Why don't many obese pregnant and post-natal women engage with a weight management service?

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Abstract

Objective: This study investigated the views and experiences of obese pregnant and post-natal women who had declined or disengaged from an evidence-based weight management service, and their reasons for doing so.

Background: Despite significant risks of maternal obesity to both mother and baby, the majority of obese women offered tailored weight management support during or after pregnancy declined to use it, and many women who accepted the service disengaged soon after.

Methods: Semi-structured interviews regarding women's views and experiences were conducted with obese pregnant and post-natal women who declined the service (N=7) and women who disengaged from the service (N=11), and analysed thematically.

Results: Four main themes were identified. "First contact counts" related to inadequate explanation of the service by the referrer, being offended by the referral, and negative expectations of the service. "Missed opportunities for support" describes what support declining women identified as desirable, such as regular weight monitoring. "No need for help", and "Service not meeting needs" related to personal choices regarding weight management, including not wanting support and preferring group-based services.

Conclusions: While some obese pregnant and post-natal women did not want any type of weight management support, many did but failed to engage with the service on offer due to a variety of barriers. A more sensitive and transparent referral process and further tailoring of the service to meet individual needs may increase uptake and continued use of this service. The inclusion of non-participants and non-completers formed a valuable element of service evaluation.

Keywords: Maternal obesity, Qualitative research, Interviews, Service evaluation, Pregnancy, Post-natal

Introduction

It has been estimated that 15.6% of women in England have a Body Mass Index (BMI) $\geq 30 kg/m^2$ when they become pregnant, with women from deprived backgrounds being more at risk of maternal obesity (Heslehurst, Rankin, Wilkinson, & Summerbell, 2010). Being obese during pregnancy carries serious health risks for both mother and child (Abenhaim, Kinch, Morin, Benjamin, & Usher, 2007), and significantly increases the risk of obesity in the resulting infant (Griffiths, Hawkins, Cole, & Dezateux, 2010; Pirkola, et al., 2010). In recognition of this, the National Institute for Health and Clinical Excellence (NICE) in England and Wales recently issued new guidance on interventions for weight management before, during and after pregnancy (National Institute for Health and Clinical Excellence, 2010). This guidance and associated commissioning guide (National Institute for Health and Clinical Excellence, 2011) recommends early identification of pregnant women with a BMI $\geq 30 kg/m^2$, and provision of practical and tailored advice from health professionals regarding healthy eating and physical activity during pregnancy. The guidance also suggests encouragement and support to achieve a healthy weight up to two years after childbirth and before the birth of a subsequent baby, including provision of tailored physical activity and dietary advice, signposting to community services and encouragement to breastfeed.

The Maternal and Early Years Healthy Weight Service (MAEYS) is a care pathway which has been cited as an exemplar of NICE's recommendations (National Institute for Health and Clinical Excellence, 2011). MAEYS was introduced in June 2009, initially as a one year pilot programme to assess feasibility in six Primary Care Trusts (PCTs) in the West Midlands area of England where over 20% of women are obese at the start of pregnancy (Sheikh, Malik, & Gardosi, 2010), and is one of the first evidence-based care pathways developed in the UK specifically for obese women during and after pregnancy (Baker, 2011). MAEYS is delivered

on a one to one basis, in the client's home, by dedicated Healthy Weight Advisors who received 12 days training to develop specific skills and competences in diet, physical activity, infant feeding and behaviour change (see Baker, 2011). The service is free and available from early pregnancy until the child is two years old. It provides tailored advice and support with behaviour change on healthy eating, physical activity and infant feeding, along with regular weight monitoring. Eligible women are referred by midwives and other health professionals. The primary aim of MAEYS is to prevent childhood obesity through minimizing gestational weight gain. Secondary aims are to reduce the significant health risks associated with being obese during pregnancy, to support post-natal weight loss and to establish healthy infant feeding habits.

Previous research has highlighted the need to more fully explore how to engage obese women in weight management services (Heslehurst, Bell, & Rankin, 2011), and maternity-care professionals have identified the importance of reaching all obese women, not just those who are already motivated to improve their health behaviour (Heslehurst, Moore, et al., 2010). A qualitative evaluation of MAEYS has shown good levels of acceptability among a sample of service users (Atkinson, Olander & French, in review) and data collected from women completing a whole phase of the service showed positive results for gestational weight gain and breastfeeding rates (Baker, 2011). However, often this is where evaluation ends, without investigating the views and experiences of people who declined or failed to complete interventions (Sørensen, Skovgaard, & Puggaard, 2006). During the pilot of MAEYS half of the women referred declined to use the service, and two thirds of those who started using the service failed to complete at least three quarters of planned sessions. Other weight management services in pregnancy have reported initiation of the service to be as low as 14.5% (Knight & Wyatt, 2010) and 35% (Davis et al, 2012) of the women who were invited

to participate, and one service reporting zero attendance from 76 women referred (West, 2010). Multiple barriers to recruitment for group-based maternal healthy weight services have been reported by obese pregnant women, (Olander & Atkinson, 2013) and referring health professionals (Davis et al, 2012; West, 2010) including inconvenient time and location, work commitments, feeling unwell, not wanting to focus on weight management during pregnancy, and health professionals' difficulties in raising the issue. Thus while the individualised home-based design of MAEYS may have overcome some of the pragmatic barriers related to more structured, group-based services, it is important when assessing the acceptability of the care pathway to understand why the majority of eligible women did not take advantage of MAEYS. Previous research has demonstrated that valuable insights into acceptability and adherence can be gained by interviewing decliners and non-completers when evaluating a community-based lifestyle intervention (Barter-Godfrey, Taket, & Rowlands, 2007). Additionally, evidence regarding why women disengage from maternal healthy weight services is lacking, as few such services have been delivered or evaluated. Without this understanding, significant health inequalities could develop or worsen. In addition, levels of uptake and adherence to health services are important contributors to their cost-effectiveness. Therefore, the aim of the present study is to investigate, through qualitative methods a) why some women who were referred to MAEYS chose not to use the service, and b) why some women who began using MAEYS disengaged from the service.

Method

Design

Cross-sectional interview study, conducted one year after the service was introduced into the antenatal and post-natal care pathways.

Procedure

Following ethical approval from the authors' University Ethics Committee, recruitment of participants was initiated by MAEYS project leads within each of the pilot PCTs. Women who had declined the service and women who had been clients of MAEYS but had voluntarily ceased using the service were contacted, and asked if they would be willing to be contacted regarding the evaluation. If women agreed to be contacted, or did not submit an "opt-out" response, they were contacted by the research team and invited to participate in either a face to face or telephone interview, according to their preference.

All participants were provided with an information sheet and gave either written or verbal (for telephone interviews) consent prior to being interviewed. Interviews were conducted by a researcher with the use of a topic guide. Topics for discussion included: Introduction to the service, expectations for the service, reasons for declining or leaving the service, positive and negative experiences of the service and suggestions for changes. However, participants were encouraged to talk freely about their experiences of MAEYS, and their own weight management. Interview duration ranged from 10 minutes to 32 minutes, with a median duration of 16 minutes. Interviews were recorded and transcribed verbatim.

Sample

See Table 1 for details of sample breakdown. [Table 1 near here]

Seven women who had declined MAEYS agreed to be interviewed, all of whom described themselves as White British. Ages ranged from 27 to 36 years, and parity ranged from first to fifth pregnancy. Eleven women who had disengaged from the service agreed to be interviewed, ten of whom described themselves as White British, and one woman described herself as British Pakistani. Ages ranged from 21 to 35 years and parity ranged from first to

third pregnancy. Both groups contained at least one participant from each of the six PCTs. All participants had a pre-pregnancy BMI ≥30kg/m2.

Analysis

Data were analysed separately for each sample via a process of inductive thematic analysis, using a realist approach (Braun & Clarke, 2006). As such, the main goal of the analysis was to provide a detailed description of the entire dataset, without being led by the questions asked, in order to inform current and future health service design. Briefly, this process involved; familiarisation with the data by repeated readings of the transcripts, coding of all data relating to participants' experiences of the service, identification of patterns (themes) within the data, checking identified themes against the coded data, and finally defining the themes through examination of the precise content of groups of similar data. Two researchers independently completed the analysis for each sample and resulting themes were compared. There was a high degree of agreement between researchers concerning the nature of the dominant themes and the final themes were produced following discussion. Finally the analyses for each sample were compared to identify congruence and divergence of themes between women who had declined the service and women who had disengaged from the service.

Results

Four main themes emerged from the data: "First contact counts", and "Missed opportunities for support" were aggregated themes relevant to both women who had declined the service and women who had disengaged. "No need for help", and "Service not meeting needs" were

relevant to women who had declined and women who had disengaged respectively. Selected quotes are included for illustration of key points. Pseudonyms are used to protect anonymity.

First contact counts

This theme related to aspects of the referral experience.

Many of the women reported that they were not told that they had been referred or were not informed about the service, prior to being contacted. These women reported being shocked and confused after unexpectedly receiving a phone call or letter.

"I just received a letter in the post, and saying that I'd been put forward for it by my midwife... And no-one had warned me about it, and I think if someone had warned me about it, it would have been better, because I just opened the letter, read the letter and thought 'Oh God' and just burst into tears. It's a sensitive time anyway because your body's changing and you're conscious of what you look like anyway."

Paula (declined)

Several women reported being upset by the referral. They often reported that they felt the referral was a form of judgement, either of themselves as a person or as a parent.

"At the end of the day I've brought up my first child and he's fine....So it's like he's not overweight, I know how to wean him, I know about healthy eating and all that, it's just me that's overweight."

Tara (declined)

Some women were referred to the service following discussions with a health professional regarding their weight, with the subject either raised by them or the health professional. In these cases the women reported being happy to be referred. This was only reported by women who had disengaged. Additionally, some women had seen leaflets or posters and had self-referred. Aside from the women who were unaware of the referral, several women reported being told about the service, but stated that they were given very little information about it by the referrer. Some women cited this lack of information as a contributing reason for not engaging with the service.

"The nurse said there's a lady in here from some programme, she didn't have any information on her whatsoever...I did feel maybe if I got a bit more information I'd have followed it up a bit more."

Crystal (disengaged)

However, some women reported having the service explained to them in more depth and stated that they were happy with this.

Some women who had been told about the referral reported not being contacted by the service as promised, and this was then given as a reason for not engaging with the service.

"Nobody's mentioned it again since...I never just, never thought to bring it up when you attend the appointments, you're worried about other things."

Shelly (declined)

No need for help

Aside from issues related to the referral process, two further issues emerged within the women's explanations for declining the service. Firstly, some reported feeling that the referral unjustly implied that they were not able to make healthy choices for themselves and their child.

"I just feel as if like you're being, because they want to offer you help with the weaning, which is all very good if, like I say, it's your first child, but I felt like they were going to come in and try to tell me how to raise my child, that's how I felt. And I don't like things like that, it makes me feel like they think I'm a bad mother."

Tara (declined)

Secondly, some women reported already having a healthy lifestyle or using other services.

"Since I've had the little one I have joined Weightwatchers, which is something I have done before and it's worked, or not worked, depending on what mood I'm in really."

Shelly (declined)

"Generally speaking we have a very balanced diet, so I'll probably just carry on like that. I don't really know what they could do that would make a difference."

Beatrice (declined)

Service not meeting needs

Aside from pragmatic barriers to continuing the service, such as moving to a different borough, family commitments, and a lack of willpower, some women reported that the service did not meet their needs in a variety of ways.

For example, some women reported needing more information and/or structure for the service to work for them.

"Maybe if it was writ [sic] out like in a certain way, like you can have these many calories a day and then you're given your list like, of all the foods and how many calories are in the food."

Cathy (disengaged)

However, other women suggested that they would prefer a less intensive service, or perceived the service to be too prescriptive.

"She didn't seem to grasp that I couldn't physically write down everything that I'd eaten that day, like times and portions sizes. She just kept saying 'when she [baby] goes to sleep', but that's when I go to sleep, not write down what I've eaten!"

Monica (disengaged)

Some women expressed a preference for a group service, rather than the one to one home visits, and some women reported wanting to wait until after the baby was born to start thinking about weight management, often citing weight gain as an inevitable consequence of pregnancy.

"I thought, if she's going to come and weigh me, and then, I mean, I've put weight on, obviously, because the baby's growing, and I would have put weight on and stuff. And then I just thought, well I can't focus like that."

Judy (disengaged)

Missed opportunities for support

Two notable missed opportunities emerged. Firstly, many of the women who had declined the service reported wanting support with weight management. When questioned about what help they would like, answers from many of these women reflected elements of the service itself, including; forming a personalised action plan, goal-setting, healthy recipe ideas, and for support to be flexible and inexpensive.

"More recipes to try, things I could cook that were healthy, and help us all being healthy. I want to lose weight, things I can eat more or less of, good to have goals, keep me on track, rather than doing it on my own."

Alma (declined)

Secondly, across both participant groups, regular weight monitoring was mentioned frequently as being desirable, and often cited as a motivational tool. Women expressed confusion or disappointment that they were not weighed regularly by their midwife or even sometimes by the healthy weight advisor.

"When I was first pregnant I put on a lot of weight and this time I wanted to monitor my weight but I wasn't weighed...It's a health issue, you need people to tell you. Without people telling you, you just don't see it."

Katherine (disengaged)

Discussion

Both women who had declined to access a personalised weight management service (MAEYS) during and/or after pregnancy, and women who had initially engaged with MAEYS but had ceased using the service, reported a variety of negative experiences relating to their referral to MAEYS. These included being upset by the referral or initial contact from the service, as well not receiving enough information about the service, and lack of contact from the service after accepting the referral. However, a few women reported a more positive referral experience and these women all reported being happy to be referred to MAEYS. The primary reason given for declining to use MAEYS was feeling that health professionals would make assumptions about referred women's abilities to care for themselves and their child. Some women preferred to use alternative weight management services or to self-manage their weight. The dominant reason given for ceasing to use MAEYS was that the service did not meet the woman's needs in terms of format and content. Some of the women who had declined the service reported wanting support with weight management. Many women reported wanting to have their weight gain regularly monitored and some women who had experienced MAEYS were disappointed not to be weighed by their healthy weight advisor.

There are several strengths of the present study. Firstly, the use of qualitative methods allowed participants to fully explain their experiences and feelings about various aspects of MAEYS, and their decisions relating to whether or not to participate. Further, as most qualitative evaluations of interventions or services solely include the views of service users and providers (Adolfsson, Carlson, Undén, & Rössner, 2002; Morgan, et al., 2010; Stewart, Chapple, Hughes, Poustie, & Reilly, 2008), our approach allowed the views of non-participants and non-completers to be taken into account alongside those of the service users, whose experiences are reported elsewhere (Atkinson et al, in review). For the acceptability of an intervention to be fairly assessed, it is important to explore and understand which aspects of the intervention potential recipients find unacceptable, why this may deter their participation, and the reasons why the intervention fails to keep participants engaged. Finally, while previous qualitative studies have examined the perceived barriers to accessing weight management, healthy eating or physical activity support during pregnancy in the UK (Clarke & Gross, 2004; Olander, Atkinson, Edmunds, & French, 2011) their findings relate to views regarding an imagined service, whereas the present findings relate to actual experiences of an intervention delivered as part of a routinely delivered service. While the pilot phase of MAEYS provided an opportunity to conduct evaluation of the service, most of the PCTs involved planned to continue to offer MAEYS as part of their antenatal and postnatal care pathways in the long term. The evaluation of an ongoing service often has a different focus than the evaluation of a quasi-experimental or controlled trial of a proposed intervention, as described by the Medical Research Council's guidance on developing and evaluating complex interventions (Craig et al, 2008). As such, the goal of the present evaluation was to assess the acceptability of the intervention as routinely delivered, which is usually with lower fidelity than when interventions are delivered in a comparatively controlled research setting. The data gained from the present evaluation has highlighted a number of process and

operational issues which may not have been identified by an evaluation of an intervention delivered as part of a research study. For example, specially trained research midwives are often used to recruit women to intervention trials, (e.g. Smith et al, 2010), whereas MAEYS relied on every midwife and health visitor within the PCTs to refer as part of their everyday practice, regardless of their personal knowledge of or interest in weight management. As such, the quality of referrals was variable and had a negative impact on recruitment. Settings included PCTs with differences in population density, ethnicity and deprivation, as well as different organisational structures. As such, the relevance of the experiences and decisions reported in the present evaluation is not restricted to a single locale or PCT, and the findings can be directly applied to future service provision based on the MAEYS pathway.

Regarding study limitations, our sample sizes were small, in common with much in-depth qualitative research, and women self-selected to participate. Previous research has demonstrated the difficulties in recruiting obese pregnant women to a qualitative study to discuss their experiences (Tierney, et al., 2010). Additionally, it has been shown that attendees of a health service are more likely to respond to a request to participate in research than non-attendees (Sutton, Bickler, Sancho-Aldridge, & Saidi, 1994). Therefore it was not unexpected that recruitment would be challenging, and multiple and varied attempts were made to recruit participants. Nevertheless, the small sample does reduce the reliability of conclusions drawn from the data. Participants were also predominantly White British. It was not possible to purposively sample for the present evaluation as the ethnic background of women was not known prior to contact from the research team. However, providers of MAEYS during the pilot phase reported over-representation of White British women using the service compared to the local population (Baker, 2011). There was, however, significant diversity in ages and parity within the sample.

The authors believe the present evaluation to be the first of an intervention which exemplifies the NICE guidance for interventions targeting weight management, during and after pregnancy (National Institute for Health and Clinical Excellence, 2010). There are a limited number of qualitative evaluations of the acceptability of maternal obesity interventions (Atkinson et al, in review; Heslehurst et al., 2010a), and those that have been conducted have almost exclusively relied upon data from participants who have been actively involved with the intervention (Claesson, et al., 2008). One recent study has reported the views of obese women who declined a healthy weight service in pregnancy (Olander & Atkinson, in review). The service offered was a free, short term (six week), structured, group-based service, held at community venues. As such the service differs significantly from MAEYS. As might be expected, pragmatic barriers such as an inability to travel to the venue or to take time away from work to attend were the most prevalent reasons for women to decline the service (Olander & Atkinson, in review). Similarly, women who had declined a post-partum healthy lifestyle programme reported doing so due to lack of time, prioritising one's children over personal health goals and the logistics of attending (Carter-Edwards, et al., 2009). The programme in question was again a structured intervention which required participants to travel to a specific location at regular times. Although these pragmatic barriers were identified in the present study, they were less prevalent. This is likely because MAEYS was designed to be flexible enough to overcome some of these barriers, for example delivering the service in the home, and outside of women's working hours. Decliners of a group based service also reported a lack of motivation towards weight management, mentioning that they did not want to focus on their weight during pregnancy (Olander & Atkinson, in review). In contrast, decliners of MAEYS mostly expressed wanting support to minimise pregnancy-related weight gain. Some women did state that they wanted to wait until after pregnancy to

focus on their weight. As MAEYS is accessible for up to two years postnatally, this service may be more acceptable to some women than one only available during pregnancy. The present study suggests that at least some of the women who declined MAEYS would have found the service acceptable and valuable as they expressed wanting the type of support MAEYS offered, but were deterred from trying the service due to the way the referral was handled or the service was explained. Although participants did not highlight specific terms or language that they found upsetting, rather that they were upset by perceived inferences of the referral itself, the need for training to enable health professionals to communicate sensitively in relation to obesity to encourage long term engagement has previously been highlighted (Smith et al, 2012; Heslehurst et al, 2011). When comparing the present results with the findings from an evaluation of MAEYS based on active service users (Atkinson et al, in review), it is possible to identify differing experiences and preferences which may have reduced uptake and usage of the service, e.g. a poorly handled referral, or a personal preference for group-based interventions. It is also important to recognise that while health promotion is now considered integral to the role of the midwife, it has been noted that by attempting to address a wide range of public health issues as part of maternity care, midwives run the risk of becoming "Jill of all trades and master of none" (Beldon & Crozier, 2005, p.218). Having a service such as MAEYS to provide specialist support may relieve some of the pressure on midwives to help women with weight management, but they still face the challenge of finding the time to sensitively introduce the service to women amongst many competing priorities during antenatal appointments,

Implications for practice

Findings suggest that modification of the referral process could increase uptake of MAEYS and similar interventions based on the recommendations of NICE (National Institute for Health and Clinical Excellence, 2010). Similarly, the present findings suggest that premature withdrawal from the service may be reduced if women are given more information about the service at the start, to manage their expectations. For example, fully informing the woman of the referral and the reasons for it could reduce upset. Furthermore, a more detailed explanation of what the service entails could reduce women's perception of the referral as implying concern about their parenting abilities. Lack of confidence in raising the issue of obesity has previously been cited by health professionals as a barrier to recruitment to maternal weight management services (Knight & Wyatt, 2010) and further research is required to understand how health professionals can approach referrals to maximise uptake. However, initially measures could be taken to ensure that referring health professionals have a detailed understanding of the aims of the service, and what is involved, in order that they can effectively communicate this to their patients.

Early referral and reducing the time between the referral and first contact from the service may also increase uptake, as some of the women in this study were willing to accept the referral to the service, but when contact from the service was delayed they either forgot about it or suggested it was too late for them to benefit. It also appears that regular weight monitoring is an anticipated, and in many cases, desirable element of the weight management service, and should be offered to all participating women. Further research is needed to explore the healthy weight advisors' barriers to weighing women at their appointments, but health professionals currently reluctant to offer weight monitoring should be encouraged that the women in this study viewed monitoring as a useful tool within a weight management service.

Importantly, the present results also suggest that while some of the issues identified could be addressed with further tailoring of the service to meet individual needs, some of the reasons given for non-participation or non-completion are not modifiable within the current intervention design. For example, some women simply prefer to use a different format of service, e.g. group-based sessions, or a more rigid diet plan. Service providers should therefore consider increasing the flexibility of the intervention further and offering obese women a choice of formats and services.

Conclusion

This qualitative evaluation of a tailored, home-based weight management intervention for obese women during and after pregnancy which included women who had declined or disengaged from the service has identified several aspects of the intervention which could be modified to increase acceptability. Uptake and continued use of maternal obesity services may be increased by a more sensitive referral process and more detailed explanation of the aims and format of the service. Women who were interested in weight management support during or after pregnancy valued the inclusion of regular weight monitoring and service providers should consider how best to fulfil this need. However, it is also apparent that some obese pregnant and post-natal women are unlikely to want weight management support during this time.

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