

# Obese women's reasons for not attending a weight management service during pregnancy

Olander, E.K. and Atkinson, L.

**Author post-print (accepted) deposited in CURVE July 2014**

**Original citation & hyperlink:**

Olander, E.K. and Atkinson, L. (2013) Obese women's reasons for not attending a weight management service during pregnancy. *Acta Obstetrica et Gynecologica Scandinavica*, volume 92 (10): 1227-1230.

<http://dx.doi.org/10.1111/aogs.12195>

**Publisher statement:** This is the peer reviewed version of the following article: Olander, E.K. and Atkinson, L. (2013) Obese women's reasons for not attending a weight management service during pregnancy. *Acta Obstetrica et Gynecologica Scandinavica*, volume 92 (10): 1227-1230, which has been published in final form at <http://dx.doi.org/10.1111/aogs.12195>. This article may be used for non-commercial purposes in accordance with Wiley Terms and Conditions for self-archiving.

**Copyright © and Moral Rights are retained by the author(s) and/ or other copyright owners. A copy can be downloaded for personal non-commercial research or study, without prior permission or charge. This item cannot be reproduced or quoted extensively from without first obtaining permission in writing from the copyright holder(s). The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the copyright holders.**

This document is the author's post-print version of the journal article, incorporating any revisions agreed during the peer-review process. Some differences between the published version and this version may remain and you are advised to consult the published version if you wish to cite from it.

**CURVE is the Institutional Repository for Coventry University**

<http://curve.coventry.ac.uk/open>

Title: Obese women's reasons for not attending a weight management service during pregnancy

Published in Acta Obstetrica et Gynecologica Scandinavica , 92(10), pp. 1227-1230.

DOI: 10.1111/aogs.12195

Running head: Reasons for declining a weight service

Ellinor K Olander, BPsych, MSc, PhD<sup>1</sup>

Lou Atkinson, BSc (Hons), MSc<sup>2</sup>

<sup>1</sup> City University London, UK

<sup>2</sup> Coventry University, Coventry, UK.

Corresponding author details:

Dr Ellinor K Olander

School of Health Sciences

City University London

Northampton Square

London

EC1V 0HB

United Kingdom

Email: [ellinor.olander@city.ac.uk](mailto:ellinor.olander@city.ac.uk)

## **Abstract**

Evaluations of services targeting obese women's gestational weight gain often report low uptake. Thus it is important to elicit the reasons why obese pregnant women decline to participate in these services and to identify their barriers to participation. Sixteen obese pregnant and postnatal women were interviewed regarding their reasons for declining a group-based service targeting their gestational weight gain. All interviews were recorded, transcribed verbatim and analyzed thematically. Both pragmatic and motivational barriers were identified. The most common practical reasons for not attending the service were its inconvenient location and time, and feeling unable to attend due to work commitments. Pregnancy-specific barriers included decreased mobility and feeling unwell. Motivational barriers included lack of interest and not wanting to focus on one's weight in pregnancy. These findings highlight issues that need to be taken into consideration when designing group-based weight management services for this population.

## **Keywords**

Pregnancy, weight management, service uptake, obesity, interview

## **Introduction**

Maternal obesity is a health challenge both in Scandinavia (1) and other countries including the United Kingdom (2). A large meta-analysis of interventions targeting gestational weight gain has recently highlighted the benefits of limiting maternal weight for obese (body mass index  $\geq 30$ ) pregnant women (3). Research has found weight restriction to be safe in pregnancy (4), and benefits associated with limiting gestational weight gain include reduced risk of gestational diabetes, pre-eclampsia and gestational hypertension (3). Interventions in pregnancy can reduce maternal gestational weight gain and improve maternal and child outcomes (3) with one recent study showing intervention effect on weight gain up to 24 months after childbirth (5). These positive research findings have led to more and more community services targeting women's gestational weight gain being developed and evaluated (6-8).

Despite this encouraging development, many services targeting overweight and obese women suffer from low participant uptake. For example, recruitment rates between 14.5% (7) and 35% have been reported (6) with one service having an initial recruitment rate of zero participants (8). It thus becomes important to explore and understand obese pregnant women's reasons for declining gestational weight gain support. This information can subsequently be used to develop more acceptable and better suited services for this population. To date, the reasons why obese pregnant women decline to participate in services targeting their weight has been reported anecdotally (7, 8) or in a quantitative fashion (6). The aim of this study was therefore to extend existing research by using qualitative methods to elicit and explore obese pregnant women's views on the barriers they face concerning participation in weight management services during pregnancy.

Specifically, we interviewed obese women who were referred by their midwife to a free group-based service, comprising a two hour session each week, held on a weekday in a community location for six weeks. The aim of the service was to encourage obese women to gain a healthy weight in pregnancy (as defined by the Institute of Medicine guidelines (9)), through providing them with an opportunity to engage in safe physical activities overseen by a physical activity specialist and receiving dietary information from a dietician and nutritionist.

### **Material and methods**

During the first year of this ongoing service, 97 women were referred to the service, and 55 of those declined participation. We contacted 29 of these declining women, of which 16 participated in a phone interview. Of the remaining 13; one declined participation in the interview, two did not remember the service and the remaining 10 we failed to make contact with despite three attempts. The remaining 26 women we did not contact as they were more than nine months post-partum.

The majority of the interviewed women were in their second or third trimester, with four women being interviewed postnatally. Six of the women were first time mothers, and self-reported ethnicity varied (8 White British, 5 British Asian, 2 mixed, 1 no information available) in line with the profile of the local multi-ethnic area. Participants mean age was 28 years (range 19-38 years), and most (N=11) lived with a partner. The semi-structured phone interview focused on women's experience regarding being referred to the weight management service and their reasons for not taking up the service. The interview schedule was developed by the researchers and health professionals delivering the service and was adapted from a previous service evaluation. The interviews lasted between five and fifteen minutes, were transcribed

verbatim and analyzed thematically following the steps of Braun and Clarke (10).

This study was approved by the authors' university ethics committee, and all women consented to take part and have their interview recorded.

## **Results**

Two themes were identified with the first theme broken down into two sub-themes; pragmatic issues (generic and pregnancy-specific) and lack of motivation. See table 1 for quotes relating to each theme.

Regarding the first subtheme, 'Generic pragmatic issues', the women interviewed reported not being able to attend the service due to its inconvenient location, mentioning barriers such as lack of transportation and distance to the venue. The other main barrier reported was the timing of the course, with several women mentioning being unable to attend due to the service being held during work hours. One participant mentioned that she was worried her manager would not take her seriously if she took time off work to attend the six week course, despite her being allowed to do so legally.

For the second subtheme, 'Pregnancy-specific pragmatic issues', several participants complained of pregnancy-related pains and reported this as a reason why they could not attend the course. Others mentioned their limited mobility and that they struggled walking for long or very far.

For the second main theme, 'Lack of motivation' some participants reported not being interested in the service. This lack of motivation was due to not wanting to focus on or worry about their weight in pregnancy, and instead enjoy being pregnant.

## Discussion

This study unearthed both pragmatic and motivational barriers to participating in a weight management service during pregnancy. The generic pragmatic issues reported by participants are to be expected considering the service was held in the community during weekdays. Finding a convenient time and place suitable for all participants will be difficult. That said, the service was offered during weekdays only, and it may be that uptake rates will increase if it is offered during the evening or weekend at a more central location than currently being used. If an evening or weekend time was to be organized, fewer women are likely to have to take time off work to attend.

Whilst women in the UK are legally entitled to attend maternity care during work hours, research has suggested that they may feel reluctant to disclose or draw attention to their pregnancy (11). In this case, the service was offered to the women due to their high BMI, something they may not want to bring to the attention of their colleagues or employer. Further, obese women may have more antenatal care appointments than pregnant women of a healthy weight, and may thus feel less able to take additional time off work.

The main pregnancy-specific barriers identified in this study were that of pregnancy-related pains and mobility limitation. Several women mentioned that they were unable to attend the community-based service due to not feeling well or being unable to walk far. This issue, together with the pragmatic barriers raises the question; is a group-based service held in the community the most suitable service to help obese women keep a healthy weight in pregnancy? Obese pregnant women often

report mobility limitations (6), and thus a service that is provided in the woman's home or at another convenient location may be better suited to these women.

Lastly, the motivational barriers mentioned by our participants echo previous research (6). A lack of interest in keeping a healthy gestational weight gain is commonly reported (12), and has previously been cited as the main reason for why pregnant women do not want to attend services targeting obesity (6). This lack of interest may be linked to receiving insufficient information from their midwife and/or other health professional regarding the importance of keeping a healthy weight in pregnancy (12). Moreover, pregnant women expect to gain weight in pregnancy, thus may not be in the right frame of mind to change their eating or physical activity habits (7). In other words, some obese women may not see pregnancy as a suitable time for behavior change.

Potential limitations of this study are the small study sample, and that some women were interviewed postnatally. This is due to the small pool of participants that could be recruited for this study. Reassuringly, despite some women being interviewed a few months after they had been referred to the service, the barriers they reported did not differ from the pregnant women's reported barriers. A considerable strength of this study is that most participants agreed to participate and seldom is this participant group, i.e. those declining a service, interviewed. This makes these study findings important, as well as informative for future service development.

Furthermore, these findings build on what has been suggested previously based on anecdotal or quantitative findings (4-6). It is important to note however, that the barriers discussed here are centered on community services for obese pregnant women and should not be confused with barriers towards participating in research interventions targeting weight management in obesity. For example, a recent research

intervention found that only 25% of those obese pregnant women assessed for eligibility, declined participation (13), and the reasons for declining participation may be different than those identified in this study. Similarly, the number of women completing a research intervention may be different compared to a community service. In the first year the current study was running, approximately 50% of participants completed the six week course, whilst for a research intervention this equivalent number was above 90% (14). More research is needed to identify how community services can learn from research interventions in terms of uptake and completion rates.

Our findings have implications for how to develop the best type of service for pregnant obese women targeting their gestational weight gain. A convenient time and place is crucial and despite being legally entitled to take time off work to attend, health professionals cannot assume that women will want and feel able to do so. Additionally, an alternative service (maybe home-based or via telephone or email) is likely to be needed for women who struggle to walk or suffer other pregnancy related complications. Importantly, it must be ensured that obese pregnant women understand why it is important to keep a healthy weight in pregnancy (12). Lastly, low service uptake will have cost implications for health providers, with the service being more expensive than if it had been well-attended.

In summary, the obese pregnant women we interviewed reported not wanting to attend a weight management service in pregnancy due to its inconvenient time, location, pregnancy illness or a lack of motivation. We have provided suggestions for how these issues can be overcome, if health providers decide to offer this type of community-based service to their obese pregnant women.

## **Acknowledgements**

We thank Chloe Patel for help with data collection.

## **Funding**

This study was part funded by NHS Coventry, England. The funder was not involved in the design, data collection, analysis or interpretation of data, in the writing of the manuscript or in the decision to submit the manuscript for publication.

## **Conflicts of interest**

The authors report no conflict of interest.

## References

1. Hemminki E. Perinatal health in the Nordic countries -- Current challenges. *Scand J Public Health*. 2009;37:671-3.
2. Heslehurst N, Bell R, Rankin J. Tackling maternal obesity: the challenge for public health. *Perspect Public Health*. 2011;131:161-2.
3. Thangaratinam S, Rogozińska E, Jolly K, Glinkowski S, Roseboom T, Tomlinson JW, et al. Effects of interventions in pregnancy on maternal weight and obstetric outcomes: Meta-analysis of randomised evidence. *BMJ*. 2012;344:e2088.
4. Claesson IM, Brynhildsen J, Cedergren M, Jeppsson A, Sydsjö A, Josefsson A. Weight gain restriction during pregnancy is safe for both the mother and neonate. *Acta Obstet Gynecol Scand*. 2009;88:1158-62.
5. Claesson IM, Sydsjö G, Brynhildsen J, Blomberg M, Jeppsson A, Sydsjö A, et al. Weight after childbirth: A 2-year follow-up of obese women in a weight-gain restriction program. *Acta Obstet Gynecol Scand*. 2011;90:103-10.
6. Davis DL, Raymond JE, Clements V, Adams C, Mollart LJ, Teate AJ, et al. Addressing obesity in pregnancy: The design and feasibility of an innovative intervention in NSW, Australia. *Women Birth*. 2012;25:174-80.
7. Knight BA, Wyatt K. Barriers encountered when recruiting obese pregnant women to a dietary intervention. *Nursing times*. 2010;106:20-2.
8. West C. Developing a support service for overweight women. *Pract Midwife*. 2010;13:19-21.
9. Institute of Medicine. *Weight gain during pregnancy: reexamining the guidelines*. Washington, DC: National Academy Press, 2009.

10. Braun V, Clarke V. Using thematic analysis in psychology. *Qualitative Research in Psychology*. 2006;3:77-101.
11. King E, Botsford W, Huffman A. Work, Family, and Organizational Advancement: Does Balance Support the Perceived Advancement of Mothers? *Sex Roles*. 2009;61:879-91.
12. Olander EK, Atkinson L, Edmunds JK, French DP. The views of pre- and post-natal women and health professionals regarding gestational weight gain: An exploratory study. *Sex Reprod Healthc*. 2011;2:43-8.
13. Vinter CA, Jensen DM, Ovesen P, Beck-Nielsen H, Jorgensen JS. The LiP (Lifestyle in Pregnancy) study: a randomized controlled trial of lifestyle intervention in 360 obese pregnant women. *Diabetes Care*. 2011;34:2502-7.
14. Lindholm ES, Norman M, Kilander CP, Altman D. Weight control program for obese pregnant women. *Acta Obstet Gynecol Scand*. 2010;89:840-3.

Table 1. Quotes from the obese pregnant women illustrating the themes.

| Theme                                | Participant quote  |
|--------------------------------------|--|
| Pragmatic issues: generic            | <p>I have no transport...(Participant 3)</p> <p>...the thing is it was the times, I couldn't make the times it was during work hours. (Participant 1)</p> <p>...because I have quite a lot of hospital appointments and medical appointments and things, I didn't want work thinking I was taking the piss to be honest, ... I know my manager is kind of obliged to give you time off for medical appointments especially when they are related to pregnancy, but to say I wanted half a day a week for six weeks. I just thought that was a bit too much to ask to be honest. (Participant 10)</p> |
| Pragmatic issues: pregnancy-specific | <p>...when there was a class ready I was too erm I was too erm ill to go. (Participant 5)</p> <p>Its just too far away, to be fair 'cause I'm struggling a bit at the minute 'cause I'm getting pains now that I am walking. (Participant 6)</p> <p>Yeah, cos you know I can't walk. When I walk from here to there, like you know just for 10 minutes yeah I've got pain. (Participant 11)</p>  |
| Lack of motivation                   | <p>I just thought I didn't want to, I wanted to enjoy being pregnant rather than having to worry about all them things I know about healthy eating and stuff in pregnancy anyway. (Participant 8)</p> <p>Just because obviously your body is going to get bigger anyway so you don't want to worry about it [weight]. (Participant 6)</p> <p>...it's not anything I'm interested in. (Participant 4)</p>   |