obesity-related clinical services including assessment, treatment, and preventative care for children and adolescents.

The growing problem of overweight and obesity in children/adolescents is widespread across the world. The recommendations for the clinical management of overweight and obesity in adults and children were developed by The National Task Force on Obesity and published by the DoHC<sup>10</sup>. They recommend that an integrated holistic approach to the management of overweight and obesity must be adopted to combat the increasing incidence of overweight and obesity in children. The recommendations describe the management of overweight and obesity in children as lifelong – and that treatments and expectations should be agreed upon with patients and parents. It is important to tailor the treatment to each individual, with the patient making adjustments to their lifestyle i.e. decrease their energy intake and increase their energy expenditure. Group therapy may increase compliance of the patient and help in the maintenance of weight loss. In children it is important that weight gain should be slower than height gain, weight loss should be gradual and strict dieting should be avoided<sup>10</sup>. The National Task Force on Obesity recommends that ‘a child whose weight is 2 centile lines above their height centile be identified for assessment, regular review and appropriate lifestyle advice’. BMI, waist circumference, blood pressure, urinalysis, and blood tests are also taken into consideration when defining a child/adolescent as overweight or obese<sup>4</sup>.

National guidelines for community based practitioners on the prevention and management of childhood overweight and obesity were introduced in Ireland in 2007<sup>11</sup>. It is imperative that they are used as a resource by all healthcare professionals allowing information given to patients and parents to be consistent and clear. A study conducted by Larson *et al*<sup>12</sup> suggested that if healthcare professionals incorporated evidence-based guidelines into practice, it may aid in reducing the incidence of childhood overweight and obesity. The National guidelines for community based practitioners on the prevention and management of childhood overweight and obesity outline the risk factors, protective factors, and consequences of childhood/adolescent overweight and obesity. The guidelines outline measurement

techniques, growth monitoring techniques, prevention techniques, management techniques, and referral guidelines for healthcare professionals. Included in these guidelines also are definitions of childhood/adolescent overweight and obesity<sup>11</sup>. Although these guidelines have been introduced it is important to assess the knowledge, needs, and attitudes of healthcare professionals in the area of childhood/adolescent overweight and obesity.

## **Methods**

### Study population and Design

A 2-page questionnaire was posted or e-mailed to 600 random members of The Irish College of General Practitioners, to 300 random members of The Irish Practice Nurses Association, and to 450 random members of The Irish Nutrition and Dietetic Institute. Follow up reminders were sent to all health care professionals. The response rate among the three groups was: GPs 37% (n=220), Practice Nurses 13.7% (n=41), and Dietitians 18% (n=81).

### Measures

The same questionnaire was sent to all professional groups. The development of the questionnaire was conducted via a comprehensive review of the literature and discussions with health professionals who work with overweight youth. First of all respondents were asked if they felt as if they require further training to treat overweight and obese children and if they have ever completed any training in the management of childhood overweight and obesity. To assess perceived skills for treating overweight children, respondents were asked for each of 11 areas to rate their skill proficiency and interest in additional training using a 3-point Likert scale (low, moderate, and high). Perceived barriers to treatment were assessed by providing a list of 9 barriers and asking how often each was an important barrier to effective treatment using a response scale – if they agreed with each statement most of the time, often, sometimes, rarely, or never. Respondents were asked what resources they would like to see developed or more widely available to support their work with overweight children by using a response scale – if they strongly disagree, disagree, neither agree/disagree, agree, or strongly agree. Respondents were also asked their personal demographic characteristics and what groups of people they have regular contact with (schools, teachers, parents, children, and adolescents).

## Data Analysis

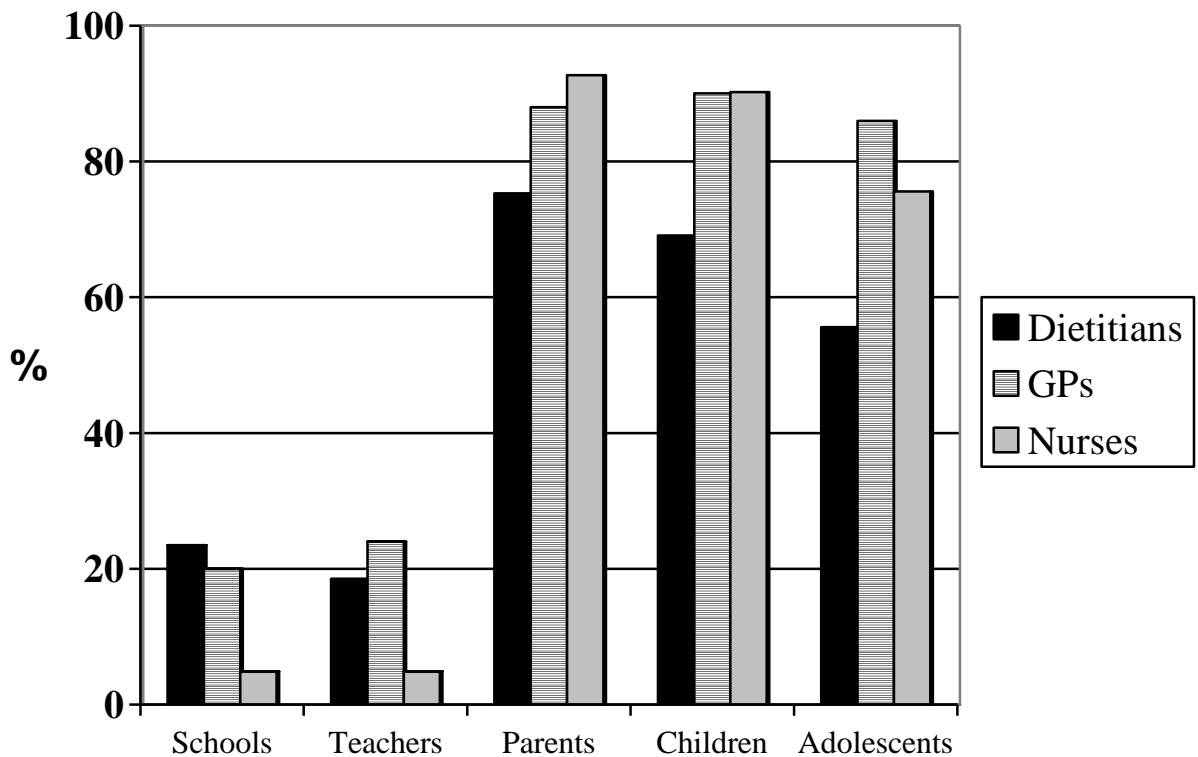
Data was stored in data sheets in Microsoft Office Excel. The data was anonymised at the point of data entry and analysed.

## **Results**

### Training needs

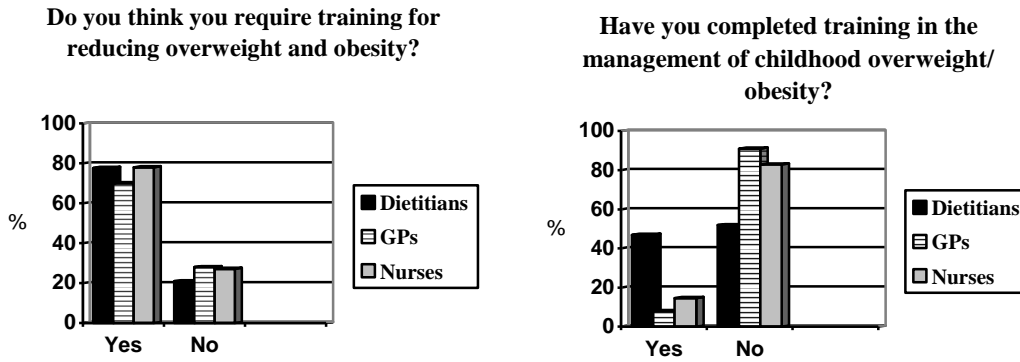
From the questionnaire it is seen that dietitians, GPs, and practice nurses have an important role in the prevention and management of childhood/adolescent overweight and obesity. These healthcare professionals have the opportunity to endorse health promotion regarding childhood/adolescent overweight and obesity prevention due to their frequent contact with parents (84%), children (85%) and adolescents (77%).

**Do you have regular contact with schools, teachers, parents, children, and adolescents?**



**Fig. 1** Do you have regular contact with schools, teachers, parents, children, and adolescents?

Approximately 78% of dietitians and nurses feel they require training to reduce overweight and obesity, only a minority (approximately 20%) feel comfortable that they do not require further training. Nearly 70% of GPs feel that they require further training to reduce overweight and obesity. Only 8% and 14.6% of GPs and practice nurses respectively, have completed formal training in the management of childhood overweight and obesity. Almost half (46.9%) of all the dietitians have completed formal training in the management of childhood overweight and obesity. However, dietitians have many opportunities to attend courses as the Irish Nutrition and Dietetic Institute (INDI) frequently run programmes on the prevention, management, and treatment of obesity, but the courses are not solely aimed at combating childhood/adolescent overweight and obesity.



**Fig. 2** Do you think you require further training / have you completed training - in the management of childhood overweight and obesity?

### Skill level and Interest in Training

Largely, the most common areas of self-perceived low proficiency (see Table 2) across all three groups (36.8%) are in addressing guidance in parenting techniques and family conflicts/concerns. However, GPs and practice nurses share several more areas of self-perceived low proficiency in the use of behavioral management strategies, guiding children/adolescents in goal setting techniques, and supporting children/adolescents to make changes. Furthermore, nurses (approximately 49%) also feel uncomfortable raising the issue of weight with children/adolescents or their parents. More than 95% of dietitians and GPs feel comfortable with assessing the degree of overweight, however, 56.1% of practice nurses cite this as a low proficiency. In 7 out of the 11 named skills, nurses feel less proficient than the dietitians and GPs, indicating that nurses especially, feel they need further training in the management and assessment of childhood overweight and obesity with comparison to the dietitians and GPs.

All groups convey a high interest in further training for all the skill areas, with the exception of dietitians (43.2%) and GPs (57%) who do not convey as high an interest in additional training in the assessment of the degree of overweight.

Skill	% Low Proficiency Level			% Moderate to High Interest in Training		
	Diet.	GP	Nurse	Diet.	GP	Nurse
a. Use of behavioural management strategies	17.3%	54%	68.3%	90.1%	72%	78%
b. Modification of patient diet/eating practices	2.5%	15.4%	9.8%	59.3%	70.4%	78%
c. Modification of patient physical activity	11.1%	10.0%	7.3%	82.7%	64.5%	73.2%
d. Modification of patient sedentary behaviour	9.9%	11.3%	22%	81.5%	65.4%	78.1%
e. Guidance in parenting techniques	43.2%	37.2%	39%	83.9%	74.5%	81.5%
f. Addressing family conflicts/concerns	48.1%	29.1%	19.5%	77.8%	72.2%	78%
g. Assessment of the degree of overweight	1.2%	5%	56.1%	43.2%	56.8%	75.6%
h. Raising the issue of weight with children/adolescents	17.3%	22.7%	43.9%	74.1%	72.2%	78%
i. Raising the issue of weight with parents	13.6%	14.5%	53.7%	74%	71.3%	78%
j. Guiding children/adolescents in goal setting techniques	14.8%	50.0%	53.7%	63.9%	79.9%	80.5%
k. Supporting children/adolescents to make changes	18.5%	33.2%	34.1%	84%	75.0%	78%

**Table 2.** Perceived skill level in obesity management and interest in further training among health care professionals

Skill	Dietitian	GP	Nurse
a. Lack of patient motivation	70.4%	79.5%	85.3%
b. Lack of parent involvement	59.2%	65.4%	58.5%
c. Lack of clinical time	56.8%	59.5%	61%
d. Lack of reimbursement	16%	35.0%	48.8%
e. Lack of clinical knowledge about treatment	8.6%	28.6%	36.6%
f. Lack of treatment skills	13.6%	29.5%	36.6%
g. Lack of supportive services (e.g., nutrition counselling)	56.8%	71.8%	51.2%
h. Futility (ineffectiveness of recommended interventions)	22.3%	41.3%	41.4%
i. Concern about precipitating eating disorders	9.9%	15.4%	39%

**Table 3.** Perceived barriers in the treatment of overweight and obese children/adolescents among health care professionals

## Barriers

The most frequent barriers (see Table 3) referred to by more than half of all the respondents were: a lack of patient motivation, lack of parent involvement, lack of clinical time, and the lack of support services. More than a third of the GPs and practice nurses cited lack of reimbursement, lack clinical knowledge about treatment, and treatment futility as a frequent barrier. Generally, dietitians listed most treatment barriers as less of an obstacle, when compared to the GPs and practice nurses.

## Resources

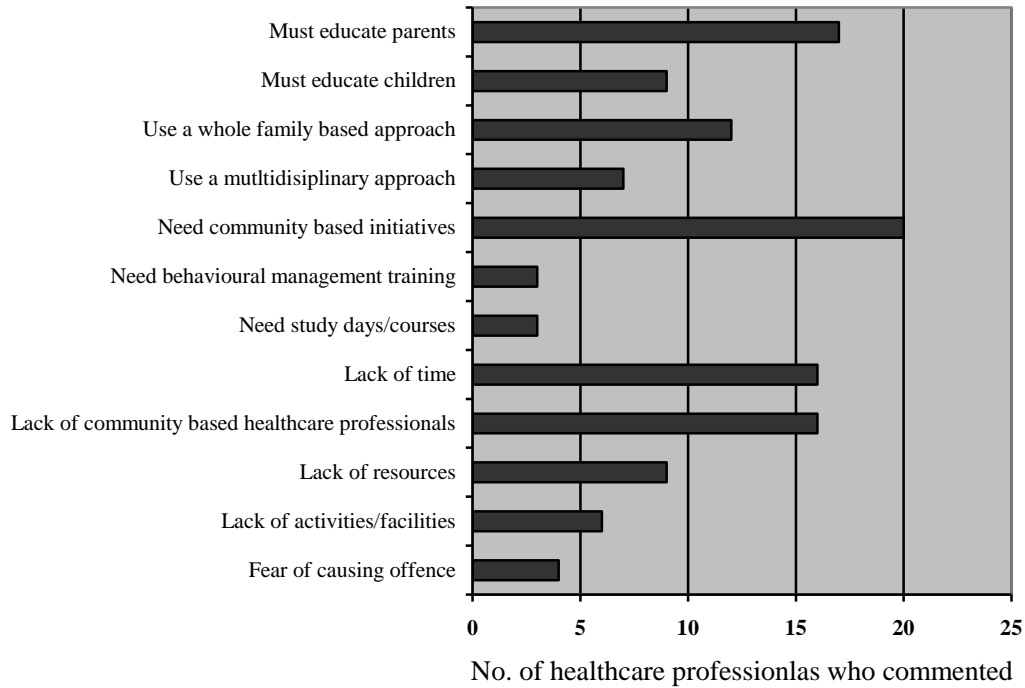
Respondents were asked which resources they would like to see developed or more widely available to support them in their work with overweight children/adolescents (see Table 4). The dietitians (approximately 90%) preferred resources are games to support healthy eating/physical activity and community-based healthy eating/physical activity initiatives while the GPs had a preference for community based healthy eating and/or physical activity initiatives (91%). The practice nurses (97.6%) preferred resource is leaflets in relation to healthy eating/physical activity, whereas, it is the dietitians (50.6%) least preferred resource. The least preferred resources by GPs (64.5%) are computer-based resources for healthy eating/physical activity.

<b>Skill</b>	<b>Dietitians</b>	<b>GPs</b>	<b>Nurses</b>
a. Leaflets in relation to healthy eating/physical activity	50.6%	71.8%	97.6%
b. Games to support healthy eating/physical activity	90.2%	88.1%	90.3%
c. Computer-based resources for healthy eating/physical activity	58%	64.5%	87.8%
d. Dietary intake and physical activity monitoring tools	74.1%	79.5%	82.9%
e. Community-based healthy eating/physical activity initiatives	87.6%	91.3%	92.7%

**Table 4.** Preferred resources among health care professionals to support their work with overweight and obese children/adolescents

### Additional comments from healthcare professionals

The healthcare professionals were asked for any additional comments when completing the questionnaire. The most common themes within the comments were: the necessity to educate parents and the lack of community based healthcare professionals. Many low-proficiencies, barriers, and the need for more resources are reiterated in the comments by the health care professionals.



**Table 5.** Additional comments from healthcare professionals

### **Discussion**

The results obtained from this research show that healthcare professionals want and require further training in the management and prevention of childhood/adolescent overweight and obesity. However, due to the low response rate results these results should be interpreted with caution. Comparable response rates have been observed in similar studies<sup>13,14</sup> and it may be possible that Health Professionals with a low interest in childhood obesity or training in this area were less likely to respond to the questionnaire. The most common areas of self-perceived low proficiency in the treatment of childhood/adolescent overweight and obesity across all three groups are in addressing guidance in parenting techniques and family conflicts/concerns. All

healthcare professionals believe that lack of patient motivation, lack of parent involvement, lack of clinical time and the lack of support services are the major barriers in the treatment of childhood/adolescent overweight and obesity. The preferred resources across the three groups to prevent and combat childhood/adolescent overweight and obesity are games to support healthy eating/physical activity and community-based healthy eating/physical activity initiatives.

Mauro *et al*<sup>5</sup> found that poor education given to health care professionals while studying is a very prevalent barrier in the treatment of obesity. More than two-thirds of dietitians, GPs, and nurses feel they require further training to reduce overweight and obesity. A similar study conducted in Australia by Buffart *et al*<sup>13</sup>, illustrated that only 41% of GPs believed they were professionally capable to manage childhood overweight and obesity. In this questionnaire each group of healthcare professionals convey a high interest in further training for nearly all the skill areas related to the management of overweight and obese children/adolescents - similar findings were documented in a U.S. study conducted by Story *et al*<sup>14</sup>.

The most common areas of self-perceived low proficiency across all three groups are in addressing guidance in parenting techniques and family conflicts/concerns. Both these skills were also cited as common areas of low proficiency in a U.S. study<sup>14</sup> where dietitians, pediatricians, and nurses were questioned on the management of child and adolescent obesity. In this U.S. study more than 20% of healthcare professionals cited guidance in parenting techniques as a low proficiency and more than 30% cited addressing family conflicts as a low proficiency. The current study reveals that nurses feel the least confident in most of the skills relating to the treatment and prevention of childhood/adolescent overweight and obesity. Nearly 40% of practice nurses were concerned about precipitating eating disorders by bringing up the issue of a child's weight - one nurse said 'I fear offending the child or adolescent, I fear they may become anorexic or bulimic as a result of my consultation'.

Furthermore, the results demonstrate that more than 50% of GPs and nearly 70% of practice nurses feel uncomfortable using behavioural management strategies - this was also cited as a common area of self-perceived low proficiency in 32.5% of nurses and 38.9% of pediatricians in the U.S. study conducted by Story *et al*<sup>14</sup>. This U.S. study recommended that pediatric healthcare professionals should have training

in behavioural management to assist them in the treatment of overweight and obese children/adolescents. Cognitive behavioural therapy (CBT) is a psychotherapeutic approach that intends to influence certain emotions, behaviors and cognitions through a goal-oriented, systematic process. It is believed that establishing psychological determinants, understanding and promoting health related behaviour change may enhance the care of overweight/obese children<sup>14</sup>. Several dietitians specifically state in the questionnaires that they had CBT training - 81.5% of dietitians feel comfortable using behaviour management strategies in managing overweight and obese children/adolescents. An early study conducted by Epstein *et al*<sup>16</sup> compared children and mothers who attended a family-based behaviour modification course with a group that attended a family-based nutrition education course and discovered a higher reduction in the number of overweight children in the group who attended the family-based behaviour modification course. The author attributed these results to the behaviour management therapy used in the treatment of overweight and obese children/adolescents.

More than half of all the healthcare professionals referred to: lack of patient motivation, lack of parent involvement, lack of clinical time, and the lack of support services as the major barriers encountered in the treatment of childhood/adolescent overweight and obesity. Small *et al*<sup>17</sup> reviewed pediatric nurse's management and assessment of childhood overweight and obesity – more than two-thirds of all the pediatric nurses felt lack of patient motivation, lack of parent involvement, lack of support services were all major barriers in the treatment of childhood/adolescent overweight and obesity. Story *et al*<sup>14</sup> also revealed that more than half of all healthcare professionals questioned felt lack of patient motivation, lack of parent involvement and lack of support services were barriers in the treatment of childhood/adolescent overweight and obesity. An Irish study by Farrell<sup>18</sup>, investigated the current practices of 110 public health nurses in the prevention of overweight and obesity in preschool children also revealed similar results. The study demonstrated that public health nurses see time constraints, heavy case loads, and lack of support services as major barriers in the treatment of childhood overweight and obesity. Farrell<sup>18</sup> also found that 70% of Irish public health nurses questioned had health behaviour change training which helps in identifying a person's readiness to change health behaviours. However, this current study shows that less than 30% of nurses and less than 50% of GPs feel comfortable using behavioural management strategies in the treatment of childhood/adolescent overweight and obesity. The

National Guidelines advise that healthcare professionals should interact with parents to evaluate their readiness to support behaviour change for children who are overweight and obese. This technique may help healthcare professionals assess a parent's motivation and involvement in the management of their child's health problems<sup>11</sup>.

The WHO<sup>2</sup> recommend that multidisciplinary childhood obesity teams should be devised including physicians, nurses, psychologists, dietitians and exercise experts. Within the comments from the questionnaire a dietitian stated that a major barrier in the treatment of childhood obesity is 'the lack of community staff (dietitians, physiotherapists, psychologists, behavioural change specialists / motivational counselors, and parenting classes etc.) to facilitate family based intervention programmes for the treatment of childhood obesity'. In a study conducted by Small *et al*<sup>17</sup> the pediatric nurse practitioners also believed that this threatening health problem may be improved by the development and deployment of support services and more complex strategies arising from multidisciplinary teams of professionals that address the issue on many levels.

Comments from the healthcare professionals also communicated the necessity of adopting a whole-family approach in the management of childhood overweight and obesity. The family must be committed and understand the condition and implications of childhood obesity, for example one dietitian said that the 'biggest challenge seems to be making parents aware of the importance of making necessary changes in shopping and cooking, portion control, increasing physical activity – basically changing their lifestyle and formulating a family approach'. This point is reiterated in the National Guidelines for Prevention and Management of Childhood Overweight and Obesity<sup>11</sup> which state that family support is necessary for successful treatment and that lifestyle change involves the whole family in making small gradual changes to behaviour. Clark *et al*<sup>19</sup> also agree by stating that education regarding healthy eating is thought to positively influence parents to make healthy food choices for their children.

'Activity Confidence and Eating' (ACE) was set up by the HSE-midland area (2008) - it is currently the only Irish intervention into the management and treatment of childhood obesity. The 'ACE' programme was reviewed by O'Keeffe *et al*<sup>20</sup> – it is a 12-week programme developed by an interdisciplinary team including; dietitians, psychologists, and physical activity health promotion officers. The main aim of ACE

was to research, develop and evaluate a pilot weight management programme for the treatment of obesity in children. Children aged between 6 and 12 years with a BMI over the 91<sup>st</sup> centile with no medical cause for overweight and obesity were eligible to take part in the ACE programme. The programme involved two education sessions with parents, one nutrition activity session with children and an education session with both the children and parents. BMI and waist circumference was recorded on day one, repeated at 12 weeks, 6 months (post intervention), and 12 months (post intervention). Children's food intake was recorded for three days in a food diary and a semi-qualitative evaluation questionnaire was administered to parents post intervention. The programme was effective in decreasing BMI in the short term, however, long term evaluation showed that weight and waist circumference increased steadily post intervention<sup>20</sup>. The key strengths of the programme include the clear structure and awareness of parents of what level of commitment is needed – the programme focuses on a whole-family approach to the treatment of childhood/adolescent overweight and obesity. Currently dietitians, psychologists, and physical activity health promotion officers are running the programme using support materials so there is no training provided for health professionals<sup>21</sup>.

An early intervention study conducted by Wadden *et al*<sup>22</sup> consisted of nutrition, exercise and behavioural modification with varying amounts of parental participation. The children (mean age 14 years) were seen alone, or the mother and child were seen separately, or the mother and child were seen together. The group of children where the mother and child were seen together showed a weight loss of 3.7kg after 16 weeks compared to a 3.1kg weight loss in the group where the mothers were seen separately and a 1.6kg weight loss where the child was seen on their own. The results showed that the more sessions attended by the mothers, the more weight loss was observed in the children<sup>22</sup>. Another intervention by Flodmark *et al*<sup>23</sup> used family therapy as a treatment for obesity in childhood, which resulted in significant weight loss in children if the treatment began in children aged between 10 and 11 years. The therapy used here helped the family's own efforts to adjust their lifestyle and willingness for change and take responsibility. However, this study needs to be confirmed by further research before the therapy can be used as a form of treatment. These various studies demonstrate how effective behavioural management strategies can be in the management of childhood/adolescent overweight and obesity and that a family based approach is best.

More than 85% of dietitians, GPs, and practice nurses preferred resources are games to support healthy eating/physical activity and community-based healthy eating/physical activity initiatives. A comment from a dietitian 'education is essential through all channels (from leaflets in doctors office to ads on the TV) but thereafter it is vital to have programmes run through the public domain (e.g. schools) that support healthy eating and increase exercise' - this encapsulates the opinions of many healthcare professionals. There are many Irish based initiatives currently running, many of these are public health campaigns providing awareness or they are preventative based initiatives.

The 'Little Steps Campaign' was developed by the HSE and Safefood to support parents/guardians as positive role models for their children for healthy eating and physical activity<sup>24</sup>. The campaign aims to provide parents with information and support to make small changes to improve their children's diet and increase their levels of physical activity. The Department of Health and the Department of Agriculture and Food launched 'Food dudes' – a fruit and vegetable programme in 150 primary schools in 2005<sup>25</sup>. This initiative was launched to encourage children to eat more fruit and vegetables both in school and at home, the programme proved to be quite popular, it is currently being introduced to every primary school in the country. The 'Exercise Energise' programme - based in Dublin, 'Active8' - a Cork based initiative and 'Girls In Action' all target inactive teenage girls<sup>26</sup>. 'Ag Sugradh le Chéile' is a scheme that invites parents into schools to play with their children in a workshop, thereby encouraging links within the community<sup>26</sup>. A dietitian commented that 'sometimes we're all looking for the magic pill or program – I feel there needs to be an overall supportive environment for weight management that makes the healthier more active choice for the entire population the easier choice'. More recently the National Physical Activity Guidelines<sup>27</sup> have been produced for Ireland, these guidelines also reiterate that having support from families and friends makes it easier to be active. The initiatives available must be maintained and in some cases provided nationally to further support the fight against obesity.

Childhood/adolescent overweight and obesity will have a major impact on future adult health and the healthcare services, healthcare professionals must be trained appropriately in order to tackle this problem. This study emphasises the need for increased training opportunities for healthcare professionals on the prevention and management of childhood/adolescent overweight and obesity, in particular in

behavioural management strategies, family interactions and family dynamics. There is a crucial need to reduce the major barriers seen as obstacles in the prevention and management of childhood/adolescent overweight and obesity. Health care professionals need to be aware of all the resources and initiatives available to tackle and manage overweight and obesity in children/adolescents. Finally more national community-based initiatives and national interventions need to be developed and maintained to support the prevention and management of childhood/adolescent overweight and obesity.

### **Recommendations**

- Healthcare professionals need further training in the prevention and management of childhood/adolescent overweight and obesity – more than two-thirds of the healthcare professionals feel they need further training.
- Healthcare professionals should use more modern techniques in the management and prevention of childhood/adolescent overweight and obesity – more than three-quarters of health care professionals have a high interest in improving their behavioural management strategies.
- The healthcare professional's workload needs to be reviewed – more than half of the healthcare professionals feel that lack of clinical time is a major barrier in the treatment of childhood/adolescent overweight and obesity.
- A multidisciplinary approach to the treatment of childhood/adolescent overweight and obesity should be adopted by all healthcare professionals – more than half of the healthcare professionals believe lack of support services is a major barrier in the treatment of childhood/adolescent overweight and obesity.
- More community and school based initiatives need to be provided and maintained on a national scale to tackle and prevent childhood/adolescent overweight and obesity.
- Further research regarding the effectiveness of obesity prevention programmes is required.
- A national campaign that provides uniform training for all healthcare professionals should be put in place - even though there are resources

available for healthcare professionals to prevent and manage childhood/adolescent overweight and obesity, many healthcare professionals are unaware of these resources.

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