



Tabriz University of Medical Sciences
Faculty of Management and Medical Informatics

Evidence-Based Journal club

- **Raana Gholamzadeh Nikjoo**
- **PhD candidate of Healthcare Management**



Citation:

A qualitative study of primary care clinicians' views of treating childhood obesity

Olivia Walker, Mark Strong, Rebecca Atchinson, Joanna Saunders and Jo Abbott

- **BMC Family Practice 2007, 8:50**

Affiliation:

University of Sheffield Medical School, Beech Hill Road, Sheffield, S10 2RX, UK,



About

Aims and scope

BMC Family Practice is an open access, peer-reviewed journal that considers articles on all aspects of primary health care, including clinical management of patients, professional training, shared decision making, and the organisation and evaluation of health care in the community.

Open access

All articles published by *BMC Family Practice* are made freely and permanently accessible online immediately upon publication, without subscription charges or registration barriers. Further information about open access can be found [here](#).

As authors of articles published in *BMC Family Practice* you are the [copyright holders](#) of your article and have granted to any third party, in advance and in perpetuity, the right to use, reproduce or disseminate your article, according to the [BioMed Central license agreement](#).

For those of you who are US government employees or are prevented from being copyright holders for similar reasons, BioMed Central can accommodate non-

[Submit a manuscript](#)

[Editorial Board](#)

[Sign up to article alerts](#)

FOLLOW



ISSN: 1471-2296

Advertisement

All articles published in *BMC Family Practice* are included in:

- CABI
- CAS
- Citebase
- Current contents
- DOAJ
- Embase
- EmCare
- Global Health
- MEDLINE
- Medscape
- OAlster
- PubMed
- PubMed Central
- Science Citation Index Expanded
- SCImago
- Scopus
- SOCOLAR
- Zetoc

The full text of all articles is deposited in [digital archives](#) around the world to guarantee long-term digital preservation. You can also access all articles published by BioMed Central on [SpringerLink](#).

BMC Family Practice has an Impact Factor of 1.669.

Abstract

Background: The prevalence of childhood obesity is rising and the UK Government have stated a commitment to addressing obesity in general. One method has been to include indicators relating to obesity within the GP pay-for-performance Quality and Outcomes Framework (QOF) contract. This study aimed to explore general practitioners' and practice nurses' views in relation to their role in treating childhood obesity.

Methods: We interviewed eighteen practitioners (twelve GPs and six nurses) who worked in general practices contracting with Rotherham Primary Care Trust. Interviews were face to face and semi structured. The transcribed data were analysed using framework analysis.

Results: GPs and practice nurses felt that their role was to raise the issue of a child's weight, but that ultimately obesity was a social and family problem. Time constraint, lack of training and lack of resources were identified as important barriers to addressing childhood obesity. There was concern that the clinician-patient relationship could be adversely affected by discussing what was often seen as a sensitive topic. GPs and practice nurses felt ill-equipped to tackle childhood obesity given the lack of evidence for effective interventions, and were sceptical that providing diet and exercise advice would have any impact upon a child's weight.

Conclusion: GPs and practice nurses felt that their role in obesity management was centred upon raising the issue of a child's weight, and providing basic diet and exercise advice. Clinicians may find it difficult to make a significant impact on childhood obesity while the evidence base for effective management remains poor. Until the lack of effective interventions is addressed, implementing additional targets (for example through the QOF) may not be effective.

PICo for qualitative studies

PICo

P	I	Co
Population	Interest	Context
What are the characteristics of the patient or population? What is the condition or disease you are interested in?	The phenomena of Interest relates to a defined event, activity, experience or process	Context is the setting or distinct characteristics. Note: Context not comparator

Background:

- Obesity is a **complex public health** issue representing a major threat to children's health
- The UK Government has responded by setting targets that aim to "**halt the year on year rise in obesity among children aged under 11 by 2010**"
- As part of this broader strategy obesity was included in the **general practice Quality and Outcomes Framework (QOF) contract for 2006–7.**

Quality and Outcomes Framework :

- is the **annual reward and incentive programme** detailing GP practice achievement results.
- It rewards practices for the **provision of quality care and helps standardise improvement in the delivery of primary medical services.**
- It is a voluntary process for all surgeries in England and was introduced as part of the GP contract in 2004.
- The indicators for the QOF change annually, with new measures and indicators being retired

Background:

- Clearly there is the potential for other obesity related indicators to be included in future QOF contracts, and it is possible that **these may relate to health outcomes, rather than processes.**
- This is difficult territory: **linking GP practice income to health outcomes that depend on the choices that patients make is controversial**

Background:

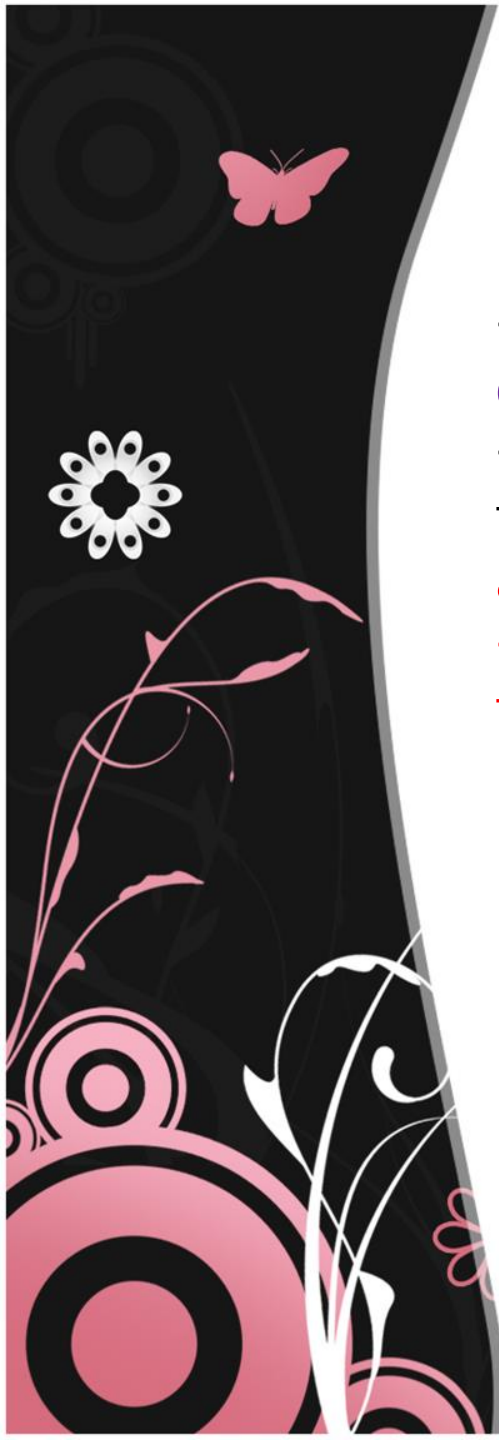
- GPs may also **resist further targets related to childhood obesity** given that the evidence base in this area is so poor.
- A Cochrane systematic review of interventions for treating childhood obesity included 18 studies of various different treatments, but **found little firm evidence of effectiveness for any of them.**
- Not surprisingly guidance for the prevention and treatment of obesity published by the UK's National Institute for Health and Clinical Excellence (NICE) strongly states the urgent need to develop this evidence

Clinicians views of managing adult obesity:

- General practitioners' (GPs') **views concerning their role in the management of adult obesity have been explored in a number of studies from a range of countries.**
- One UK study concluded that **general practitioners believed that obesity was not within their professional domain, even though patients wanted their doctor to take responsibility for their weight problems.**

Clinicians views of managing adult obesity:

- another from the UK ,have reported that GPs do feel they have a role in the management of obesity, either as counselling patients on health risks or giving advice on weight management
- Regardless of whether GPs feel they have a role in the management of obesity, they are generally pessimistic about the likely impact of any advice that they give.
 - A lack of evidence based interventions,
 - a lack of training (particularly nutrition training),
 - poor motivation on the part of the patient and
 - poor family support have been cited as important reasons for failure



Clinicians views of managing adult obesity:

- It is not surprising then that many GPs find managing obesity unrewarding or frustrating.
- In contrast, research with practice nurses has found that they generally felt confident in giving weight loss and nutritional advice.
- However, they were not optimistic that patients would follow this advice, or that weight loss would result



Clinicians views of managing childhood obesity:

- Managing childhood obesity has the potential to be more complex than managing adult obesity because the clinician is interacting not only with the child, but the wider family as well.
- Parents may not recognise or accept that their child has a weight problem ,and GPs feel that even by raising the issue a breakdown in the doctor patient relationship may result.

Objectives:

● In this study we aimed to explore the views of GPs and practice nurses concerning childhood obesity in one district in the north of the UK

Screening Questions:

1. Was there a clear statement of the aims
of the research?

☐ Yes

☐ Can't tell

☐ No

HINT: Consider

- What was the goal of the research?
- Why it was thought important?
- Its relevance

Method:

Participants

- In May 2006 the **practice managers from the 39 general practices** who contract with Rotherham Primary Care Trust were asked to invite their GPs and practice nurses to participate in this study.
- Eighteen participants from 11 practices responded to the invitation, of which 12 were GPs (11 male and 1 female) and six (all female) were practice nurses.
- The majority of the participants were aged 40–49 years
- GPs and nurses were drawn varied in terms of their size, and the socioeconomic status of the registered patient population.

Method:

Data collection and analysis

- Data collection was by semi-structured interview following the interview schedule used by Epstein and Ogden, adapted to relate to childhood rather than adult obesity

- Think about the last time you had a consultation with a parent/child who expressed concerns over their child's weight...

or

- Think about the last time you were in a consultation with a child and you expressed concerns about their weight...

Method:

Data collection and analysis

- Can you tell me about the consultation?
- How did you feel about managing this patient?
- What advice or information did you provide for the patient/their parent?
- What did you think the patient/their guardian expected from you?
- Did you feel that the consultation was successful?
- Do you think primary care has a role in dealing with childhood obesity?

Method:

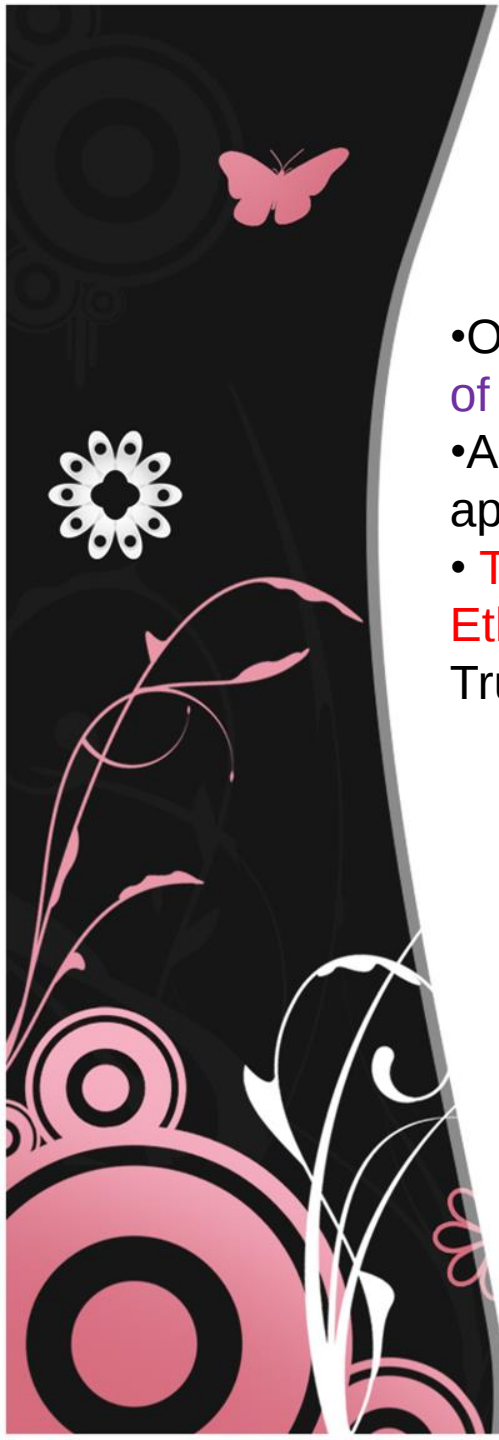
Data collection and analysis

- What management do you think primary care should employ in tackling obesity in children?
- How would/do you feel about managing children with obesity routinely?
- As a GP/practice nurse, whom would you contact for support and advice in relation to obesity?
- How do you feel about the following:
 - Counselling in primary care?
 - Behavioural adjustment techniques?
 - Education in obesity management for GPs and practice nurses?
 - Extending the primary care team to include nutritionists and/or dieticians?
 - Secondary and tertiary care in relation to obesity management?

Method:

Data collection and analysis

- Each interview, carried out **face to face** by researcher OW, lasted approximately **30 minutes**.
- All interviews were **recorded and transcribed verbatim**.
- The transcribed data were analysed using **the Framework method**
- A random sample of nine transcripts were similarly analysed by RA and the results were discussed.



Method:

Ethics

- Our analysis of the views of primary care staff took place as part of a wider Rotherham PCT obesity service evaluation.
- As a service evaluation it did not require formal NHS ethical approval.
- This was confirmed by the chair of the South Yorkshire NHS Ethics Committee and the chair of the Rotherham Primary Care Trust Research Governance committee.

Screening Questions:

2. Is a qualitative methodology appropriate?

☐ Yes

☐ Can't tell

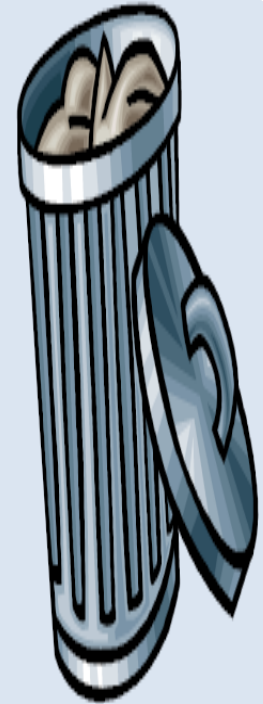
☐ No

HINT: Consider

- If the research seeks to interpret or illuminate the actions and/or subjective experiences of research participants
- Is qualitative research the right methodology for addressing the research goal?

Screening Questions:

Is it worth continuing?



Detailed question:

3. Was the research design appropriate to address the aims of the research?

☐ Yes

☐ Can't tell

☐ No

HINT: Consider

- If the researcher has justified the research design (e.g. have they discussed how they decided which method to use)?

Detailed question:

4. Was the recruitment strategy appropriate to the aims of the research?

☐ Yes

☐ Can't tell

☐ No

HINT: Consider

- If the researcher has explained how the participants were selected
- If they explained why the participants they selected were the most appropriate to provide access to the type of knowledge sought by the study
- If there are any discussions around recruitment (e.g. why some people chose not to take part)

Detailed question:

5. Was the data collected in a way that addressed the research issue?

☐ Yes

☐ Can't tell

☐ No

HINT: Consider

- If the setting for data collection was justified
- If it is clear how data were collected (e.g. focus group, semi-structured interview etc.)
- If the researcher has justified the methods chosen
- If the researcher has made the methods explicit (e.g. for interview method, is there an indication of how interviews were conducted, or did they use a topic guide)?
- If methods were modified during the study. If so, has the researcher explained how and why?
- If the form of data is clear (e.g. tape recordings, video material, notes etc)
- If the researcher has discussed saturation of data

جمع آوری داده ها

۵- آیا داده ها به شکلی جمع آوری شده اند که بتوان به موضوعات اساسی تحقیق دست یافت؟ نمره:

نوشتن توضیح

توجه:

■ آیا محل جمع آوری داده ها توضیح داده شده است؟	
■ آیا روش جمع آوری داده ها به روشنی مشخص شده است (بحث گروهی متمرکز؛ مصاحبه ساختاریافته و...)?	
■ آیا محقق توجیهی درباره روش های انتخابی دارد؟	خیر
■ آیا محقق روش های جمع آوری داده ها را به روشنی توضیح داده است؟ (روش مصاحبه؛ آیا نشانه ای از چگونگی اداره و هدایت مصاحبه وجود دارد؟ آیا از راهنمای عناوین موضوعات استفاده کردند؟)	خیر- در مورد نحوه جستجو و موارد بررسی اسناد توضیحان کافی ارائه نشده است
■ آیا روش های استفاده شده در طول مطالعه تغییر یافته یا اصلاح شده اند؟ اگر بله، آیا محقق توضیح داده چگونه و چرا؟	موردی ندارد
■ آیا شکل و چگونگی جمع آوری داده ها روشن شده است (ضبط صوت؛ تصویر ویدئویی؛ یادداشت برداری و ...)?	بله- ضبط صوت
■ آیا محقق در مورد اشباع داده ها توضیح داده است؟	خیر

Detailed question:

6. Has the relationship between researcher and participants been adequately considered?

☐ Yes

☐ Can't tell

☐ No

HINT: Consider

- If the researcher critically examined their own role, potential bias and influence during
(a) Formulation of the research questions
(b) Data collection, including sample recruitment and choice of location
- How the researcher responded to events during the study and whether they considered the implications of any changes in the research design

بازخورد (ارتباط با شرکت کنندگان / تشخیص سوگیری محقق)

۶- آیا ارتباط بین محقق و شرکت کنندگان به اندازه کافی مورد توجه قرار گرفته است؟ نمره:

توضیح	توجه:
	■ آیا محقق به طور جدی نقش خود و احتمال سوگیری و تاثیرگذاری در موارد زیر را بررسی کرده است؟ ■ تنظیم و تدوین سوالات تحقیق ■ جمع آوری داده ها؛ نمونه گیری و انتخاب محل تحقیق
	■ محقق چگونه به اتفاقات در طی مطالعه پاسخ داده؟ و آیا نتایج حاصل از این تغییرات در طراحی مطالعه را توضیح قرار داده است؟

Detailed question:

7. Have ethical issues been taken into consideration?



Yes



Can't tell



No

HINT: Consider

- If there are sufficient details of how the research was explained to participants for the reader to assess whether ethical standards were maintained
- If the researcher has discussed issues raised by the study (e.g. issues around informed consent or confidentiality or how they have handled the effects of the study on the participants during and after the study)
- If approval has been sought from the ethics committee

مسائل اخلاقی

۳

نمره:

۷- آیا مسائل اخلاقی مورد توجه قرار گرفته؟

نوشتن توضیح

توجه

- آیا توضیحاتی کافی درباره چگونگی تشریح مطالعه و اهداف آن به شرکت کنندگان وجود دارد؟ بطوریکه خواننده مقاله ارزیابی درستی از رعایت استانداردهای اخلاقی داشته باشد.
- آیا محقق مسائل ومشکلات ناشی از مطالعه را توضیح داده است (مثال: درباره رضایت آگاهانه؛ اعتماد؛ چگونگی مواجهه با اثرات مطالعه روی شرکت کنندگان در حین مطالعه)؟
- آیا محقق از کمیته اخلاق رضایت یا موافقت گرفته (احراز موافقت از کمیته اخلاق)؟

Detailed question:

8. Was the data analysis sufficiently rigorous?

☐ Yes

☐ Can't tell

☐ No

HINT: Consider

- If there is an in-depth description of the analysis process
- If thematic analysis is used. If so, is it clear how the categories/themes were derived from the data?
- Whether the researcher explains how the data presented were selected from the original sample to demonstrate the analysis process
- If sufficient data are presented to support the findings
- To what extent contradictory data are taken into account
- Whether the researcher critically examined their own role, potential bias and influence during analysis and selection of data for presentation

تحلیل داده ها

نمره:

۸- آیا تحلیل داده ها از استحکام و قوام لازم برخوردار است؟

توجه	نوشتن توضیح
■ آیا توضیح جامع درباره فرایند تحلیل داده ها وجود دارد؟	
■ آیا تحلیل درون مایه ای صورت گرفته است؟ اگر چنین باشد آیا روشن است که چگونه دسته ها و درون مایه ها از متن استخراج شده اند؟	
■ آیا محقق برای نشان دادن فرایند تحقیق روشن ساخته است که داده های گزارش شده چگونه از نمونه اصلی انتخاب شده اند؟	
■ آیا اطلاعات داده شده برای تایید و پشتیبانی یافته ها کافی هستند؟	
■ تا چه حدی به داده های متضاد اشاره شده است؟	
■ آیا محقق به طور جدی نقش خود؛ سوگیری و تاثیر پذیری در طی تحلیل داده ها و انتخاب داده های ارائه شده را ارزیابی کرده است؟	

Results:

- A number of themes emerged from the data.
- In summary, **clinicians felt that families or other agencies, rather than the GP, were responsible for solving this difficult and often sensitive problem.**
- Interventions were framed in terms of providing dietary and exercise advice
- **Lack of time was cited as a reason for sometimes avoiding engagement with the issue**

Results:

- *The responsibility for managing childhood obesity:*

- GPs and practice nurses felt that their role was **confined to raising the issue of a child's weight with his or her parents** and managing any associated medical problems
- **family may hold the key to solving the problem**, they may be unwilling or unable to take on this responsibility.

Results:

- *The difficulty of the task:*

- Childhood obesity was sometimes felt to be a problem that was just too difficult to tackle, and that clinicians could not cope with the scale of the problem.
- this may explain the unwillingness that clinicians felt towards accepting responsibility for it
- GPs framed their interventions in terms of providing diet and exercise advice for the child and their family, but there was a feeling of pessimism that the advice would have little impact upon the child's weight.
- It was felt that there was just too big a gulf between a healthy diet and what the children actually ate

Results:

The sensitive nature of the subject

- Some reasons for the sensitivity of the subject were given.

The link between feeding and nurturing was made by one GP:

((They seem to like fat babies still, think they are healthy. They don't seem to have any notion that it's reasonable to restrict baby's food, keep their weight under control... they usually are quite prickly about it and the reason is they are usually all fat'))

- The anxiety that bringing attention to a child's weight could cause psychological problems was also voiced

Clinicians were concerned that they may jeopardise their relationship with the family if they mentioned the problem of a child's weight

Results:

The problem of lack of time and pressure of work

- GPs identified another important barrier to discussing a child's weight during a consultation as being a limitation of time and resources.

- *You only have ten minutes, you just can't do it' (GP.2)*
- *'I don't wish to do it [discuss a child's weight] if I'm busy, cos I know it takes a long time' (GP.11)*
- *'I don't think we should be going out looking for the work. I think that it's more a public health matter, we just don't have the resources to go looking for more work' (GP.6)*

Discussion:

Summary of main findings

- GPs and practice nurses we sampled view childhood obesity as primarily a social or family problem and that the clinician's role is to raise the issue, rather than to manage the problem themselves.
- The management of childhood obesity was felt to be difficult, primarily due to the sensitive nature of the subject, and the lack of effective interventions.
- There was a general pessimism that dietary advice would be unsuccessful given the gulf between a healthy diet and what many children ate.

Discussion:

Strengths and limitations of the study

- One of the strengths of Framework analysis is its flexibility in allowing ideas to be reformulated as the analytical process progresses.
- because it is so "open" it is possible that the researcher's own views, conflicts and prejudices influenced the themes that were subsequently identified from the transcripts
- An attempt was made to minimise this by involving in the analysis a second researcher with a different professional background (RA is a non-medical public health specialist whereas OW is a fourth year medical student).

Discussion:

Strengths and limitations of the study

- Although our results are broadly in keeping with results of similar studies, we can not assume that they are representative of practice nurses and GPs in general. Because our cohort of participants was chosen using opportunistic sampling from only one primary care trust area it may only reflect the views of local clinicians with an interest in obesity research.
- However, even though this study was of a small scale, it has provided valuable information for the primary care trust and will inform future decision making regarding obesity services.

Discussion:

Comparison with existing literature

- The results of this study appear to be consistent with those found in the majority of the existing literature.
- There are parallels between the findings of this study and those that relate to adult obesity.

Discussion:

Implications for clinical practice and future research

- The Department of Health has recently published a care pathway for the assessment and management of overweight and obese adults, young people and children in primary care [26].
- Within this suite of documents guidance **is specifically provided to help clinicians in raising the issue of weight with both adults and children**, which our study identified as an important barrier to obesity management.

Discussion:

Implications for clinical practice and future research

- However, the real question is "what works in the treatment of childhood obesity?"
- " Clearly there is an urgent need to strengthen the evidence base in this area, and our exploration of the views of GPs and practice nurses in Rotherham suggests that this lack of evidence is an one of the barriers to even raising the issue in the first place.

Discussion:

Implications for clinical practice and future research

- However, if evidence suggests that primary care staff should engage in, for example, more behaviour change or motivational counselling, there is likely to be a significant requirement for increased resources, training and clinician time.
- With the forecast rise in childhood obesity, and the Government's stated commitment to address the problem, it is likely that considerable pressure will be placed on GPs and practice nurses to intervene in this arena.
- The Quality and Outcomes Framework may be one such lever,
- but given that GPs see childhood obesity as primarily a social or family problem there may be resistance to including more obesity related measures (particularly those related to outcomes) in the contract.

Discussion:

Implications for clinical practice and future research

- Further research with a **larger sample size** would be of benefit, and
- a **specific study** to determine if the Department of Health's care pathway has assisted primary care clinicians in raising the issue of **childhood obesity** would be welcome.
- **An analysis of the views of clinicians on the role of targets and incentives in this difficult area** would also be of considerable interest.

Conclusion:

- The GPs and practice nurses in our sample felt that their role in obesity management was centred upon raising the issue of a child's weight, but that the responsibility of solving the problem lay primarily with the family.
- Clinicians may find it difficult to make a significant impact on childhood obesity given the sensitivity of the issue, and while the evidence base for effective management remains poor.
- Implementing additional targets, for example through the QOF, without addressing these fundamental problems may be counterproductive.

Detailed question:

9. Is there a clear statement of findings?

☐ Yes

☐ Can't tell

☐ No

HINT: Consider

- If the findings are explicit
- If there is adequate discussion of the evidence both for and against the researchers arguments
- If the researcher has discussed the credibility of their findings (e.g. triangulation, respondent validation, more than one analyst)
- If the findings are discussed in relation to the original

یافته ها و بحث

نمره :

۹- آیا بیان روشنی از یافته ها وجود دارد؟

نوشتن توضیح

توجه

■ آیا یافته ها واضح و روشن هستند؟

■ آیا بحث های کافی در مورد شواهد موافق یا مخالف استدلالهای محققان وجود دارد؟

■ آیا محقق بر روی اعتماد (قابلیت اعتماد) یافته ها بحث کرد است (مثال: تلفیق (Triangulation)، بازبینی شرکت کنندگان (Participant validation)، به کاربردن بیش از یک تحلیلگر؟

■ آیا یافته ها در راستای سوالات اصلی تحقیق بررسی و بحث شده اند؟

Detailed question:

10. How valuable is the research?

HINT: Consider

- If the researcher discusses the contribution the study makes to existing knowledge or understanding e.g. do they consider the findings in relation to current practice or policy?, or relevant research-based literature?
- If they identify new areas where research is necessary
- If the researchers have discussed whether or how the findings can be transferred to other populations or considered other ways the research may be used

ارزش تحقیق

نمره :

۱۰- تحقیق انجام یافته تا چه اندازه با ارزش است؟

نوشتن توضیح	توجه
	■ آیا بحث های محقق درباره مطالعات گوناگون باعث ایجاد آگاهی و درک مفاهیم شده است (مثال: آیا آنها یافته ها را در ارتباط با سیاست ها و فعالیت های جاری و یا در ارتباط با متون مبتنی بر تحقیق وشواهد بررسی می کنند)؟ ■ آیا محققین زمینه های جدیدی را که نیازمند تحقیقات می باشند مشخص کرده اند؟ ■ آیا محققین تعمیم پذیری نتایج به جوامع دیگر رابحث کرده و یا راهکارهای دیگری برای استفاده از نتایج تحقیق بیان نموده اند؟

References:

1. National Audit Office: **Tackling Obesity in England. Report by the Comptroller and Auditor general. National Audit Office.** London , Stationery Office ; 2001.
2. Zaninotto P, Wardle H, Stamatakis E: **Forecasting obesity to 2010.** [http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsStatistics/DH_4138630].
3. Department of Health: **Public Service Agreement 2005-2008.** [<http://www.dh.gov.uk/assetRoot/04/13/85/35/04138535.pdf>].
4. NHS Employers and the General Practitioners Committee of the BMA: **Revisions to the GMS contract 2006/07. Delivering investment in general practice.** London , NHS Confederation; 2006.
5. Strong M, Radford J: **What about the impact on patient health?** *BMJ* 2007, **335(7610):60.**
6. Summerbell CD, Ashton V, Campbell KJ, Edmunds L, Kelly S, Waters E: **Interventions for treating obesity in children.** *Cochrane Database* 14651858.CD001872.

References:

7. National Institute for Health and Clinical Excellence: **CG43 Obesity: the prevention, identification, assessment and management of overweight and obesity in adults and children.** [[http:// www.nice.org.uk/guidance/CG43](http://www.nice.org.uk/guidance/CG43)].
8. Epstein L, Ogden J: **A Qualitative Study of GPs' views of treating obesity.** *Br J Gen Pract* 2005, **55**:750-754.
9. Cade J, O'Connell S: **Management of weight problems and obesity: knowledge, attitudes and current practice of general practitioners.** *Br J Gen Pract* 1991, **41**:147-150.
10. Fogelman Y, Vinker S, Lachter J, Biderman A, Itzhak B, Kitai E: **Managing obesity: a survey of attitudes and practices among Israeli primary care physicians.** *International Journal of Obesity* 2002, **26** (10):1393-1397.
11. Bocquier A, Verger P, Basdevant A, Andreotti G, Baretge J, Villani P, A P: **Overweight and obesity: knowledge, attitudes and practices of general practitioners in France.** *Obesity Research* 2005, **13**:787-795.
12. Campbell K, Engel H, Timperio A, Cooper C, Crawford D: **Obesity management: Australian general practitioners' attitudes and practices.** *Obesity Research* 2000, **8**:459-466.
13. Hankey CR, Eley S, Leslie WS, Hunter CM, Lean MEJ: **Eating habits, beliefs, attitudes and knowledge among health professionals regarding the links between obesity, nutrition and health.** *Public Health Nutrition* 2004, **7**:337-343..
14. Hoppé R, Ogden J: **Practice nurses' beliefs about obesity and weight related interventions in primary care.** *International Journal of Obesity* 1997, **21**(2):141-146.
15. Gerner B, McCallum Z, Sheehan J, Harris C, Wake M: **Are general practitioners equipped to detect child overweight/obesity? Survey and audit.** *Journal of Paediatrics and Child Health* 2006, **42**(4):206-211.
16. Jelalian E, Boergers J, Alday CS, Frank R: **Survey of Physician Attitudes and Practices Related to Pediatric Obesity.** *Clinical Pediatrics* 2003, **42**(3):235-245.
17. Story MT, Neumark-Stzainer DR, Sherwood NE, Holt K, Sofka D, Trowbridge FL, Barlow SE: **Management of Child and Adolescent Obesity: Attitudes, Barriers, Skills, and Training Needs Among Health Care Professionals.** *Pediatrics* 2002, **110**(1):210-214.
18. King LA, Loss JHM, Wilkenfeld RL, Pagnini DL, Booth ML, Booth SL: **Australian GPs' perceptions about child and adolescent overweight and obesity: the Weight of Opinion study.** *British Journal of General Practice* 2007, **57**:124-129.
19. Eckstein KC, Mikhail LM, Ariza AJ, Thomson JS, Millard SC, Binns HJ: **Parents' Perceptions of Their Child's Weight and Health.** *Pediatrics* 2006, **117**(3):681-690.
20. Etelson D, Brand DA, Patrick PA, Shirali A: **Childhood Obesity: Do Parents Recognize This Health Risk?** *Obesity Res* 2003, **11**(11):1362-1368.

References:

21. Strong M, Maheswaran R, Pearson T: **A comparison of methods for calculating general practice level socioeconomic deprivation.** *International Journal of Health Geographics* 2006, **5**:29.
22. Ritchie J, Spencer L: **Qualitative data analysis for applied policy research.** In *Analysing qualitative data Edited by: Bryman A, Burgess R*. London , Routledge; 1993:173-194.
23. McWinnie IR: **Continuity of care in family practice. Part 2 implications of continuity.** *J Fam Pract* 1975,**2**(5):373-374.
24. Stewart M: **Continuity, care, and commitment: the course of patient-clinician relationships.** *Annals of Family Medicine* 2004,**2**:388-390.
25. Edmunds LD: **Parents' perceptions of health professionals' responses when seeking help for their overweight children.** *Fam Pract* 2005, **22**(3):287-292.
26. Department of Health: **Obesity Care Pathway and Your Weight, Your Health.** [http://www.dh.gov.uk/PublicationsAndStatistics/Publications/PublicationsPolicyAndGuidance/PublicationsPolicyAndGuidanceArticle/fs/en?CONTENT_ID=4134408&chk=Sq/wNd].
27. MEND Central. **The “Mind, Exercise and Nutrition... Do it!” programme** [http://www.mendprogramme.org/mend_programme/]
28. Centre for the Development of Healthcare Policy and Practice. **The “Watch it!” Programme.** [<http://www.watchit.org.uk/>]

Questions?

