



# Midwives' perceptions and knowledge of maternal obesity: experiences of providing healthy eating and weight management advice to pregnant women

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# Maternal obesity and weight gain in pregnancy

Maternal obesity is arguably the biggest challenge facing maternity services with 50-60% of women classified as overweight or obese on entering pregnancy (Martin et al 2015).

The UK now has the highest level of maternal obesity in Europe (Poston et al., 2016).

Obesity in pregnancy carries significant health risks for both the mother and baby.

Excessive gestational weight gain (GWG) can incur equivalent health risks to obesity (Heslehurst et al., 2014) and is considered a significant predictor of long term obesity in women (Amorim et al., 2007; Mamun et al., 2010).

Obesity and its consequences can persist into future generations (Stupin & Arabin., 2014)

# Current guidelines

Broad scope of current clinical guidelines advocate

- a healthy weight before pregnancy,
- a healthy diet coupled with being physically active during pregnancy and
- returning to a healthy weight after pregnancy (NICE, 2016)

All women presenting for maternity services should receive healthy eating advice **from midwives** (NICE 2015)

Those with a BMI  $>30\text{kg/m}^2$  should be offered a structured weight loss programme after birth (NICE 2010)

# Current guidelines

Women's weight management issues and needs for support differ, depending on their BMI status (Narayanan et al., 2016)

In the UK, there is a lack of evidence based guidelines and scientific policy or consensus on what constitutes appropriate GWG.

International variation in clinical guidelines for GWG; the most widely applied in clinical practice are those published by the American Institute of Medicine (IOM 2009).

UK clinical guidelines recommend the avoidance of weighing pregnant women beyond the initial appointment (NICE 2010)

# Pregnancy is a ‘teachable moment’

Pregnant women become more aware of health and seek clear, credible, evidence-based information (Ferrari et al., 2013; Olander et al., 2012).

An opportunistic period to adapt eating patterns to healthier behaviours if the current dietary pattern is not optimal.

Pregnancy is a ‘powerful teachable moment’ for behaviour change (Olander et al., 2016; Phelan 2010).

Highly complex obesity issues – maternity professionals may have difficulties incorporating healthy eating and weight management conversations into clinical appointments (Herring et al., 2012; O’Cathain et al., 2012).



# Netmums and the Royal College of Midwives survey

- 70% of women increased their food intake to some degree during pregnancy and 9% ate substantially more (Russell *et al.*, 2010).
- 61% didn't have sufficient opportunity to discuss nutrition at their antenatal appointment and only 5% reported they had opportunity for discussion (Russell *et al.*, 2010).
- Obesity exerts increased demands on health care professionals looking after pregnant women and their infants.
- Midwives have been recognised, above all other health professionals, as being responsible for providing 'nutrition recommendations in pregnancy' (WHO 2016)

# Study Aims

Nature of healthy eating and weight management advice being given to pregnant women?

Potential issues with the translation of current guidance?

Barriers experienced by midwives in the communication of advice?

Important issues that must be explored to inform improvements in antenatal care.

**The aim of this study was to explore midwives perceptions, knowledge, and experiences in the translation of healthy eating and weight management advice to pregnant women.**

# Interview schedule

A semi-structured interview schedule was devised based on existing literature and discussion with key stakeholders (midwifery lecturers, midwives, antenatal service providers, nutritionists, dietitians)

Midwives were asked questions such as:

- What advice do you give to pregnant women regarding diet and healthy eating?
- Which resources do you access /encourage patients to access for healthy eating information?
- How do you keep your knowledge about healthy eating up-to-date?
- How confident do you feel discussing weight management with pregnant women?
- How can midwives be further supported to provide patients with healthy eating/ weight management advice?



# Procedure

- Midwifery team leaders were contacted and asked for their permission to contact and recruit midwives.
- Midwives were provided with an information sheet and invited to take part in the study.
- All participants completed an informed consent form.
- Interviews were held on NHS premises, during working hours.
- It was explained that the research was independent of the midwifery service and the aim of the interview was to explore their perceptions and experiences of obesity in pregnancy.

# Methods

Semi-structured interviews were conducted with 17 midwives involved in antenatal care (n9 Liverpool: n8 Ulster).

Interviews were audio recorded & transcribed verbatim

Data were subjected to thematic analysis (Braun and Clarke 2006)

3 key themes were identified.

# Midwives characteristics

Midwives had a range of experience and expertise:

- Six were community midwives and eleven were based within hospital antenatal clinics;
- Some had senior roles including lecturing (1) or supervision (2) and two worked in specialist/high-risk clinics.
- Two had postgraduate qualifications, three had a degree and the remainder had a nursing background followed by a midwifery diploma.

The mean duration of practice was 23.2 years (range 8-38 years).

# Results

- Interviews lasted approx. 27 minutes

Three core themes:

1. 'If they eat healthy, it will bring their weight down' (Midwives misunderstood).
2. 'I don't think we are experienced enough' (Lack of resources and expertise).
3. 'BMI of 32 wouldn't bother me' (Normalisation of obesity)

# “If they eat healthy, it will bring their weight down”: Midwives misunderstood

- Midwives found it difficult to distinguish between the topics of general healthy eating, nutritional needs, GWG, and the risks associated with increased maternal BMI.
- Midwives were able to describe basic healthy eating advice such as food safety issues, referring to ‘not eating for two’ and promoting a ‘balanced diet’. Although, such advice was delivered ad hoc.

Cut out junk  
food

Make healthy  
choices

Cut out fat  
and oil

Don't eat  
blue/soft  
cheese

- Some midwives did signpost women towards sources of healthy eating advice such as NHS ‘managing your weight in pregnancy’
- Midwives were unable to say that women routinely received pregnancy specific dietary advice saying,

*“You have very little time to talk about all those things...diet, sleeping and eating in general...because we are focused on the pregnancy aren’t we and the risks”*

*“We probably spend less time talking about diet and weight than anything else”*

Confusion when asked about the difference in healthy eating compared to healthy weight advice,

“They go hand in hand”

‘It’s the same thing...isn’t it”?

“if they eat healthy it will bring their weight down”

Several recognised that these were different issues

“Diet is general short-term advice”

“Weight advice needs to be more specialised...structured...and long term”

Some midwives recognised that overweight women may have a healthy diet whereas normal weight women may not.

# Appropriate weight gain?

- Most midwives were hesitant or unsure with regard to what constitutes a healthy weight gain in pregnancy.
- One midwife suggested that it should be based on your starting weight.

12kg?

20kg?

24-30lb?

3 stone is too much


“Normal weight women should gain about 2.5 stone whereas overweight women should gain less”

*“That’s a really hard one...because there is no UK guidance on what is a healthy weight gain”*



# “I don’t think we are experienced enough” : Midwives lack resources and expertise

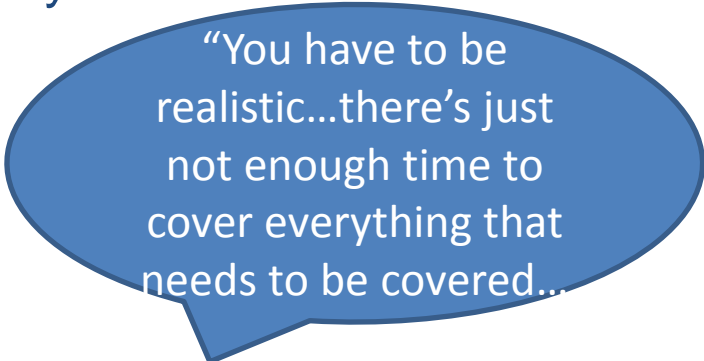
All midwives agreed with the NICE (2010, 2016) recommendation that midwives should provide healthy eating advice.



We are in a good position to talk to them about it and reinforce it.

However, “we don’t have time” was the main barrier in giving such advice.

Midwives cited the ever increasing list of topics they were expected to cover.....with pressing issues such as child protection and domestic violence taking priority.



“You have to be realistic...there’s just not enough time to cover everything that needs to be covered...”

- Midwives acknowledged their lack of expertise regarding weight management advice and referred to limitations in current clinical practice, resources and workload.

*"I think overweight women do need weight management advice throughout pregnancy...I don't think it's within the midwifery remit cause I think it's more specialised....it's unfair to ask midwives to have that knowledge"*

*"I think that is more specialised...we should be able to hand that on to someone else...we are not experienced enough to really tailor diets"*

"We don't have any training (laughs) or updates or anything about diet in pregnancy"

- Expectations of current policy don't translate into appropriate resources for midwives.

- A major challenge faced by midwives is the socio-cultural acceptance and normalisation of obesity in pregnancy.

*“BMI of 32 wouldn’t bother me that much because most women are in this category”*


*“Some women have always been big...and they have had babies before that they didn’t have any problems with, so they don’t understand what all the fuss is about”*

- The fear of causing offence was a barrier to initiating the difficult conversation surrounding weight management in pregnancy.


*“You have to be very careful with your words...don’t you”*

*“Sometimes women will get offended even when you mention the word obese”*

- Most midwives said that they had very few queries about weight gain in pregnancy.
- Consistent with the literature, there was a feeling that women did not recognise they were overweight, or they would rather not know.
- Referrals to weight management services was perceived as a negative outcome,



“...in a way, she (BMI >38) is being punished...having to have appointments at the hospital instead of in the community.....”



“The healthy weight programme is good...but they don't avail of it”

- Regular weighing and ‘singling-out’ for weight management service was seen as humiliating and unwelcomed.
- In contrast recent research (Swift et al., 2016) suggests that women expect to be weighed during pregnancy and want access to specialist advice and services

# Keeping knowledge up to date

- None of the midwives reported any recent training about healthy eating, GWG or obesity
- Knowledge was kept update by
  - Reading midwifery journals, using online resources (e.g. Royal College of midwives site), referring to guidelines (NICE etc) and having conversations with colleagues
- Midwives could cite many services available to support obese pregnant women.....but confusion on the criteria (BMI cutoffs, GP or self) for referral and what services they actually 'had access' to...e.g. dietitians

# Key Highlights

- Midwives have a key role in the translation of nutrition recommendations and in this study, were open to the idea, in the future of providing detailed, tailored dietary and weight management advice.
- The normalisation of obesity, practice limitations, high workload and lack of resources explained the reasons why systematic advice was not part of standard antenatal care.
- Midwives confidence in their own knowledge and fear of causing offence were reasons to avoid engagement in conversations on healthy eating and weight management.

# Key Highlights

- To communicate effectively, midwives need to be supported to promote general healthy eating, nutrition and appropriate weight management advice.
- Currently a mismatch between what the evidence base tells us, what directive policy and clinical guidelines provide, and what midwives actually do in practice.
- There is an urgent need to prioritise maternal nutrition and weight management guidelines.
- Improve maternal and infant outcomes and support midwives in their integral role in the delivery of personalised antenatal care.

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