



Parental Perceptions of Onsite Hospital Food Outlets in a Large Hospital in the North East of England: A Qualitative Interview Study Protocol

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Abstract

The need to address the increasing obesity rates of children living in the United Kingdom has become a Government priority. It has been recognized that a public health level approach as opposed to an individual approach is potentially one way forward. The wider food environment should be designed so that the 'healthier choice' is the easiest choice; this includes public sector settings such as hospitals. Due to Private Finance Initiative deals many hospitals do not own their premises and therefore do not have control over the types of shops and outlets permitted to operate on site. Many of these outlets sell and promote food and drinks high in sugar, fat and salt undermining health messages developed by the UK National Health Service. Financial incentives have been provided to encourage hospitals to promote healthier food choices; however few outlets have complied with all the set targets. The aim of this qualitative interview study is to determine the dietary perceptions and needs of parents whose children attend a large children's hospital in the North East of England. A purposive sample of parents whose children attend the hospital as an in- or out-patient will be invited to participate in a one-to-one in-depth interview to share their views of the wider hospital food environment. Interviews will be conducted until data saturation is reached and Framework Analysis will be adopted for interview analysis. These findings will inform a larger study to pilot-test an intervention to facilitate healthier food choice in hospital settings.

Keywords

Food environment, Hospital food, Childhood obesity, Children's diet, Parents, Qualitative research

Introduction

Recent figures from the UK National Child Measurement programme showed that a third of 10-11 year olds and over a fifth of 4-5 year olds were overweight/obese [1]. Health problems associated with being overweight or obese cost the National Health Service (NHS) more than £5 billion every year [2]. Hospitals have a role in addressing the obesity burden by helping visitors choose a healthier lifestyle [2]. Health professionals routinely provide advice to patients on healthy eating and it is important their advice is not undermined by lack of healthy food and drink items offered for sale on hospital premises [3]. However, despite NHS trusts having contracted food standards for feeding patients [4], there is no regulation for the wider hospital food environment. Onsite outlets sell and promote foods high in salt, sugar and

fat [5]. Private Finance Initiative deals mean that many hospitals do not own their own premises, but lease them from buildings consortia, who also rent out areas to commercial operators [6]. Economic reliance on revenue may be a key motivating factor encouraging the growth of outlets selling less nutritious food in hospitals [7].

Evidence points to a shift in how the 'obesity epidemic'

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Table 1: Study recruitment sampling framework.

Sampling framework table	
Target audience	Parents of children (age 0-16 years) attending the children's hospital as an in-patient or out-patient.
Inclusion criteria	Parents of varying socio-economic status as determined by postcode assigned Index of Deprivation and age from each of the following: Children attending as a long-stay or short-term patient, and attending a paediatric out-patient clinic.
Exclusion criteria	Parents whose children have to follow a specific diet, such as those attending the allergy clinic. Parents of children who are diabetic will be permitted to participate.
Sampling method	Purposive
Data collection method	Face-to-face semi-structured interviews (interviews will take approximately 30 minutes).
Sample size	Interviews will be conducted until data saturation is reached; this is estimated from previous studies to be around 15-20 interviews.
Recruitment method	Research nurses or research champions will be responsible for identifying potential participants. Eligible parents will be provided with a study information sheet, if happy to be contacted by Lead Researcher (LM), they will be asked to complete an Expression of Interest Form (EOI) which will capture the participant contact details. LM will contact the parent to arrange a time and location for the interview.
Recruitment timeframe	June 2017 - September 2017

should be tackled; the focus for action is moving towards a public health level as opposed to an individual level approach. The 'food environment' where people work and live is likely to influence what people eat [8] with unhealthy food environments fostering unhealthy diets [9]. Evidence of the impact of the hospital food environment in the UK is limited. The UK Government's recent childhood obesity strategy [10] stresses the importance of every public sector setting, including hospitals, having a food environment so designed that the easy choices are also the healthy choices. Hospitals represent an environment which has great potential for influencing what people eat; marketing practices, such as pricing, food placement and signage can change the way visitors eat [8,11].

In 2016, after pressure and support from the Campaign for Better Hospital Food [12], NHS England offered financial incentives for hospitals to remove price discounts and advertising for well-known retailers only fulfilling one of four specific targets such as 'ban price promotions on sugary drinks junk food and sugary drinks and to provide healthier alternatives [13]. The targets are known as the Health and Well being Commissioning for Quality and Innovation [14]. Compliance with the targets was mixed with several and foods high in fat, salt and sugar' [15].

The aim of this study is to explore the perceived needs of families regarding the types of food that are offered for sale in shops and outlets in a North East of England hospital. Parents will be invited to participate in an interview in order to share their views of the food available to them and their family, when their child is admitted either as an in- or out-patient. This is a small pilot study and the data collected will be used to inform a larger study and contribute to hospital healthy eating policies.

Methods and Materials

Design

A qualitative semi-structured, in-depth interview study.

Setting

This study will be conducted at a large UK North East children's hospital. The hospital is one of the 4 largest major children's hospitals in the UK, approximately 73,000 children engage with the service each year. Therefore, improving the hospital food environment has the potential to reach and influence a significant number of families.

Participants and recruitment

Participants will comprise a purposive sample of parents of children attending the children's hospital either as an in-patient or out-patient (see Table 1 for Sampling Framework). This is to enable a wide variety of views from the diverse population which attends hospital. The hospital offers one of the widest ranges of children's healthcare in the country. Each year around 49,000 children attend outpatient clinics, 11,000 are admitted as day cases and around 13,000 children require overnight stays on the wards.

Materials

The interview topic guide was developed from a review of the literature and in consultation with the Newcastle University Teaching Hospitals Healthy Eating Policy committee. The guide was reviewed by a local Young Person's Advisory Group (YPAG North East) and a local virtual advisory parent group.

The topic areas include: experience of being a hospital visitor; knowledge and use of hospital food outlets; satisfaction of available foods; perception of regulations; and on-ward catering. The topic guide is available on request from the corresponding author.

Data management and statistical analysis

Interviews will be digitally recorded with the participant's consent and transcribed verbatim. Framework

analysis will be adopted to analyze the findings of the interviews; this allows the reduction of data through summarization and synthesis enabling comprehensive and transparent analysis [16]; its use is increasingly common in healthcare research. NVivo software will be used to aid indexing and charting [17]. Guided by the principles of grounded theory [18], the data will be repeatedly read and coded independently within a framework of a priori issues identified from the topic guide (Supplementary File) and by participants or which emerge from the data. Regular discussion and review of the analysis by LM and the project team will act a quality control measure.

Ethics

Ethical approval was granted by the Health Research Authority, Rec reference: 17/LO0520. Participants will be informed that they are free to leave the study at any point without having to give a reason.

Monitoring, quality control and assurance

The study will be managed under the guidance of Fuse (The Centre for Translational Research in Public Health) standards. The principal investigator will be responsible for the day-to-day conduct of the study. Quality Control will be maintained through the piloting of interview topic guides, participant information and consent forms. Participant data will be treated in the strictest of confidence and any quotes used in publications will be treated anonymously. All digital data, including master copies, will be securely stored and backed up on the University's File store Service. Access to the data will be accessible only to authorized project staff. The file store is hosted across two data centres, operates shadow copies and daily backups are kept for ninety days.

Preservation of the data

The University does not have a data repository. However, research data with long-term value will be archived with supporting documentation in a suitable repository. A repository will be identified within the first six months of the project starting. The repository will maintain long-term accessibility for at least ten years and create a data record with a robust identifier to aid discovery.

Expected outcomes of the study

The findings of the study will be disseminated through reports to the NHS Foundation Trust and the Children's Hospital Research Community; publications to relevant journals and presentations to stakeholders; and at a local or national public health related seminars or conference.

Discussion

The food environment is likely to be instrumental in influencing what people choose to eat and drink. In

order to address the increasing obesity burden faced by the UK, recent Government strategy policies have called for action to be taken in public sector buildings such as NHS hospitals and other health settings. Research exploring the wider hospital food environment in the UK is scarce. In the US and Canada several studies have been conducted to implement interventions with the aim of encouraging healthful eating [8,19-23]. Some studies have focused on changing the vending machine environment [24-26] for example by stocking 'better' or 'other' choices. In New Zealand the District Health Boards are in line to adopt a new Healthy Food policy across the country. This policy provides guidance on the types of food suitable for sale in hospitals; foods categorized as 'red' will not be permitted for sale. It has been suggested that such interventions may have other positive effects such as modeling healthier choices, providing supportive environments and influencing social norms [26].

A recent Australian study found that 90% of surveyed parents felt that hospital outlets should sell mostly healthy food and 83% felt the health service should restrict the sale of unhealthy food and drink [3]. A further study conducted in Taiwan exploring the user perceptions of hospital retail space, found that the highest consumer demand was for 'convenience' followed by 'cleanliness' and 'comfort' [27]. Moreover, it has been suggested that fast food outlets on hospital premises which provide low-cost food are perceived to be familiar and reliable [28], which may be an important consideration for families.

The use of 'nudge theory', which has gained particular momentum in areas such as health promotion [29], may be a tool which can be utilized by hospitals to facilitate the promotion of healthy eating to visitors in a non-paternalistic way. A nudge is described as 'an aspect of the choice architecture that alters people's behaviour in a predictable way without forbidding any option or significantly changing their economic incentives' [30]. A nudge can involve making an environment less conducive to someone making an unhealthy choice; provision of information; changes to default; and the use of norms [31]. Most eating behaviour occurs without much conscious effort [32] and people's behaviour is susceptible to the influence of 'default rules, framing effects and starting points' [33]. It could be argued that re-framing the environment to change people's behaviour and to 'stop them making the 'wrong' decisions' is controlling. However, private industry and corporate actors have relatively free rein in influencing their customer's health behaviours [33]. This reiterates the unease of retail franchises being present in hospitals.

The study aims to determine the perceptions and needs of parents whose child visits or attends a large hos-

pital in the North East of England. Examining the needs and perceptions of parents and their children will enable a better understanding of how they can be supported, during what may be a stressful period of their life, to choose the healthier food and drink option.

It is believed that this study investigating the types of food and drinks sold to visiting children and their families in the UK is the first of its kind. Our study will be conducted in a single, large-scale hospital, thus generalisability to other healthcare settings may be limited. In addition, we recognize as is common in health care research, parents who volunteer to participate in the study may have prior health knowledge or interest in health-related matters; this may impact the findings. However, the in-depth nature of the interviews will enable a rich source of data to be collected.

The findings from this study will inform the development of a larger study with the aim to pilot-test an intervention to facilitate healthier food choice. This will not only benefit the family in the short-term but in the wider context potentially provide a better environment for promoting long-term, positive health behaviours. This in turn may contribute to changing hospital food policy for the benefit of all patients, staff and visitors.

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Supplementary Information

Hospital food environment study Parent interview topic guide

Experience of being a visitor

- Can you tell me about your experience of visiting the Great North Children's Hospital
 - o Child's age
 - o Condition
 - o How often do they visit/stay in hospital?
 - o Does this require you to stay overnight with your child?

Knowledge and use of outlets

- Can you tell me about the shops that are located within the RVI
- Do you/have you visited any of the shops/outlets?
- What sort of things do you normally buy at these shops/outlets?
- Have you/your family ever **needed** to buy a snack/meal whilst in the hospital
- Do you/have you and/or your family **eaten** a snack/meal bought from one of the hospital shops/outlets?

- o If not why not?
- o Was food sourced elsewhere e.g. shop/outlet outside hospital/brought from home?
- Can you tell me about the snack(s)/meal(s) bought from the hospital shop/outlet
 - o Taste
 - o Healthiness
 - o Cost
- Can you tell me about any special offer/deals that were/are available?

Satisfaction of available foods

- What influences your decision of what food to buy?
- What do you think about the choices available within the hospital
 - o Taste
 - o Healthiness
 - o Cost
- Are there other types of foods/snacks/shops/outlets you would like to be available?
- Do the outlets cater for families?
- What changes would you like to be made to the available foods?

Perception of regulations

- The outlets in the hospital are not regulated by the NHS, how do you feel about this?
- Do you think people want to make healthier food choices?
 - o If not why not?
- How do you think people can be helped to make healthier food choices when buying snacks or food at the hospital?
- How would you feel if certain snacks, drinks or foods were banned for sale in the hospital?

On ward catering

- Are you aware of the carer's food policy?
 - o If yes, how did you find out about it?
 - o Have you taken advantage of the policy?
 - o What did you think of the meal/snack provided?