Childrens' and parents' views and experiences of attending a childhood obesity clinic: a qualitative study

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Aim: To explore childrens' and parents' views and experiences of attending a hospital-based childhood obesity clinic, in order to inform the development of services in primary care. Background: The prevalence of childhood obesity in the UK is rising. Previous literature identifies the need for long-term, regular follow-up during weight management programmes, and acknowledges the difficulties families face when making lifestyle changes. Primary care has been identified as a possible clinical setting that can meet these needs. However, there is a paucity of evidence to guide the development of such services. Method: A qualitative interview study was undertaken in a hospital-based childhood obesity clinic in Bristol, England. Short in-depth interviews were held with 21 parents and 11 children attending this clinic. Interviewees were purposefully sampled to ensure interviews were held covering participants of varying age, gender and success in reducing their BMI. The interviews were audiotaped, fully transcribed and analysed thematically. Findings: Families valued the multidisciplinary team approach used in the clinic in terms of the education and support it offered. They enjoyed regular follow-up, reporting that this provided ongoing support and motivation. Families whose children succeeded in BMI reduction appeared more resourceful and tended to embrace ideas for making lifestyle changes. Unsuccessful families, however, found it harder to alter their lifestyle and often met barriers to change. The authors conclude that community obesity clinics will need to provide a multidisciplinary service offering regular support and individualized exercise and dietary advice whilst attempting to address barriers to change.

Key words: childhood obesity; obesity management; primary health care; qualitative research

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Introduction

Thirty percent of 11-year-olds in England are overweight or obese (National Child Measurement Programme 2006/07) and the prevalence of childhood obesity continues to rise (Ebbeling

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et al., 2002; Wanless et al., 2007). Wanless et al. (2007) highlight obesity in their latest report on the performance of the NHS, warning that the economic cost of increased obesity threatens the sustainability of our health system.

Overweight children frequently suffer bullying and low self-esteem (Rudolf, 2004). More serious physical and psychological co-morbidities include dyslipidaemia, hyperinsulinaemia and depression (Freedman *et al.*, 1999; BMA Board of Science,

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2005; Reddy, 2006; Sabin et al., 2006). Obesity and related co-morbidities tend to track into adulthood increasing the risk of future cardiovascularrelated morbidity and mortality (Brown, 2005; Bibbins-Domingo et al., 2007). Many comorbidities are reversible with adequate reduction in a child's body mass index standard deviation score (BMI SDS) (Reinehr and Andler, 2004).

There is currently a paucity of evidence for treating childhood obesity (Summerbell et al., 2003; Brown, 2005; National Institute for Health and Clinical Excellence, 2006) but primary care has been identified as a potential setting for its management (Scottish Intercollegiate Guidelines Network, 2003; NICE, 2006; Reddy, 2006). However, Rudolf (2004) comments that primary care lacks the time needed to address this problem and a BMA (British Medical Association) report (BMA Board of Science, 2005) acknowledges that when simple management in primary care fails, the involvement of secondary care services is needed.

The attitude of clinicians providing care for obese children and their families is likely to be crucial in terms of service development and success. Some studies have found general practitioners (GPs) to be concerned about childhood obesity and believing they could have a role to play in its management (Gerner et al., 2006; Walker et al., 2007). However, other studies report that GPs and practice nurses view obesity as a social issue outside their professional domain (Epstein and Ogden, 2005; Walker et al., 2007) and feel that they cannot intervene effectively due to lack of time, knowledge and resources (Turner et al., in press). In addition, due to the lack of robust evidence-based guidelines in managing childhood obesity, it would be difficult for the government to impose 'quality outcome framework' targets to add incentives for GPs managing obesity, although targets have been added looking at adult obesity prevalence.

Qualitative studies in the area of management of childhood obesity have identified a plea from parents and adolescents for long-term support during weight management to help them make lifestyle changes (Murtagh et al., 2006; Stewart et al., 2008). Many parents need guidance to deal with conflicts that arise due to resistance from the child and extended families when trying to introduce new diets (Dixey et al., 2006; Stewart et al., 2008). Furthermore, parents may experience conflicting emotions when excluding certain foods from their child (Stewart et al., 2008). There are mixed feelings about dietetic advice: some children find dietitians too rigid in their approach, whilst other families want more structured advice (Barlow and Ohlemeyer, 2006; Dixey et al., 2006; Murtagh et al., 2006). Other programmes (Dixey et al., 2006; Stewart et al., 2008) report increased patient self-esteem through attending specialist services and meeting other obese children. However, Dixey et al. (2006) warn that it is important not to normalize obesity, thus reducing a child's incentive to lose weight.

These studies illustrate the way in which qualitative research methods can be used to assess parents' and patients' views and experiences in detail, and provide insights into the factors that may influence the success of community clinics and secondary care services for childhood obesity. None of them, however, have considered how such services could be replicated in primary care. Primary care has been viewed as a suitable management setting for childhood obesity (NICE, 2006) and providing care within this setting could improve patient acceptability and accessibility to childhood obesity services.

One of the UK's most established childhood obesity clinics is based in Bristol. It offers a multidisciplinary service and aims to provide patients with three monthly assessments from a clinician, dietitian and exercise specialist. The clinic is successful with 70% of children attending achieving reductions in BMI SDS (Sabin et al., 2007). A pilot trial is currently being undertaken to examine the feasibility of replicating Bristol's hospital-based childhood obesity clinic in primary care (Hamilton-Shield, 2006). We took this opportunity to hold in-depth interviews with parents and children attending the clinic to identify which aspects of management they thought helped or hindered weight loss, and thus gain insight into how a childhood obesity clinic should be developed in primary care.

Method

Interviews were held between July 2007 and February 2008 with 21 parents and 11 children attending the hospital-based clinic. Sampling was purposive to ensure interviews were held with boys

Table 1 Characteristics of the study population

Characteristic	Number of participants
Of all families/ children interviewed, clinic	
outcome for child	
Successful	9
Unsuccessful	9
DNA	3
Parents interviewed	
Mothers	17
Fathers	4
Grandmother	1
Sex of children/adolescents interviewed	
Girls	6
Boys	5
Age of child/adolescent interviewed	
5-10 years	2
11–18 years	9
Clinic outcome for children/adolescent	
interviewed	
Successful	4
Unsuccessful	5
DNA	2

DNA = did not attend appointment.

and girls of varying age, who had/had not lost weight, and with families who did/did not attend follow-up appointments (Table 1). A 'successful' participant was defined as someone who had reduced his/her BMI since attending the clinic (mean BMI SDS reduction for successful participants in this qualitative study was 0.69). Participants who 'did not attend appointments' (DNAs) were defined as those who had attended the clinic for one or more appointments but had not then returned for follow-up.

The lead author (S.E.O.) conducted short indepth interviews with parents and then, if both parent and child consented, their child (aged 7–18 years). S.E.O. was not known to the interviewees in any capacity and attended the clinic only to interview participants for this study. Two separate interview guides were used: one for the parents and another for the children. Both guides included questions about the child's referral to the clinic, descriptions and feelings about appointments, suggestions for improvement and reasons for non-attendance. The parent's interview guide also covered issues such as clinic accessibility and thoughts about the hospital setting.

Most of the interviews took place in the hospital, four were conducted in participants' own

Primary Health Care Research & Development 2009; 10: 236-244

homes, and one was held by telephone. On average, parent interviews lasted 20 min and child interviews 14 min. All were audiotaped and fully transcribed. Interviews were undertaken until saturation of key themes was reached.

Each transcript was read and re-read in order to gain an overall understanding of the parents' and childrens' views and experiences. This process was also used to identify themes and to develop a coding frame. Transcripts were read by another member of the research team, so that the analysis and coding frame could be refined through discussion.

Transcripts were imported into the software package ATLAS.ti and electronically coded. Data coded under specific themes, for example, diet, were then retrieved and summarized. Comparisons were then made between the accounts given by 'successful' and 'unsuccessful' patients/parents and non-attenders (DNAs); between girls and boys; and between children (aged 5-10 years)/ adolescents (aged 11–18 years) and their parents. Thematic patterns and deviant cases were noted. Original transcripts were then re-read to ensure the resulting findings accurately reflected and fully mapped the data collected.

Results

The main themes to result from the analysis were the role of the clinic; the approach used by the team; advice given and changes made by families in relation to diet and exercise. In this paper, to maintain confidentiality, participant's names have been removed.

Role of the clinic

Many participants described that one of the clinic's principal benefits was its ongoing support, keeping families mindful of the issue of weight. Mothers reported feeling relieved that someone was supporting them and their children in making changes. Parents and adolescents alike described how the adolescents preferred to hear advice from a professional rather than from their family.

Yeah, it's different to me telling him, 'No, you can't have this, you can't have that'. And if he's got somebody else telling him more professional than me....

(Mother of 9-year-old boy, DNA)

Successful families described how they had actively managed the weight problem and were motivated to lose weight by the time they returned for the next appointment. They appeared to be motivated by a desire to feel pride in their ability to lose weight, to please the health care professionals and in some cases, to prove that they could succeed.

I didn't have to lose it but I felt that I wanted to do it, you know, I really wanted to do it...I wanted to be proud.

(16-year-old girl, successful)

Some families felt that more frequent appointments would have been desirable, as they would have increased the individual's motivation to lose weight:

I'd rather it had been less of a gap and seen them more through that year, because I would have got more kicks up the bum, because I'm one of these people that...well, I'm just a standard teenager...if I don't get told to do something, I'll sit here and I'm not going to do it, am I?

(18-year-old boy, successful)

In contrast with successful families, families who had not succeeded in weight loss or were DNAs spoke about weight issues in a passive manner. The accounts from many of these families suggested that they could not identify ways of changing their lifestyle long-term and almost felt that the clinic might do the work for them. For example, the role of the clinic was described as 'looking after their child' or 'keeping you in control'.

We didn't know what to expect, but it was brilliant We just got somebody that was looking after her....

(Mother of 13-year-old girl, unsuccessful)

Mother: Yeah, well, I feel great like, it's like they kind of look after him.

Interviewer: So you feel better about it? Mother: Yeah, they'll get it better [good] and looking after what he eats, what he don't eat. (Mother of 14-year-old boy, unsuccessful)

Many unsuccessful families and DNAs said that the clinic was simply providing them with information that they already had. Whilst many did not know what to expect, others were hoping for psychological support with parenting issues, dealing with extended families and their child's emotional needs. Some also regretted the fact that they were not invited to see the dietitian and exercise specialist at the first appointment and then had to wait some time for much needed advice and motivation.

Well, we all know what to do and I was going out there and they was just telling me what I already knew, basically.

(Mother of 8-year-old boy, DNA)

But I think there are lots of issues for kids as well, you know, around bullying and selfesteem, and none of that's really been looked at. I mean, I know he's only...well, he was only six when he started coming here, but they still are very aware of their body and issues around that.

(Mother of 8-year-old boy, unsuccessful)

Approach used by the team

Families commented on the supportive nature of the clinic staff and the majority of participants specifically referred to the manner of the lead clinician. Whilst adolescents reported his approach as relaxed, parents of younger children described him as being direct and hard, commenting on his 'no nonsense' description of the serious consequences of obesity and lifestyle changes that families needed to make. Some parents stated that they had been shocked and angered by his approach, although parents whose children had reduced their BMI described this approach as helpful and even as key to their child's success.

...if he'd have took a softly, softly approach, I don't know that we, we'd be here today, finding out that he's lost weight.

(Father of 12-year-old boy, successful)

Parents whose young children had not succeeded in weight loss had mixed responses to his approach.

But if it's his way of getting through...he's very experienced and I'm not and that's probably his way of getting through to her and making her realise. I don't have to agree with that.

(Mother of 10-year-old girl, unsuccessful)

...and certainly seeing somebody like (lead clinician) makes you feel a bit kind of, you know, he doesn't mince his words. And so in a way, that's quite good, I think, for me, to have somebody like that.

(Mother of 8-year-old boy, unsuccessful)

Dietary advice received and changes made by families

Children and adolescents, who had reduced their BMI, and their parents, described specific dietary changes that they had implemented and foods that they had entirely cut out of their diets.

...since coming here. I probably would have given him a smaller pudding, instead of cutting it out completely and giving more fruit. (Mother of 6-year-old boy, successful)

Parents of successful young children described feelings of guilt when restricting their offspring's diet, initially made worse by the child's protests at dietary changes. These parents acknowledged this was a problem that had to be overcome, often with the support of family. These families described practical ways around situations and were proud of their ability to embrace new ideas, for example, they would alter cooking methods to reduce the fat content of a favourite meal or introduce low-fat treats. These ideas sometimes stemmed from a mother's personal experience of commercial slimming clubs.

We can have chips. Did you know you can have chips?....it's wonderful. This is a slimming world recipe.

(Mother of 7-year-old girl, successful)

Unsuccessful families did not describe implementing specific dietary changes. Parents of younger children spoke of how they found it hard to overcome the feelings of guilt they experienced when trying to restrict diets. They reported feeling cruel, sometimes wondering if they might be causing psychological harm to their child.

...she's still a child and she just got so sick of Special K, so recently, she has gone back to having things like Coco Pops. Now, I know they're no good for her, but you've still got to think of her as a child. She's not an adult, and I think that's what they miss here, personally....she's still a child and she still needs

to behave like a child and be treated like a child.

(Mother of 10-year-old girl, unsuccessful)

Accounts from these families suggested that they often appeared to lack the resourceful nature and support of the successful families and many described facing criticism and even sabotage from extended families.

I'm so annoyed with what they're (extended family) doing, because I, I'm trying to help him and they're giving in. And it does make me feel really, really annoyed.

(Mother of 9-year-old boy, unsuccessful)

Some parents described disappointment with the dietetic advice regardless of their child's success that they had not received this advice at their first clinic visit when they felt it would have had most impact, or had wanted far more specific advice, diet plans and recipes.

need to have a diet pack, they need to have this is the regime...your team to get together and make a pack, a real child-friendly pack that's going to appeal to parents, that's bright, that's...

(Mother of 7-year-old girl, successful)

It's all very well going through what you're eating and saying you should cut this down or you should cut that out, but suggestions or like a diet sheet or...

(Mother of 11-year-old boy, DNA)

Exercise advice received and changes made by families

Successful families praised the exercise specialist: he was described as having motivated adolescents and children to try new sports and exercises by setting realistic goals and using incentive sticker charts with the younger children.

...because it makes you actually think about it and realise how much...because you've got a goal, you've kind of had to work out how to reach that goal.

(15-year-old boy, successful)

One adolescent attributed her recent BMI reduction to increasing the intensity of her exercise. Having previously been under the impression that she was doing sufficient exercise, she

only now realized the level of work required to make a significant difference. She described a school PE lesson to illustrate her point:

...like we were doing aerobics the other day and in the hour's lesson we did ten minutes of actual work...

(15-year-old girl, successful)

A range of views was expressed amongst the unsuccessful families regarding the exercise advice provided. Some described how they felt it was surplus to requirements, as they already did adequate exercise, while others found it motivating. It was difficult to quantify how much exercise these children did and in some cases accounts were defensive.

She never even turns the computer on... because as soon as she gets home from school, she's up to her horses and if she's at home, she's at her horses from nine o'clock in the morning 'til seven o'clock at night. So she's out and about all the time.

(Mother of 8-year-old girl, unsuccessful)

Others described the advice as being impractical due to the expense or lack of exercise facilities. A few families never received the exercise advice and regretted this.

Yeah, and I said that the gym he suggested was down in (area name), and I phoned them up and they don't accept kids under twelve, so do you know what I mean, some of things that he suggested would have been good if I could have afforded it...

Mother (11-year-old boy, DNA)

Discussion

Summary of main findings

Most parents and children attending the hospital-based childhood obesity clinic found clinic staff supportive by providing useful information about diet, exercise and the long-term effects of obesity.

Families reported regular clinic contact as important, helping maintaining motivation to make lifestyle changes and supporting families who struggled to make changes. Parents and adolescents valued receiving dietary and exercise advice from professionals. The lead clinician was reported to take a different approach according to the age of the patient: parents of young children described him as making them feel entirely responsible for lifestyle changes and offering rather direct blunt advice, while adolescents reported his approach to be relaxed.

Whilst the clinic is successful in terms of BMI SDS reductions, its approach does not suit everyone. Successful families appeared to be motivated by the clinic's direct and no-nonsense attitude to obesity and subsequently embraced new ideas and made significant lifestyle changes. These families seemed resourceful, were usually supported by extended families and had ideas for changing diets and introducing opportunities for exercise. Unsuccessful families found it hard to identify the specific lifestyle changes needed and also met barriers to change, for example, parent's emotional conflicts when restricting their child's diet. They needed more regular and practical support to deal with issues of interfering extended families and to explore parental anxieties, and needed practical ideas for exercise and diet changes.

Strengths and limitations of the study

The flexible open nature of the interviews allowed participants to articulate their views and experiences of the clinic, although conducting interviews in the hospital setting may have restricted the extent to which parents and children felt able to express negative views. The purposive sampling strategy meant interviews were held with children of varying gender, age and success, allowing us to identify possible reasons for why children had or had not lost weight. However, this sampling approach will have limited the extent to which findings can be generalized. The generalizability of the findings will also have been limited by the fact that we only recruited participants from one clinic. Furthermore, our data suggested that the approach used by the lead clinician had a major impact on participants and their families. Many parents of overweight children do not realize their child is overweight (Etelson et al., 2003) and might not view their weight as problematic (Jain et al., 2001). The individuals we interviewed had acknowledged that their child had a weight problem and had sought help.

Comparison with existing literature

Many of our study's findings are consistent with existing literature: families of obese children would like regular contact with services as a source of support and motivation (Murtagh et al., 2006; Stewart et al., 2008) and one author recommends this weekly to monthly (Dietz and Robinson, 2005); parents can feel conflicting emotions when restricting diets (Stewart et al., 2008); extended families can sabotage a parent's attempts to support a child losing weight (Dixey et al., 2006; Stewart et al., 2008) and guidelines suggest the use of behavioural therapy (Dietz and Robinson, 2005; Baumer, 2007) to deal with this. We also identified the call for structured but not excessively rigid dietetic advice (Barlow and Ohlemeyer, 2006; Dixey et al., 2006; Murtagh et al., 2006). Baumer (2007) suggests that dietitians need to give practical, individualized and pragmatic advice, an idea further developed in our study.

Unsuccessful children in this study often described taking a lot of exercise. Literature states that reducing sedentary activities rather than increasing exercise improves weight loss (Epstein *et al.*, 1995; Steinbeck, 2005; Spear *et al.*, 2007) and this issue needs to be addressed.

Finally, our study noted that different approaches tended to be taken by clinicians according to the age of the patient. Younger children's parents were viewed as 'vehicles of change' and the lead clinician took an 'exacting approach' when talking to these parents about the implications of childhood obesity. Parents have been described as 'vehicles of change' in the management of their child's weight, particularly for younger children (Edmunds *et al.*, 2001; Steinbeck, 2005; Spear *et al.*, 2007) and the National Institute for Health and Clinical Excellence guidelines (NICE, 2006) state that parents should be encouraged to take responsibility for lifestyle changes for their children.

In contrast, when consulting adolescents, the lead clinician tended to direct advice at the adolescents rather than their parents. A sensitive manner was used accepting this age as a time of increasing maturity, mindful of pressures that this age group face. Spear *et al.* (2007) review evidence regarding the 'target for change'. They conclude that for children under 12 years, parents need to be targeted, whilst evidence relating to adolescents is less conclusive.

Primary Health Care Research & Development 2009; 10: 236-244

Implications for future research and clinical practice

This study identifies potential areas for service improvement at a time when multidisciplinary childhood obesity services are being initiated in the community. In transferring a childhood obesity clinic to primary care, we recommend maintaining the same clinic model: a lead clinician (eg, practice nurse with training in childhood obesity or a GP with special interest), a dietitian and exercise specialist. Our model of care suggests that a specialist team would operate within primary care. This is mindful of GPs' views that childhood obesity is out of their remit of care due to the complexity of this problem (Epstein and Ogden, 2005; Walker *et al.*, 2007; Turner *et al.*, in press).

Dietary advice needs to be practical, pragmatic and individualized, mindful of a child's food preferences, the families' financial resources, time and cooking skills. Whilst some families will need minimal input, others require help planning meals, education about cooking methods and help dealing with food refusal. Often the families need more regular advice, support and supervision when they first start to make dietary changes, helping to maintain motivation.

The exercise specialist also needs to be motivating and give practical suggestions for reducing sedentary activities and increasing exercise. They need to have a working knowledge of local sports facilities and provide achievable goals and rewards for children.

The lead clinician will need to provide regular and ongoing support in person. Regular appointments, for example, monthly, would motivate families by reminding them why they need to make changes and providing practical ideas to overcome problems that they encounter.

Due to the complex and sensitive nature of childhood obesity it is likely that the attitude of clinicians is crucial to the success of services. Our study reflects on the attitude of the lead clinician and raises the possibility that his approach contributed to the clinic's success. We conclude that the lead clinician must be supportive whilst not over-sympathetic, as s/he might run the risk of legitimizing obesity and thus reduce the motivation to change. Equally the clinician needs to be at ease in adapting his/her approach according to the age and personality of the patient.

Childhood obesity continues to be at major policy focus for the NHS. An evidence base for service development will be needed if the involvement of primary care is to be effective and costeffective. This paper offers some early thoughts on ways in which we might proceed.

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