

Obesity prevention in English primary schools: headteacher perspectives

Clarke, Joanne; Pallan, Miranda; Lancashire, Emma; Adab, Peymane

DOI:

[10.1093/heapro/dav113](https://doi.org/10.1093/heapro/dav113)

License:

None: All rights reserved

Document Version

Peer reviewed version

Citation for published version (Harvard):

Clarke, J, Pallan, M, Lancashire, E & Adab, P 2015, 'Obesity prevention in English primary schools: headteacher perspectives', *Health Promotion International*. <https://doi.org/10.1093/heapro/dav113>

[Link to publication on Research at Birmingham portal](#)

Publisher Rights Statement:

This is a pre-copyedited, author-produced PDF of an article accepted for publication in Health Promotion International following peer review. The version of record Clarke, J. L., et al. "Obesity prevention in English primary schools: headteacher perspectives." Health promotion international (2015) is available online at: <http://dx.doi.org/10.1093/heapro/dav113>

Checked Jan 2016

General rights

Unless a licence is specified above, all rights (including copyright and moral rights) in this document are retained by the authors and/or the copyright holders. The express permission of the copyright holder must be obtained for any use of this material other than for purposes permitted by law.

- Users may freely distribute the URL that is used to identify this publication.
- Users may download and/or print one copy of the publication from the University of Birmingham research portal for the purpose of private study or non-commercial research.
- User may use extracts from the document in line with the concept of 'fair dealing' under the Copyright, Designs and Patents Act 1988 (?)
- Users may not further distribute the material nor use it for the purposes of commercial gain.

Where a licence is displayed above, please note the terms and conditions of the licence govern your use of this document.

When citing, please reference the published version.

Take down policy

While the University of Birmingham exercises care and attention in making items available there are rare occasions when an item has been uploaded in error or has been deemed to be commercially or otherwise sensitive.

If you believe that this is the case for this document, please contact UBIRA@lists.bham.ac.uk providing details and we will remove access to the work immediately and investigate.

Title: Obesity prevention in English primary schools: headteacher perspectives

Authors: Clarke JL¹, Pallan MJ¹ (Corresponding), Lancashire ER¹ and Adab P¹.

1: Public Health building, University of Birmingham, Birmingham, UK

Email addresses of authors:

Joanne Clarke: j.l.clarke@bham.ac.uk

Miranda Pallan: m.j.pallan@bham.ac.uk

Emma Lancashire: e.r.lancashire@bham.ac.uk

Peymane Adab: p.adab@bham.ac.uk

Corresponding author: Miranda J Pallan, School of Health and Population Sciences, Public Health building, University of Birmingham, Edgbaston, Birmingham, B15 2TT, UK.

Tel: +44(0)121 4147990; Fax: +44(0)121 414 6007

Section of journal: Original article

Keywords: Physical activity, healthy eating, school principal, qualitative

Funding sources: This work was supported by the National Institute for Health Research (NIHR) Health Technology Assessment programme (project number 06/85/11), and was undertaken as part of a PhD by JC, a member of research staff working on the funded study.

Word Count: 6874 words (total); 4470 words (body of text); 658 words (references); 1500 words (tables and figure); 246 words (abstract)

Acknowledgements: With sincerest thanks to the headteachers who gave their time to be interviewed.

Abstract

Schools are seen as important contributors to obesity prevention, yet face barriers in fulfilling this function. This qualitative study investigates headteacher views on the primary school role in preventing obesity. Semi-structured interviews were held with 22 headteachers from ethnically and socio-economically diverse schools in the West Midlands, UK. Data analysis was conducted using the framework approach. Two over-arching categories were identified: 'School roles and responsibilities' and 'Influencing factors'. Participants agreed that although schools contribute towards obesity prevention in many ways, a moral responsibility to support children's holistic development was the principal motivator, rather than preventing obesity per se. The perceived impact on learning was a key driver for promoting health. Parents were believed to have the main responsibility for preventing obesity, but barriers were identified. Whilst headteachers recognised the advantageous position of schools in offering support to parents, opinion varied on the degree to which schools could and should take on this role. Headteachers serving more deprived areas reported adopting certain responsibilities that elsewhere were fulfilled by parents, and were more likely to view working with families on healthy lifestyles as an important school function. Several factors were perceived as barriers to schools doing more to prevent obesity, including academic pressure, access to expert support and space. In conclusion, school leaders need more support, through resources and government policy, to enable them to maximise their role in obesity prevention. Additionally, school-based obesity prevention should be an integral part of the education agenda rather than bolt-on initiatives.

Introduction

Childhood obesity is regarded as a global public health problem (World Health Organisation, 2004). In England, 22.2% of 4-5 year olds and 33.3% of 10-11 year olds are overweight or

obese based on population-monitoring thresholds derived from the UK 1990 growth reference population, with the highest rates in deprived areas (Health and Social Care Information Centre, 2013). Long-term health and social consequences of childhood obesity are well-understood (Ebbeling et al., 2002).

Schools are seen as a key setting for obesity prevention as the majority of children have long-term and in-depth contact with them. Indeed, the majority of obesity prevention interventions are school-based (Lobstein et al., 2015). Within schools, opportunities exist to undertake and observe key obesity prevention behaviours (healthy eating and physical activity) and to develop strategies to modify unhealthy behaviour (Story et al., 2009). The school environment, policies, curriculum, extra-curricular activities and personnel have potential to positively influence children's lifestyle behaviours (Katz et al., 2008), and play an important role in instilling these behaviours into adulthood (Karnik and Kanekar, 2012). Furthermore, these different elements could work together to reinforce, or provide conflicting messages which could hinder, healthy behaviour (Carter and Swinburn, 2004). As childhood obesity rates remain high, and primary school years are a key period for weight gain, there is emerging consensus that schools have a critical role to play in obesity prevention (Robinson et al., 2006; National Institute for Health and Clinical Excellence, 2006; Kropski et al., 2008).

A recent metasynthesis of stakeholder views on the primary school role in preventing obesity pointed to a need for schools, parents and government to work together (Clarke et al., 2013). In particular, the importance of home-school collaboration was emphasised to ensure consistency of messages. Moreover, this review highlighted a scarcity of studies eliciting headteacher opinions, with only nine headteacher viewpoints represented from over a thousand school stakeholders. As principal decision-makers within school, headteacher views are a vital consideration. Although schools are required to follow certain statutory requirements (e.g. in England, the National Curriculum and school food standards),

headteachers have significant power to shape policy and practice, thus affecting how their school contributes to obesity prevention.

A recent study reported on the perspectives of 14 headteachers (2 male) on the barriers and facilitators of preventing childhood obesity (Howard-Drake and Halliday, 2015). The study found schools to lack the capability, capacity and confidence to support obesity prevention, and called for effective partnerships with specialist organisations. However, the study was conducted in only one local authority area in northern England, with a relatively homogeneous population.

This study aims to explore the views of headteachers, from a wide range of schools, on the role of primary schools in preventing obesity. To the best of our knowledge, this is the first study to include headteachers across an ethnically and socio-economically diverse region, and to explore differences in headteacher perception based upon the communities they serve. Understanding differences in the motivations of, and challenges faced by, headteachers serving schools in diverse communities may help shape future approaches to children's health in schools, and thus reduce health inequalities.

Methods

The study was undertaken within nine local authority areas in the West Midlands region of England. To maximise transferability, schools were purposively sampled to include diversity in location, ethnic mix, size and deprivation. Headteachers from selected schools were invited to participate, although in some schools the deputy headteacher was interviewed due to availability. In total, 200 headteachers were invited to take part in the study via a letter of invitation and follow-up email. Of these, 25 agreed to be interviewed (although three subsequently declined to participate due to competing demands); 23 declined to participate

(all stating lack of time) and the remainder did not respond. In total, 15 headteachers (5 male) and 7 deputy headteachers (2 male) from 21 schools were interviewed (Table I).

Subsequently, the term ‘headteacher’ will be used for all participants.

Table I: Participant and school characteristics – headteacher perspectives on the role of primary schools in preventing childhood obesity.

Participant number	Participant characteristics	School ethnicity (% White)	School Free School Meal Entitlement (%)	School Urban/Rural ^a	School size (number of pupils on roll)
1	Headteacher ^F	40-49	20-29	Urban	350-399
2	Headteacher ^M	10-19	50-59	Urban	250-299
3	Headteacher ^M	90-100	10-19	Urban	450-499
4	Deputy headteacher ^M	40-49	0-9	Urban	200-249
5	Deputy headteacher ^F	60-69	30-39	Urban	350-399
6	Headteacher ^M	10-19	30-39	Urban	150-199
7	Headteacher ^F	10-19	10-19	Urban	250-299
8	Headteacher ^M	30-39	50-59	Urban	200-249
9	Headteacher ^F	90-99	0-9	Rural	100-149
10	Headteacher ^F	90-99	0-9	Rural	150-199
11	Headteacher ^F	90-99	0-9	Urban	100-149
12	Deputy headteacher ^F	50-59	60-69	Urban	300-349
13	Deputy headteacher ^F	0-9	40-49	Urban	300-349
14	Deputy headteacher ^F	60-69	10-19	Urban	450-499
15	Headteacher ^F	10-19	40-49	Urban	250-299
16	Headteacher ^F	10-19	30-39	Urban	350-399
17 & 18	Headteacher ^F and deputy headteacher ^F	80-89	50-59	Urban	200-249
19	Headteacher ^M	60-69	30-39	Urban	300-349
20	Headteacher ^F	70-79	20-29	Urban	350-349
21	Deputy headteacher ^M	80-89	20-29	Urban	250-299
22	Headteacher ^F	80-89	10-19	Urban	150-199

^aDefined by school postcode (Office for National Statistics, 2010); F: Female; M:Male

Semi-structured interviews were used to enable key questions to be asked, whilst allowing free expression and flexibility to probe deeper into responses. A schedule was developed to guide discussion comprised of three key questions plus prompts (Table II). Ethical approval was obtained from the National Research Ethics Service Committee West Midlands, The Black Country (10/H1202/69). Interviews took place within participants’ schools between May 2013 and May 2014. Interviewees were assured of anonymity and confidentiality, and signed a consent form prior to interview. Discussions (which lasted on average 36 minutes)

were: one-to-one (except in one school where a combined headteacher and deputy headteacher interview was undertaken), conducted by JC and voice-recorded.

Table II: Schedule for interviews – headteacher perspectives on the role of primary schools in preventing childhood obesity.

1)	Do you think that obesity is an issue for primary school age children in the West Midlands? <ul style="list-style-type: none"> • Would you say that childhood obesity is an issue for your school? In what way? • How important do you think the prevention of childhood obesity is to your school? • Whose responsibility do you think it is to prevent childhood obesity?
2)	To what extent do you feel that schools should play an active role in the prevention of childhood obesity? <ul style="list-style-type: none"> • Does your school play any role in helping children maintain a healthy weight or prevent obesity? • Do you think, as Head/Deputy Head Teacher, that you have a particular role in the prevention of childhood obesity? • Does your school do anything to promote healthy eating? And if so, what? • Does your school do anything to promote physical activity? And if so, what? • Can you think of any key achievements at your school in promoting healthy eating and physical activity/preventing childhood obesity? Is there anything you are particularly proud of? • Is there anything else that could be/needs to be done? Is there anything you would like to be able to do? • Do you think there are any benefits to your school in promoting healthy eating and physical activity/preventing childhood obesity? • Do you think there are any barriers for your school in promoting healthy eating and physical activity/preventing childhood obesity? • Do you get any support to promote healthy lifestyles? Do you work with any partner agencies? • Apart from the school, who else has a role in preventing childhood obesity? How important is this role compared to the role of the school? • Does your school work with parents to promote healthy lifestyles? And if so, how? • Can you think of any barriers to working with parents? And if so, how do you think these could be overcome?
3)	Can you think of anything that would help your school take a more active role in preventing childhood obesity? <ul style="list-style-type: none"> • What kinds of resources, support or training would make it easier for your school to take a more active role in obesity prevention? • What other things, outside of the school setting, do you think would help?

Recordings were transcribed verbatim and anonymised. QSR NVivo 10 was used to support data analysis. Data collection and analysis were undertaken concurrently to enable discussion of emerging themes at later interviews. Thematic data analysis was conducted using the framework approach (Ritchie and Spencer, 1994), following the systematic method outlined by Gale et al. (2013). To enhance confirmability, two researchers (JC and MP) independently coded the first five transcripts through data familiarisation and identification of codes. A coding (analytical) framework, agreed through discussion, was applied to all transcripts, and refined over several iterations. A framework matrix was developed as a structure for

analysing data both by code and by participant, enabling comparison of themes by participant, whilst maintaining the individual perspective as a whole. The matrix also enabled consistencies in perceptions to be examined between headteachers serving areas of higher and lower socio-economic status. Data were charted into the matrix before all authors met to discuss and interpret the emerging themes. ‘Member checking’ (where feedback on the interpreted results is obtained from participants) was not conducted to reduce participant burden.

Findings

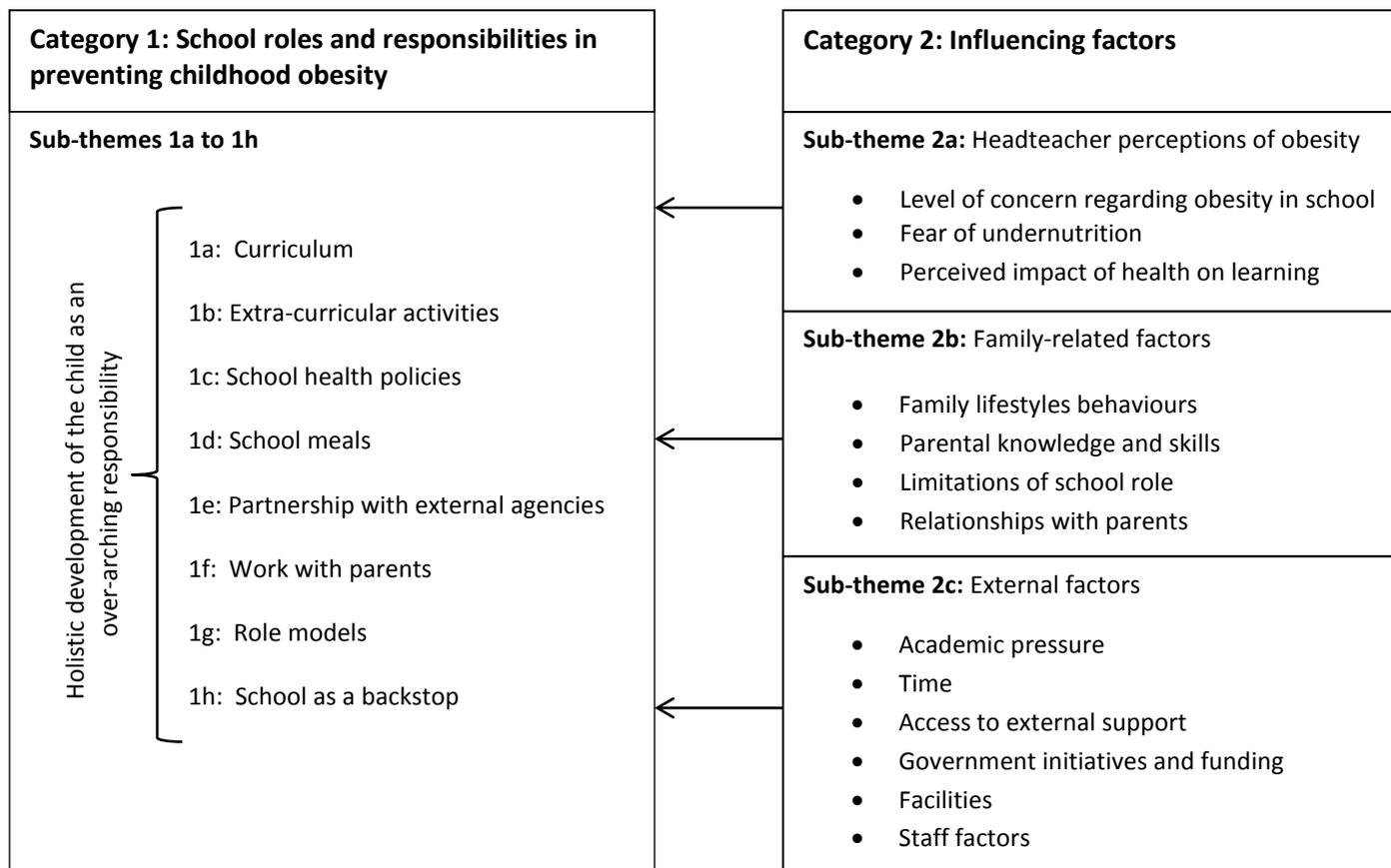
Two over-arching categories emerged from the analysis: ‘School roles and responsibilities in preventing childhood obesity’, under which eight sub-themes were identified, and ‘Influencing factors’, under which three sub-themes and 13 finer-level themes were identified (Figure 1). The over-arching category ‘Influencing factors’ refers to factors believed by participants to exert an influence over how well the school is able to fulfil the perceived roles and responsibilities.

School roles and responsibilities in preventing childhood obesity

All participants identified that schools play a role in promoting health and discussed a variety of ways in which their school contributed towards preventing obesity. Such activities were seen mainly within the context of the school’s moral responsibility to support children’s holistic development, and the term ‘obesity prevention’ was only used in a minority of schools.

“It’s about educating the whole child, and I want my children not to just be academic, I want them to be healthy” (P20)

Figure 1: Schematic diagram of school roles and responsibilities in preventing obesity and the factors found to exert an influence.



All headteachers felt that promotion of healthy lifestyles through the **curriculum** was an important school responsibility. Additionally, **extra-curricular activities** (such as physical activity, cooking or gardening opportunities) were seen by many participants as enhancing the school’s role in healthy lifestyle promotion.

“We do cookery clubs and we try and teach them how to cook... because yes there is a role in the future for that person to understand that when they’re an adult that they can cook and they can eat healthily” (P8)

School health policies were discussed as a way of promoting consistent messages throughout school alongside maintaining a high profile for promoting health. Furthermore, the provision

of healthy **school meals** was perceived by all as an important school function. Participants believed that external support was required in schools to tackle the complex issue of obesity prevention, and that working in **partnership with external agencies** (such as school meals services, local Healthy Schools teams and school nurses) was an important part of their responsibility. Within school, the need to **work with parents**, and the importance of staff acting as **role models** were also discussed.

“I think the responsibility comes from not just the education side of it but the examples that you set” (P14)

Some participants alluded to their school taking on a more active role in promoting health and acting as a **‘backstop’** when parents seemed to have failed. Examples included breakfast or PE kit provision and additional extra-curricular physical activities.

“We target the families where we know the children are unlikely to get breakfast, to come to breakfast club, so they're targeted, so they've got that meal” (P7)

The extent to which headteachers directed the school to undertake the roles and responsibilities reported above was affected by various factors, described in the next section.

Influencing factors

Headteacher perceptions of obesity. Perceptions of obesity as a concern varied and influenced the extent to which healthy lifestyle activities were prioritised by schools. Difficulties with obese children accessing parts of the curriculum (particularly physical education), and the resultant negative impact on learning, were discussed alongside health concerns. Issues regarding weight-related teasing and the emotional wellbeing of obese children were also raised.

“In year six [aged 10-11 years]... I've got girls that weigh more than I do and they have all sorts of health complications and are always at the hospital for one thing and another, so it is very, very worrying” (P17)

“It's an issue for children in terms of their self-esteem, their perception of themselves” (P14)

Some headteachers, although aware of obesity within their school, did not identify it as a big issue. A few were more concerned about undernutrition.

“I don't think it is an absolute priority for us but I'd say in every year group/in every class there's probably one or two children who are significantly overweight” (P2)

“We have a lot of I'd say malnourished children... in many respects we're the other end of the scale” (P8)

A prominent motivator in promoting healthy behaviours was the belief that health positively impacts learning. Many participants talked about physical activity and healthy eating

improving alertness, concentration and school attendance. Some headteachers specifically highlighted the positive impact of physical activity on confidence, self-esteem and team-working skills of children.

“I think healthier children are more switched on to their learning and they seem more enthusiastic and more willing to work hard and be independent and engage with the learning” (P4)

“The children individually obviously get great esteem [from physical activity opportunities], that esteem obviously lasts into their academic work, they feel boosted, they're given avenues to shine where perhaps they wouldn't be able to shine, again, massive boost” (P21)

Some headteachers discussed the importance of their own role in the promotion of healthy lifestyles, and saw their personal beliefs and attitudes as key to its success.

“It works in our school because I'm passionate about it [health promotion], so if I didn't drive it, it would be difficult to keep it going, you do need that kind of ethos really, a whole school ethos, otherwise it's just unsustainable” (P22)

“I think the high profile of PE [physical education] comes principally from myself” (P3)

Family-related factors. Universally, headteachers perceived that whilst schools have a contribution to make in preventing obesity, parents held the principal responsibility.

“We will play a role, we will support... we will educate, but I firmly believe that it's got to be parents who take the ultimate responsibility” (P3)

Despite this, many participants recognised barriers to families leading healthier lifestyles, including lack of time due to working hours, cultural practices, costs of healthy food and activities, and lack of knowledge and skills, particularly in preparing healthy meals. In some schools serving deprived communities, headteacher perceptions of family lifestyle behaviour inadequacies influenced the school to the extent that it assumed roles that under other circumstances would be viewed as parental responsibilities.

“Some of it is linked to choices that families make and maybe understanding of what is a healthy diet... more so probably is the link to how much income families have and we do have also issues around poor housing, that have links to health as well. So all of these things impact on the kinds of decisions our parents make and I think are a factor in our children being obese” (P16)

“We have a big gap in parenting knowledge and so we almost step into the shoes and have to do an awful lot of that that would ordinarily be done by parents elsewhere” (P13)

Many participants saw poor quality packed lunches as a problem. Although a minority reported having strict healthy lunchbox policies, most thought this was outside the school’s remit and were fearful of ‘overstepping the boundary’ and harming relationships with parents.

“We don’t search lunchboxes, we don’t police what parents send their children in with, because I don’t think it’s our role” (P8)

As evident from headteachers' responses, the extent to which schools worked with parents varied greatly. Although all participants said they would contact individual parents with specific concerns, some felt that parent education was not their responsibility and were keen to express limitations of the school role. Headteachers from schools in more affluent areas felt no need for parent education, as parents tended to support healthy lifestyles. Other interviewees in schools serving more deprived areas, many with high ethnic minority group representation among their pupils, thought that working with parents was crucial to promote consistent messages between home and school.

"We're fortunate in that we're a fairly affluent area and parents are very aware of their children's needs and the whole issue of childhood obesity" (P10)

"What we don't want is for them to go home and it's almost like two steps forward and six steps back; so you educate the parents then to educate the children and then you've got the triangle, everybody working together" (P12)

A few participants discussed successful parent education programmes within school. Facilitators to success included good relationships with parents; having dedicated staff as 'parent workers'; use of 'experts' from external agencies, and the availability of appropriate facilities. Some headteachers felt that inviting parents into school to work alongside their child was more effective than parent-only workshops.

"The only way we can get parents into school is when they do something with their child. They don't want to come to be lectured at" (P1)

However, it was recognised that some parents were hard or impossible to engage with due to work commitments, lack of interest, or fear of school. Some headteachers reported that differences in the perception of obesity among different ethnic groups sometimes made parental engagement problematic. Frustration was evident amongst some interviewees regarding a perceived lack of early years parental support.

“A lot of our parents are very worried about the professional institution; sometimes it’s very difficult to get them into the school” (P12)

“We’ll maybe perceive it as they are obese or certainly overweight but their culture says that they’re not” (P5).

“Often by the time they’ve come to us and they’re four and five years old, those habits have been set and it’s about unbreaking the habits, you know, we do need to start much, much earlier” (P16)

External factors. A range of external factors influencing the school’s role in preventing obesity was identified. The main perceived barriers that prevented schools from doing more to promote health were government pressure to focus on academic achievement and the ‘prescriptive curriculum’.

“The education system at the moment is so pressurised... heads, deputies, staff are all pressurised... it’s got to be results, results, results all the time” (P21)

Despite recognition from interviewees that promoting health had a positive impact on learning, headteachers discussed how the focus on achievement in the core subjects of literacy and numeracy made them reluctant to take time away from academic learning.

“If this was my school and I was able to run it in any way I wanted to... a bigger part of their education would be healthy eating and active lifestyles. I can only do it minimally because of the government agenda... which has to be the ultimate priority otherwise I get into trouble” (P7)

Another common barrier identified was difficulty in accessing school nurse support. Whilst two participants reported good school nursing provision, others found that accessing support was increasingly difficult or impossible. Many interviewees expressed dissatisfaction with the National Childhood Measurement Programme (NCMP) (a weight surveillance programme measuring children in English state schools in Reception (4-5 years) and Year 6 (10-11 years)) (Health and Social Care Information Centre, 2013) as they felt schools were provided with statistics on pupil weight status, but no further support was offered. In some situations parents were angered by receiving letters telling them their child was obese and vented their frustrations on the school.

“We can't get a nurse for love nor money sometimes when we want a nurse, but you know, we can spend loads of money on weighing the poor kids... “to make a survey and to find out how obese the children are”... it just seems to me a waste of resources... The measuring and the targeting and the numbers and the figures, that won't be cut, that will carry on, there will be people to do that, but actually people to do the real stuff has sort of disappeared” (P8)

Some participants discussed good relationships with external support agencies, for instance health or voluntary groups. Such input was appreciated for adding capacity to deliver plus expertise that may not exist amongst school staff.

“I think they [parents and children] believed it more from him as a... dietary sort of expert, than they would if we’d just been saying the same old things over and over again” (P15)

Other headteachers noticed that some previously valued support had recently been withdrawn, for example local Healthy Schools teams, School Sports Partnerships and Children’s Centres, leaving schools to ‘do things for themselves’. Some participants, whilst recognising the positive impact of such initiatives, reported not having the capacity to maintain the work once the support was removed.

“The funding has stopped so schools have to pay for it themselves, at one time you would’ve had somebody come in and audit your school and you get a Healthy School award... schools have to manage all that stuff themselves, and when they’re really busy these things are going to go” (P22)

Some participants felt the need for external support was so great that it warranted dedicated support staff to focus on health promotion amongst children and families.

“In an ideal world, if you had a nurse, a school nurse or a school person that was able to be in school two or three days a week that was working with families, that was able to go into houses, that was able to help them at a dinner time, was able to train and teach the families, then, you know, I would welcome that” (P8)

“I’ve got an IT specialist, I’ve got a top notch caretaker, I’ve got a first class bursar, I’m going to have a sports coach, I’ve got an attendance officer and if we got a healthy person, school nurse, you know, it’d be brilliant wouldn’t it?” (P3)

Various influencing factors were discussed in relation to extra-curricular provision. Some headteachers reported very few extra-curricular activities, whilst others described a vast array of opportunities for physical activity, cooking or gardening. Some participants cited lack of equipment or space as a barrier, and funding was perceived as a major influence. Some schools serving deprived communities were able to fund activities for all children using 'pupil premium funding' (additional funding given to English schools to raise attainment of disadvantaged pupils), whereas others charged parents to cover costs. Participants describing the widest range of opportunities were more likely to be from schools serving deprived communities, although headteacher perceptions of the benefits of extra-curricular activities appeared to be an influencing factor regardless of deprivation level. Related to this, an interesting difference between schools was the use of school staff. Some headteachers believed that teachers lacked the time, skills or confidence to run out-of-school-hours clubs. Other participants reported teachers running clubs on a voluntary basis. In a minority of schools, where participants saw extra-curricular activities as highly beneficial to children, it was compulsory for all staff to run a club.

"They just can't [run extra-curricular clubs] because they're too busy, they have to plan lessons. I mean, most teachers... do a ten hour day anyway and then you just want to go home and flop, haven't got any energy to do anything else" (P22)

"All my teaching staff are expected to do an after-school or lunchtime activity, so that's part of their contracted hours" (P19)

Headteacher expectations of staff also influenced the extent to which schools provided good role models for children. Most viewed this as an important part of the school function which

included staff eating with children at lunchtimes, policies prohibiting staff from eating unhealthy foods in front of children, and physical involvement in out-of-school-hours activities.

“We get involved and I think that's part of the secret here, the children don't see us just standing there and watching... we're in a canoe, we're up a wall, we're in the mud, and it's fun” (P20)

Although one participant discussed how they didn't see themselves as a healthy role model; *“I don't model it clearly [laugh] I'm not a good role model, but you know, generally I encourage it throughout the school” (P7)*, some felt it vital that they modelled healthy behaviours to children and staff. A few interviewees discussed problems with staff who they thought were not good role models in terms of their lifestyle choices, and the difficulties this raised in working with parents and children.

“I have some staff who are obese, you know, there's a bit of a thing there isn't there, a difficulty, 'so well you can't really tell me about my child and what they should and shouldn't be eating, you've got staff who are not very healthy themselves'... tricky” (P22)

Discussion

Participants in this study recognised the importance of promoting healthy lifestyles within schools and identified a range of factors influencing school roles and responsibilities in preventing obesity. Headteachers perceived positive effects of health on education, and the impact on learning was discussed as a major driver in school efforts to promote health. This finding is consistent with several studies showing the association between health and academic attainment (Caird et al., 2011; Healey, 2004; World Health Organisation, 1996; St

Leger and Nutbeam, 2000), and a substantial body of evidence showing that poor health can inhibit learning (Healey, 2004; St Leger and Nutbeam, 2000; Feinstein et al., 2008). Despite this, the current study found an unwillingness or fear amongst headteachers in dedicating more time to health promoting activities due to the 'prescriptive curriculum' and academic targets. This resonates with a recent qualitative study of primary school teachers in which taking time away from core curricular subjects (e.g. to participate in physical activity), was perceived as a risk (Griffin et al., 2014). Additionally, within the current study, barriers were perceived that prevented schools from doing more to promote health both within and outside of the curriculum, including lack of space, facilities, time, funding and support. Until school leaders feel better supported to dedicate more time and resources to health promotion, this perception of risk and the associated barriers will continue to pervade.

An important finding of this study is that, within discussions, the term 'obesity prevention' was not widely used by headteachers, and health promoting activities were instead considered within the context of providing a rounded education and the development of the 'child as a whole'. This, combined with headteachers' positive perceptions of the impact of health promotion on learning, has implications for future branding of obesity prevention programmes within schools. There appears to be a clear need for greater integration between health and education with obesity prevention efforts firmly anchored within the existing school curriculum (Brandstetter et al., 2012), and fitting with the school emphasis on improving educational attainment (Langford et al., 2015). Promotion of the wider benefits of obesity prevention programmes to schools should be presented within the context of the core function of primary schools. As such, obesity prevention should be an integral part of the education agenda and curriculum rather than bolt-on initiatives. The Health Promoting Schools approach (World Health Organisation, 1998), recognises the symbiotic relationship between health and education, and provides schools with a framework for improving both

health and education through a ‘whole school approach’. The approach has been shown to be effective in improving physical activity and nutrition in schools (Langford et al., 2015).

However, many schools need support to implement the Health Promoting Schools approach, particularly in working with families.

Headteacher perceptions of access to and quality of the school nursing service were shown to vary, as also reported in previous school-based studies (Dawson, 2008; Howard-Drake and Halliday, 2015). Many participants described difficulties in accessing services with frustrations seemingly compounded by an apparent lack of support received following the NCMP measurements. The recent withdrawal of other sources of support (for example Healthy Schools teams) due to funding cuts led many participants to believe that schools were inadequately supported; despite having insufficient time and expertise to tackle the complex and sensitive issue of obesity, schools were left to ‘get on with it’. This was particularly the case in schools serving deprived communities, where need for supporting parents was perceived as high. As suggested by some participants, dedicated support workers in schools would be a possible solution to this problem.

Strengths and Limitations

Views represented in this study are specific to the 22 participants. Those agreeing to participate may have been more interested in obesity prevention than those who declined, meaning alternative views could have been missed. In addition, the decision not to carry out ‘member checking’ may have introduced bias in that interpretation of responses was conducted solely by the authors without the confirmation of participants. However, the consistency of many of the findings with those from other sources lends some validity. Furthermore, the wide range of schools represented, and the in-depth insight into headteachers’ views enables tentative conclusions to be drawn which may help direct future guidance and resources for preventing obesity in schools.

Conclusions

Headteachers considered children's holistic development as a key school responsibility.

Health promotion was seen in this context, with its perceived impact on learning an additional advantage. Although much of this effort contributes towards obesity prevention, in most schools, this was not the main driver for such activities, an important factor to take into account in the future design and promotion of school-based obesity prevention initiatives.

Headteachers believed that the responsibility for preventing obesity lies mainly with parents, whilst recognising that many families face barriers to adopting healthy lifestyles and require support. Although many agreed that schools are ideally placed to provide such support, some felt they lacked the necessary expertise and capacity. Partnership working with expert input could be a solution.

School leaders need support, through resources and government policy, to enable them to do more on healthy lifestyle promotion both within and outside of the curriculum. Targeting resources to those schools serving deprived communities would help to reduce health inequalities.

References

Brandstetter, S., Klenk, J., Berg, S., Galm, C., Fritz, M., Peter, R. et al. (2012) Overweight prevention implemented by primary school teachers: a randomised controlled trial. *Obesity Facts*, **5**, 1-11.

Caird, J., Kavanagh, J., Oliver, K., Oliver, S., O'Mara, A., Stansfield, C. et al. (2011) *Childhood obesity and educational attainment: a systematic review*. EPPI-Centre, Social Science Research Unit, Institute of Education, University of London: London.

Carter, M.A., and Swinburn, B. (2004) Measuring the obesogenic food environment in New Zealand primary schools. *Health Promotion International*, **19**(1), 15-20.

Clarke, J., Fletcher, B., Lancashire, E., Pallan, M. and Adab, P. (2013) The views of stakeholders on the role of the primary school in preventing childhood obesity: a qualitative systematic review. *Obesity Reviews* **14**(12), 975-988.

Dawson, B. (2008) *Healthy body: healthy mind: how headteachers are managing their schools to help improve children's health*. National College for School Leadership.

Ebbeling, C.B., Pawlak, D.B., Ludwig, D.S. (2002) Childhood obesity: public-health crisis, common sense cure. *The Lancet* 2002; **360**(9331), 473-482.

Feinstein, L., Sabates, R., Sorhaindo, A., Rogers, I., Herrick, D., Northstone, K. et al., (2008) Dietary patterns related to attainment in school: the importance of early eating patterns. *Journal of Epidemiology and Community Health* **62**(8), 734-739.

Gale, N.K., Heath, G., Cameron, E. Rashid, S., and Redwood, S. (2013) Using the framework method for the analysis of qualitative data in multi-disciplinary health research. *BMC Medical Research Methodology*, **13**(1), 117.

Griffin, T.L., Clarke, J.L., Lancashire, E.R., Pallan, M.J., Passmore, S. and Adab, P. (2014) Teacher experiences of delivering an obesity prevention programme (The WAVES study

intervention) in a primary school setting. *Health Education Journal* November 7, 2014: p.0017896914556907.

Healey, K. (2004) *Linking children's health and education: Progress and challenges in London*. London: King's Fund.

Health and Social Care Information Centre (2013). *National Child Measurement Programme: England, 2012/3 school year*. Available at: www.hscic.gov.uk/catalogue/PUB13115/nati-chil-meas-prog-eng-2012-2013-rep.pdf. Accessed 9 March 2015.

Howard-Drake, E.J. and Halliday, V. (2015) Exploring primary school headteachers' perspectives on the barriers and facilitators of preventing childhood obesity. *Journal of Public Health*, doi:10.1093/pubmed/fdv021.

Karnik, S. and Kanekar, A. (2012) Childhood obesity: a global public health crisis. *Int J Prev Med*, **3**(1), 1.

Katz, D.L., O'Connell, M., Njike, V.Y., Yeh, M.C. and Nawaz, H. (2008) Strategies for the prevention and control of obesity in the school setting: systematic review and meta-analysis. *International Journal of Obesity*, **32**(12), 1780-1789.

Kropski, J.A., Keckley, P.H., and Jensen, G.L. (2008) School-based obesity prevention programs: an evidence-based review. *Obesity*, **16**(5), 1009-1018.

Langford, R., Bonell, C. Jones, H. Campbell, R. (2015) Obesity prevention and the health promoting schools framework: essential components and barriers to success. *International*

Journal of Behavioral Nutrition and Physical Activity, **12**(15) DOI 10.1186/s12966-015-0167-7

Lobstein, T., Jackson-Leach R., Moodie, M.L., Hall, K.D., Gortmaker, S.L., Swinburn, B.A. et al. (2015) Child and adolescent obesity: part of a bigger picture. *The Lancet*, **385**(9986), 2510-2520.

National Institute for Health and Clinical Excellence (2006). *Obesity: the prevention, identification, assessment and management of overweight and obesity in adults and children*. NICE: London.

Office for National Statistics (2010). *National Statistics Postcode Directory: 2010 User Guide*.

Ritchie J. and Spencer, L. (1994) Qualitative data analysis for applied policy research. In Bryman, A. and Burgess, R.G. (eds). *Analyzing Qualitative Data*. London: Routledge, pp. 173-194.

Robinson, V., Lear, J. and Eichner N. (2006) The role of school health professionals in preventing childhood overweight. *The Center for Health and Health Care in Schools*.

St Leger, L. and Nutbeam, D. (2000) Research into health promoting schools. *Journal of School Health*, **70**(6), 257-259.

Story, M., Nanney, M.S., and Schwartz, M.B. (2009) Schools and obesity prevention: creating school environments and policies to promote healthy eating and physical activity. *Milbank Quarterly* **87**(1), 71-100.

World Health Organisation (1996) *The status of school health*. Available at: www.who.int/school_youth_health/media/en/87.pdf. Geneva: WHO. Accessed 9 March 2015.

World Health Organisation (1998) *Health Promoting Schools: a healthy setting for living, learning, working*. Geneva: World Health Organisation.

World Health Organisation (2004) *Global strategy on diet, physical activity and health*. Available at: www.who.int/dietphysicalactivity/strategy/eb11344/strategy_english_web.pdf. Accessed 9 March 2015.