Author's response to reviews

Title: Barriers to successful recruitment of parents of overweight children for an obesity prevention intervention: a qualitative study among youth health care professionals

Authors:

Sanne MPL Gerards (sanne.gerards@maastrichtuniversity.nl)
Pieter C Dagnelie (dagnelie@maastrichtuniversity.nl)
Maria WJ Jansen (Maria.Jansen@ggdzl.nl)
Nanne K De Vries (n.devries@maastrichtuniversity.nl)
Stef PJ Kremers (s.kremers@maastrichtuniversity.nl)

Version: 3 Date: 10 February 2012

Author's response to reviews: see over
Dear editor,

We herewith send you a revision of the manuscript entitled ‘Barriers to successful recruitment of parents of overweight children for an obesity prevention intervention: a qualitative study among youth health care professionals’ (MS: 6177660156144866).

We would like to thank you for giving us the opportunity to revise our manuscript. We are grateful for receiving the reviewer’s constructive remarks. Changes we made in the manuscript are highlighted.

With regard to the reviewers’ comments, the following revisions have been made.

**Reviewer: Anthea Magarey**

*This study describes an important issue and one that researchers and service providers in many countries have experienced.*

We thank the reviewer for this compliment.

*This study attempts to identify why referral by health professionals to an intervention to prevent further increase in relative weight of overweight children was so poor. While a number of issues are identified few are new. The authors have not clearly identified what new knowledge the study provides. I found the discussion relatively weak and does not truly reflect the findings nor consider the professional role of the participants to the degree it could.*

We thank the reviewer for this observation. Based on the reviewer’s comments we added information on what knew knowledge the study provides (Introduction P. 4 and Discussion P. 13-15). Furthermore we now discussed the professional role of the interviewees in the Discussion (P.13). We feel that the reviewer comments have led to a revised version of our manuscript that includes a more comprehensive discussion of the study findings.

*A wide range of barriers were identified that were classified under a number of headings – this classification was useful and relevant. What was unclear was how frequently each of the issues was raised by the professionals eg was the issue of parents lack of recognition raised by over half, or almost all or only two?*
We are glad to see that our classification was useful for the reviewer. We now included more quantitative terms in the Results to clarify the frequency of the issues raised by the professionals (see P. 8-11).

**Major revisions**

**Background**

1. Participation in YHC greater than 90% - is this on annuals basis, at specific ages - more detail required.

We included the following details in the Introduction (P. 4): Annually, more than 90% of the 0-4 year old children are reached (e.g., in 2009, almost all 0-year-old children were reached and approximately 80% of the 4-year-old children).

2. Methods

It is relevant to provide more information that led to this qualitative study. I assume an intervention was developed and based on previous experience of the difficulty of recruitment a specific strategy was developed; this is not clearly stated.

We indeed developed an intervention and a specific recruitment strategy based on previous experiences. We therefore expected that fitting the intervention to an existing health care system, would not lead to substantial difficulties. The recruitment strategy is described as ‘Referral procedure’ in the Methods on P. 5.

A brief description of the intervention is required - eg the ‘pilot’ suggests a research study and that the intervention had not been proved as effective, what is the intervention format and commitment (eg number and length of sessions) and content.

We have now included a short description of the intervention in the revised manuscript (i.e. Implementation of the referral strategy; see Methods P.5).

This should be followed by the description of the dissemination strategy which I think should be renamed a referral strategy as described in the first paragraph.

We thank the reviewer for this suggestion. We now included more information on the dissemination strategy and renamed it in accordance with the reviewer’s suggestion (see Methods P. 6).
Include the coverage of YHC professionals attending this - a defined geographical area, how many and what proportion of those eligible? Much of this fits more logically in the introduction as it is the background to the current qualitative study.

The YHC professionals who were involved in the current study were 25 Youth Health Care physicians and 49 YHC nurses. These were all working in South-Limburg, in the southern part of the Netherlands. They were all eligible for participation in the interviews. Since this information is specifically related to the research sample, we feel this information fits best in the Methods section, where we now added these details (P. 6).

3. What was the response for children attending the 4y check (given they were invited the number should be known), and base on national data what proportion would be expected to be overweight?

We thank the reviewer for this remark, which leads to a better view on the referral outcomes. Based on YHC records and national overweight prevalence rate in the age group (14%), an approximate amount of 230 children were eligible for participation in the geographical area during the recruitment period. We added this information in the Methods on P.6.

4. Were they IOTF cut-points for assessing weight status?

The cut-off points were based on the globally accepted standards defined by Cole et al. 2000. We now added this information to the Methods section (P. 5-6).

5. What is meant by clinical judgement? Was any consideration made to previous assessment of weight status eg if child was tracking up?

Clinical judgment is the diagnostic procedure that YHC physicians need to perform when a child’s weight is slightly above the ‘overweight cut-off point’. In these cases, a physician determines whether the child is overweight based on their experience, expertise and the course of the weight pattern over time. We now added this information to the Methods (P.5).

6. It is questionable whether intervention should be advocated for a child identified as just in the overweight range based on a single assessment - this point needs to be discussed as it impacts on professional support for the referral strategy.
We agree with the reviewer. However, the assessment of child’s weight status it not based on only one measurement; YHC physicians take the course of childrens’ weight development over time into account in determining whether a child is overweight (i.e. ‘clinical judgement’, see our response to the previous remark and Methods P. 5). We have now included this point in the Discussion (P. 14).

7. What happened to those children who were identified as obese? Are there any services for those children and why would these not be used for the overweight children?
According to the guidelines which are used by YHC physicians, obese children should be either referred to a general practitioner or a pediatrician. However, one should note that in practice we observe that obese children are treated as overweight children and overweight children are typically not treated at all. To illustrate, we experienced that some of the children who were referred were actually obese. This information is now added to the Discussion (P. 13).

8. How were the 16 who were interviewed selected? Who conducted the interviews, were they 1:1 and what were the questions?
The following details on the format of the interviews were added in the Methods (P.7): ‘After the six-month implementation period, we asked YHC professionals (nurses, physicians and management staff members) from the participating child health clinics to participate in semi-structured interviews to identify the reasons for the disappointing number of referrals. YHC professionals could register for the interviews. The interviews were held at the offices of these health professionals by the first author of this manuscript, S.G. The questions were related to the topics in our research framework which are described on page 8. Some example questions are: ‘How did you try to refer overweight children to the intervention?’, ‘What were your experiences in referring children?’ ‘Did you experience any barriers or stimulating factors in referring children?’’. We added example questions in the revised manuscript on page 7.

9. Analysis: what was the framework for the analysis of the transcripts?
The framework for analysis of the transcripts was related to the topics which were similar to the factors mentioned in Figure 2 and Table 2. This information is added in the Method section on Page 8.

Results
10. The quotes to illustrate points should either be entirely in the text OR entirely in the Table. It did not make for easy reading to have them split. I would prefer the table as the themes are then clear. The text then can give an indication of the frequency of identification from the 16 interviewees of the mention of each theme. (described as factor).

We thank the reviewer for this remark. We agree. Based on the reviewers’ recommendation, we deleted the in-text quotes (see the Results P. 9-12).

Discussion
11. This needs to be expanded. All five areas should be discussed. The authors say parent related issues were the most frequent but it is not possible to get a sense of that from the data as presented. It seems to me that professional issues (individual and organizational) are given considerable attention also. The socio-political environment requires consideration - how might the importance of early intervention be raised in society?

We thank the reviewer for this remark. We have now expanded the discussion in line with the recommendations of the reviewer and we feel that as a consequence its additional value for the manuscript has increased. All areas are now included, we now more explicitly provided insights in the relative importance of the parent related issues, and we included considerations regarding raising the importance of early interventions in society (see P. 12-16).

12. Professional responsibility requires further discussion. It is stated in the background that ‘YHC professionals systematically monitor the physical …health of children and advise parents and children on achieving a healthy development…and signal possible problems such as … overweight’. Do they not therefore have professional responsibility to raise excess weight with parents although they may get an adverse reaction?
The professionals indeed have the professional responsibility to raise excess weight in children. They have explicitly mentioned this, but at the same time, however, they do not feel comfortable to do that. We added this point to the discussion of the revised manuscript on P. 13-14).

13. In the training of professionals was there discussion re the importance of early intervention? Did they support this and did they have sufficient information to parents re the benefits of attending the program? Did professionals support this early intervention and support the specific intervention - was it evidenced based or a trial to develop an evidence based program? These issues are important to consider as they impact on the professionals’ support and their subsequent action. In general, YHC physicians do acknowledge the relevance of early prevention, and also this specific intervention. Some of them indeed did not see the advantage of the current intervention compared to existing interventions, which may also be a reason for a lack of referrals. This information is added in the Discussion on P. 13)

14. What is the generalisability of the results?
The sample of YHC professionals was self-selective (the interviews were on a voluntary basis), but it appeared representative. We interviewed YHC professionals from eleven of the fourteen different Child Health Clinics, representing all age categories. This information is added in the Discussion on P. 15.

Minor
Reference 7 lacks a year
We added a year to reference 7.

No date on reference 18
We added a date to reference 18.
Reviewer: Karin Hannes

Major revision:
- The type of qualitative design has not been mentioned, which makes it difficult to evaluate whether the study has been conducted according to the state of the art. We used semi-structured interviews with a fairly open framework which allowed focused, conversational, two-way communication. This information has now been added to the Methods section on P. 7.

- The abstract and report states that parents were the main factor. How has this particular ‘weight’ been assigned to this particular finding? In fact, stating that parents may be the largest obstacles in the background section may have led to a self-fulfilling prophecy. Could you make a stronger scientific case for your conclusion as well? Your citation table and the categories described in it does not fully seem to adjust for this conclusion. What exactly leads the authors to conclude that parents are the main factor?

We thank the reviewer for this observation. The conclusion that parents are considered to be the main factor was done based on the frequency and perceived impact of what professionals mentioned in the interviews. This information is now more explicitly mentioned in the text (P. 11-12) as well as in the Abstract (P. 2).

Furthermore, if you speak to providers instead of parents themselves, it is not to be expected that they would have an external locus of control? To me, this would be one of the potential risks that impacts on the credibility of your final conclusion.

We fully agree with the reviewer that the YHC professionals can have an external locus of control when they mention that the parents are the main reason for not referring children. On the other hand, some professionals admitted that they have too few skills to communicate effectively with the parents, thereby internally attributing the low referral rates. Studies that focus on the parent perceptions may provide more information on this. These considerations are now included in the Discussion section of the revised manuscript (P. 15).

- If a variety of obstacles to the recruitment of children and parents have already been identified, then why is the research necessary? Make a case for your study, e.g. by
pointing out on how your setting differs from the previous settings or how your target group may provide additional information, or by stating that previously conducted research was mainly quantitative or…?

Previous studies have indeed often been quantitative. The rationale for our study was that we expected a higher referral rate because of the unique Dutch Youth Health Care system. One other Dutch (quantitative) study also experienced recruitment problems, but they did not investigate the reasons for that. To clarify, we added this rationale to Introduction (P. 4).

- The selective sampling strategy is considered a limitations, which makes me wonder which particular sampling strategy has been used? Information on this strategy (apart from a description of the actions) or a statement on whether or not the research subjects in the sample volunteered to take part has not been given.

YHC professionals who took part in the interviews were volunteers. We now added information on the sampling strategy in the Methods section of the revised manuscript (P.6).

- The discussion lacks an indication of what was new in this study compared to the previously conducted studies mentioned in the background.

We now more extensively reflected on our results in light of the previous studies in the Discussion section (P.13-14).

- How is the theoretical base a strength? It does seem to confirm what was already known (parents are the main factor). So what ‘richness’ is added to the findings by using qualitative research (which is also perceived as a strength)?

We applied an existing framework to guide the interview structure. The semi-structured qualitative interviews enriched the contents of the rather broad concepts in the research framework. Thus, we ensured that all potentially relevant concepts were addressed in the interviews and we succeeded in getting a grip on the most important beliefs of the interviewed YHC professionals within each concept. This has now been more explicitly included in the Discussion section (P. 14-15).
Minor essential revisions:
- P3: if the parents are expected to be the largest obstacles, then why are the providers used as the research subjects? Provide a rationale, apart from stating that it is a limitation of the study.

YHC professionals are a potential gateway to obesity treatment programs, in line with systems that currently operate in Dutch primary health care with respect to adult obesity treatments. Although parents may constitute an obstacle in terms of recruitment, YHC professionals could be expected to be optimally equipped to enroll participants for childhood obesity programmes. We added this information in the Introduction on P. 4.

- If you consider having conducted interviews by the same interviewer and analysed by two different ones a strength, state why. What extra value did you add by doing this (think credibility, confirmability, transparency, neutrality etc).

The interviews were conducted by the same interviewer in order to increase consistency in the data gathering process. The interviews were analysed by two different persons in order to increase objectivity and neutrality, thereby increasing confirmability. This information is added in the Discussion on P. 15.

- The use of ‘the respondents’ or the ‘interviewees’ seems to suggest that ALL of them supported a particular statement. I did not find any evidence for that in the presentation of results. But if this is the case use ‘All respondents’ instead of ‘the respondents’.

We thank the reviewer for this remark. We have now gone through the Results section with this remark in mind and we now revised it by using more quantitative terms in the Results (P.9-12) in order to clarify the frequency of the issues raised by the professionals.

- Provide supporting citations in the text or in the table, not both. If you choose the latter strategy, adapt the text so that it stands without the in-text citations.

We deleted the in-text citations, and adapted the text; see Results section P. 9-12.
Discretionary revisions:
- Socially desirable answers seems like a weak argument in the limitations section. This might be the case for questionnaires or any other research technique. If you really have the impressions that this was the case during the interviews or a considerable risk, state some of the reasons. If it was the case one of the potential reasons might be that the interviewer did not success in creating a safe enough climate for the conversation.

We thank the reviewer for this critical note. We did not have the impression that social desirability was a problem, for example because professionals appeared to be open in stating their opinions and by admitting their shortcomings and lack of skills. Also, the atmosphere during the interviews was quite confidential. However, we still would like to mention the issue of social desirability to make the readers aware of this potential risk which is inherent in interviews. We added this information in the Discussion on P. 15.