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"If she wants to eat…and eat and eat…fine! It's gonna feed the baby": Pregnant women and partners' perceptions and experiences of pregnancy with a BMI > 40 kg/m^2

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ABSTRACT

Introduction: women with a raised BMI are more likely to gain excessive weight in pregnancy compared to women with a BMI in the normal range. Recent behaviour change interventions have had moderate to no influence on GWG, and no effect on other perinatal outcomes. Evidence is required regarding the social and cultural contexts of weight and pregnancy. No studies to date have included the views of partners.

Aims: to explore the experiences, attitudes and health-related behaviours of pregnant women with a BMI > 40 kg/m^2; and to identify the factors and considerations which shape their beliefs, experiences and behaviours, and how these may change during and after pregnancy. 2. To determine the impact, if any, of the beliefs and attitudes of significant members of the women's families and social networks upon the women's experiences, attitudes and health-related behaviours in relation to weight and pregnancy

Methods: this was a prospective serial interview study. Semi-structured interviews were conducted with 11 pregnant women with a BMI > 40 kg/m^2, during pregnancy and after birth, and once with 7 partners (all male) of women. Interview questions were designed to be appropriately but flexibly framed, in order to explore and gather data on participants' everyday life, lifestyles, views, experiences, relationships and behaviours, focussing more specifically on beliefs about health, pregnancy, weight and diet. Thematic content analysis was used to formally analyse and unearth patterns in the data.

Findings: the findings can be grouped into six interrelated themes: the complexities of weight histories and relationships with food; resisting risk together; resisting stigma together; pregnancy as a 'pause';receiving dietary advice; postnatal intentions. These themes are interrelated due to the 'spoiled identity' (Goffman, 1963) that the large body represents in western culture and related stigma.

Conclusion and implications: this study provides evidence that there exist deeply ingrained social and cultural beliefs among women and in particular their partners, regarding pregnancy diet and weight gain. Further, this study provides evidence that male partners may resist stigmatised risk on behalf of a pregnant partner. All women (and several men) expressed an intention to adopt healthy behaviours and lose weight once their baby was born. Further evidence is required regarding the means by which women who experience stigmatised risk during pregnancy, and their partners, might be engaged and receptive to health advice. Models which draw on ideals of relationship-centred care, and selfefficacy via open discussion with women and families, engaging women and partners by providing them with an opportunity to talk about their beliefs and concerns, could be explored to inform future research and practice.

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Introduction

Women with a BMI $>30\ kg/m^2$ (defined as clinically obese) are more likely to gain excessive weight in pregnancy compared to women with a BMI in the normal range (Restall et al., 2014), leading to increased risks of high birthweight, and maternal postpartum weight retention with associated risks (Siega-Riz et al., 2009). In women with a BMI $>40\ kg/m^2$ (very severely obese), for whom pregnancy risks are incrementally greater (CMACE/RCOG, 2010), limiting gestational weight gain may reduce the risk of adverse pregnancy outcomes (Crane et al., 2009). A number of randomised-controlled trials have sought to examine the efficacy of pregnancy intervention approaches such as diet and exercise programmes, cognitive behavioural therapy (CBT), and social (cognitive) learning theory, on maternal weight gain and fetal growth (Dodd et al., 2010; Smith and Lavender 2011; Thangaratinam et al., 2012). However, recent RCTs of behaviour change interventions have experienced low uptake (Dodd et al., 2014; Poston et al., 2015), indicating poor acceptability. Multiple systematic reviews (Dodd et al., 2010; Campbell et al., 2011) and meta-analyses (Oteng-Ntim et al., 2012; Agha et al., 2014) have concluded that behaviour change interventions to date which have focused on limiting GWG via a combination of dietary counselling, weight monitoring, and exercise programmes for all categories of women with a BMI $>30\ kg/m^2$ have had moderate to no influence on GWG, and no effect on other perinatal outcomes.

It has been argued that, in common with biomedical approaches to weight loss in the general population, antenatal interventions trialled to date have engaged with maternal obesity as primarily a nutritional phenomenon and that, by employing behaviouralist approaches to lifestyle modification, theoretical underpinnings are based on analyses that regard 'food, bodies and eating as disembodied and disengaged from the social contexts in which people live their lives' (Warin et al., 2008 p.98). The authors of the landmark Foresight Report argue that a broader societal approach is needed to tackling obesity, requiring change at personal, family, community and national levels (Robertson et al., 2007). However, current and recent approaches do not adequately acknowledge pregnancy and increased weight as highly embodied and constantly lived experiences, occurring within, and shaped by, their families and communities (Schmied and Lupton 2001; Throsby 2007).

Recent evidence has identified health behaviours and values shared between partners as a greater contributor to increased weight than other factors, such as the influence of parents and upbringing (Xia et al., 2016) Studies of the general population have found that weight is a common conversation topic for many couples (Bove and Sobal, 2011). In addition, increased weight in fathers has been shown to be associated with increased risks of offspring increased weight (Patel et al., 2011; Fleten et al., 2012). Pregnant women with a BMI $>30\ kg/m^2$ in one small qualitative study described partners as either supportive or unsupportive in their efforts to eat healthily in pregnancy (Heslehurst et al., 2013a) and participants in a study which explored the attitudes of women with a history of gestational diabetes to engaging in physical activity also reported that lack of partner support was a barrier to perceived healthy behaviour change (Graco et al., 2009). However, to the authors' knowledge there are no studies that explore the views of pregnant women's partners regarding pregnancy diet, GWG and associated risks. Evidence of the views of partners regarding pregnancy risk, diet, lifestyle and GWG would broaden understanding of the complexities surrounding the social meaning of weight and diet in pregnancy, including its impact on engagement with formal sources of health information and health interventions (Kraschnewski 2014).

This paper reports findings from a qualitative study which explored understandings of diet, weight and health among pregnant women with a BMI $>40\ kg/m^2$, and their partners. The women attended a specialist antenatal clinic for women with a BMI $>40\ kg/m^2$ during pregnancy in a Scottish city. Focusing on beliefs and experiences regarding diet and weight gain in pregnancy, we explored the embodied experiences of pregnant women, situated within their day-to-day lives and relationships. By drawing on the perspectives of their partners alongside the pregnant women, we aimed to explore how ideas regarding weight and diet are constructed by individuals and within couple relationships during pregnancy, and the consequences for women's engagement with specialist services and formal health messages such as advice regarding GWG.

Aims

1. To explore the experiences, attitudes and health-related behaviours of pregnant women with a BMI $>40\ kg/m^2$; and to identify the factors and considerations which shape their beliefs, experiences and behaviours, and how these may change during and after pregnancy.
2. To determine the impact, if any, of the beliefs and attitudes of significant members of the women's families and social networks upon the women's experiences, attitudes and health-related behaviours in relation to weight and pregnancy.

Methods

Design

This was a prospective serial interview study: 11 pregnant women with a BMI $>40\ kg/m^2$ who were interviewed either once or twice during pregnancy, and once following birth. Pregnancy can be a time of transition, both physically and emotionally, thus a longitudinal approach afforded the opportunity to explore the extent to which pregnancy and birth experiences brought change in participants' views and beliefs. In addition, partners of 7 pregnant participants were interviewed once during the index woman's pregnancy. Data collection and analysis took place concurrently, in order to explore emergent themes (Mason 2002). The study thus progressed iteratively, enabling interview questions and sampling to be guided by the experiences of participants. Semi-structured interviews afforded the flexibility required to gain an in-depth understanding of participants' views and experiences (Brett-Davies 2007). One-to-one interviews were chosen to encourage individuals to discuss sensitive issues, including those they may not feel able to discuss in the presence of a partner.

Ethical approval was granted by NRES committee northwest on 18th December 2014 (REC reference no: 14/NW/1413).

Recruitment and sampling

Eligible women were identified and approached during their attendance at a specialist antenatal clinic in a Scottish hospital, which provides care for pregnant women with a BMI $>40\ kg/m^2$. Participants were selected purposively in order to achieve a sample that broadly reflected childbearing women in Scotland in terms of age, ethnicity and social class. Recruitment to the project began in April 2015, and interviews began in May 2015 and were completed in February 2016. Following initial interviews, each index woman was asked to nominate individuals from her family and/or social network to be approached to take part in the study and to provide them with a recruitment pack. Formal verbal and written consent was obtained in person immediately prior to initial interviews taking place.

In total 53 women were approached to participate in the study and 52 accepted a study information pack. 14 women responded to a follow-up telephone call and 12 women agreed to participate. However, one woman miscarried prior to her interview taking place. Therefore, 11 women took part in an initial antenatal interview. The study protocol originally included two antenatal interviews and one postnatal interview. Five women took part in a second antenatal interview, when

it was decided that, as second interviews were not providing richness and depth in terms of new data compared with first interviews, and due to the limited timescale of the study, these would not be conducted with the remaining six women. Of the 11 women, eight nominated their partner or husband to participate in interviews (two women did not have a partner, and one woman did not wish to approach her partner to participate). Of those approached, seven partners (all male) agreed to be interviewed and one declined (Table 1).

The interviews

Using a broad topic guide, interview questions were designed to be appropriately but flexibly framed, in order to explore, and gather data on, pregnant participants' everyday lives, views, experiences, relationships and behaviours. Specifically, they focussed on weight history and general health, diet and eating, and pregnancy, as well as experiences of pregnancy care. Follow-up interviews explored whether their views had changed during pregnancy. The third interview, which took place in the postnatal period, included questions designed to explore experiences of birth and views on maternity care as well as their perceptions and feelings following birth. Interviews with partners and husbands included questions designed to explore their views and perceptions about health, weight, diet and exercise, as well as their perceptions of their partner's BMI, diet and general health status during pregnancy. Earlier interviews were reviewed prior to follow-up interviews and the topic guide was tailored accordingly. Interviews were digitally audio recorded with consent and transcribed verbatim.

Data analysis

Thematic content analysis was used to formally analyse and unearth patterns in the data. Using an interpretive approach, themes were developed in an iterative and inductive way, involving the breaking down and reassembling of data following a thematic analysis framework developed by Braun and Clarke (2006). This involved multiple hearings of the audio recording and readings of the transcripts in order to become immersed in the data, with concurrent generation of initial codes via note-taking. This was followed by a re-focusing of the initial analysis by arranging early codes into the broader level of themes, using NVivo10 software. Themes were then reviewed and refined, enabling a move beyond initial, more descriptive analysis, to identify participants' ideas and conceptualisations regarding key themes such as stigma and risk. This was followed the development of a more structured framework, enabling further identification of recurrent themes across and within participants' accounts (Braun and Clarke; 2006). Pseudonyms were chosen by participants.

Findings

The findings can be grouped into six interrelated themes: the complexities of weight histories and relationships with food; resisting risk together; pregnancy as a 'pause'; receiving dietary advice; postnatal intentions. These themes are inter-related due to the 'spoiled identity' (Goffman 1963) that the large body represents in western culture. As such, although the women in this study voluntarily attended for high-risk care, thereby acknowledging the 'problem' of their increased weight in pregnancy, both members of several couples individually performed 'identity work' (Faircloth 2010) to simultaneously acknowledge - and resist- the negative associated characteristics of increased weight. In so doing, they negotiated a complex 'in-between' path (Zinn 2008 p439) through pregnancy, navigating the shadow of stigma, biomedical representations of risk, dietary and lifestyle advice, and referring to reassuring messages, lay beliefs and norms regarding pregnancy, food and weight, which they experienced within their everyday lives.

Weight histories: Eating and dieting

Most pregnant participants gave detailed life histories during interviews, including accounts of their weight. Some women linked their early years and past events to adult behaviours, recounting a troubled relationship with food and eating. Some had experienced emotional distress in childhood or teenage years and/or depression in adulthood, and this was characterised for several by what was described as 'emotional' or 'comfort' eating at times of psychological distress. Eva described a difficult childhood, gaining a lot of weight in her early teens, which led to struggles with her weight throughout adulthood:

> "...I started my period when I was like...thirteen, fourteen...and it was like...like when I was a kid I was like...tiny. I was a tiny wee kid. And then I started my period and, you know, you start getting boobs and a butt and then everything else just kept going....ha!...basically [*tearful*] ... And then...I don't know, you just slowly get...fatter and fatter..."
>
> [Eva 28, 3rd baby].

Her husband Eric described the emotional impact he observed her weight had on Eva. However, his comment also demonstrates the complexities of the interplay within their relationship. Asked if Eva's weight and serial dieting was an issue which caused tension, Eric said:

> "It doesn't cause tension. She gets pretty sad... I try to be helpful. I just try to be supportive, but there's not much you can do. You can't force someone to do something. You can say to them, 'Oh, are you gonna do that? But if you're only gonna do it for a month or something, what's the point?' I only step in occasionally, if she's gone on some stupid diet that annoys me, and then err... I'm just like, 'Look, that's enough'. [laughs] 'Here's a bit of cake..."
>
> [Eric 30, Eva's husband, 3rd baby].

However, other women were keen to emphasise that it was not a traumatic history or mental health problems which accounted for their increased weight, but rather an enjoyment of their lives and of what they described as 'good' food. Jane said:

> "Ian and I are fat because we both love cooking. It's not that we don't eat healthy. We love to cook and we love to make big lovely dinners and treats. 'Let's have some potato dauphinoise', and.... we love cheese.... and we have nice tasting food. We don't just eat crap, but we probably eat too much bad stuff. We like to go out and we like cocktails. We like nice stuff. When we want to lose weight we can, but I think we're quite happy really anyway."
>
> [Jane 32, 1st baby].

These women had partners who they also identified as overweight and they described dieting together, deriving mutual support, as well as

Table 1
Table of demographics.

Pseudonym	Age	Parity	Ethnicity	Occupation
Eva	28	2	White American	Mum/student
Eric	30		White British	Unskilled manual
Babs	27	1	White British	Semi-skilled non-manual
JimBob	30		White British	Semi-skilled non-manual
Rachel	38	1	White British	Professional
Ben	40		White British	Professional
Ruth	26	0	White British	Skilled non-manual
Graham	30		White British	Semi-skilled non manual
Mary	38	0	White European	Semi-skilled non-manual
Adrian	28		Black African	Unemployed
Jane	32	0	White British	Skilled non-manual
Ian	32		White British	Skilled non-manual
Louise	32	0	White British	Skilled non-manual
Vincent	32		White British	Skilled non-manual

colluding in 'breaking' their diets. Jane's husband Ian talked about this:

> "And I think what we tend to do when we're on a diet is… one gives permission for the other one to sort of… break their diet. So if you're on your own, you're less likely to do it, less likely to go off your diet… but maybe I say, 'I could really fancy… this tonight', and maybe Jane, sometimes she'll be like, 'No, you can't have that, stick to your diet', and other times it'll be, 'Let's have that', and vice versa, so…"
>
> [Ian 32, Jane's husband, 1st baby].

Resisting stigma together: 'they presume that everybody stuffs their face with cake all day'

Regardless of how they accounted for their weight, all participants resisted stigmatising explanations for their size, and both members of several couples concurred in this, contributing together to the 'identity work' (Faircloth 2010) that each woman undertook to preserve her moral integrity and resist the blame for her size. One couple, Mary and Adrian, described their food choices, stressing how Mary ate healthy food, and was not greedy:

> "I'm not an over-eater. I don't have sweets in the house. I don't eat every single day chocolates and…I don't have that. Like, if I eat an ice cream, I eat an ice cream, like a cone or…[some]thing. I don't eat a whole tub of ice cream, you know? And that was… most of my life, because I'm not a big eater of take-aways or McDonalds or… because I've been born and raised in a family, in a country where we… we eat from scratch. We eat quite natural ingredients as I said, and cook in quite a… healthy way"
>
> [Mary 38, 1st baby]
>
> "She eats healthy, like. Since we've been together, she eats the healthy food, because I like healthy food, and then like…Whenever we go for shopping like, you see our basket is like…veg, fruit, more veg [and] fruit than any other thing."
>
> [Adrian, 28, Mary's husband].

Others, like Eva and Eric, both angrily rejected the assumptions they believed health professionals made about Eva's eating habits and lifestyle. Eva said:

> "I think the thing as well…they think you're just sitting here stuffing pints of Ben & Jerry's, like… that's not what my life is like…" [tearful]
>
> [Eva, 28, 3rd baby].

Using similar language to his wife, Eric expressed the same view:

> "Cos they just go… they *presume* [Eric's emphasis] that everybody's stuffs their face wi' cake all day, cos you… if you look online, it's like… a person who's lost like 10 stone and they're like, 'I used to sit and I used to eat crisps all day', and I'm like, you're full of cr… [isps]? Who even does that?"
>
> [Eric 30, Eva's husband, 3rd baby].

Resisting risk together: 'there are women who are much more at risk'

Almost all of the pregnant participants described themselves as 'healthy', despite their weight. Some attempted to normalise their weight in order to relieve anxiety regarding pregnancy risk. Several women and their partners or just above at pregnancy booking compared themselves favourably to others in terms of weight and associated risk, with some of those who had a BMI of 40 kg/m^2 referring to the fact that this meant they were only just eligible for referral for high risk care. One woman, Rachel, said:

> "When I saw Dr [consultant]… a number of times she made it pretty clear that I'd only just made it into their clinic. That I was one of the smallest ladies that she treats…The last time I saw her in the clinic, she made it pretty clear that she didn't expect to ever see me again. She gave me my plan of care: 'Go and have a nice delivery'"
>
> [Rachel 38, 2nd baby].

Rachel's husband Ben commented on this also:

> "…Rachel is barely within the clinic that we're in at the moment in terms of risk factor. There are women who are at much more risk"
>
> [Ben 40, Rachel's husband 2nd baby].

Other participants, both pregnant women and partners, drew on ecological fallacies in order to negotiate the notion of weight-related pregnancy risk. These included: highlighting other health behaviours, such as drinking or smoking in pregnancy, as more risky than having a high BMI; emphasising pregnancy as by its nature risky, and the experience of complications as randomly occurring among the pregnant population; highlighting the positive pregnancy experiences of family, friends or those accessed online who also had a raised BMI in pregnancy.

Pregnancy as a Pause: '…it feels like it gives you a free pass'

The accounts of many of the women and their partners demonstrated that they both perceived and experienced pregnancy as a time of change in terms of food and diet, and this manifested in different ways. Some women perceived a relaxation of cultural and social pressure to attempt to control their weight once they were pregnant. Five women had been members of commercial slimming clubs immediately prior to becoming pregnant, but stopped attending once they discovered they were pregnant despite four being advised by their club that they could attend during pregnancy. Advice from clinical staff to stop attending, as well as pregnancy symptoms such as nausea were described as reasons for leaving, however, the perceived relaxation from the pressure to lose weight was also an important factor. One woman who stopped going was Babs. She said:

> "I think it goes to extremes in pregnancy, and I think a lot of folk change their diets totally because they think 'I need to eat healthy for the baby' and I'm not saying that I didn't eat healthy meals as well, I just did eat…crisps and chocolate as well…so…"

She explained why she increased her intake of junk foods in pregnancy:

> "Oh, I think it feels like it gives you a free pass. Mmm…yeah, I do. And I shouldn'ae feel that but I do. Mm-hmm. You just think, 'Oh, I can deal wi' it after'… I just think, 'Well, I'm gonna.'. …this is likely to be my last baby, I can lose the weight once I'm done"
>
> [Babs 27, 2nd baby].

Babs' 'free pass' was one which enabled her to eat as she pleased. Her comments indicate her expectation that she would gain excessive weight, and was planning to return to the slimming club following birth, thus intended to enjoy the freedom she felt in pregnancy to eat foods she deprived herself of when dieting. At the high-risk clinic they attended, all participants were advised to limit pregnancy weight gain, and aim for weight maintenance. Babs' husband Jim Bob rejected this advice, indicating instead his belief that Babs should follow her cravings and that weight gain in pregnancy was inevitable:

> "At the minute… she's eating Fray Bentos pies [laughs] and pork pies for her lunch and that because that's what she's wanting and that's *her craving* [Jim Bob's emphasis]. Is it bad? Is it good? It's not having any ill-effects on her, from what I can see and that…She's going to put weight on cos she's pregnant, there's no denying that. After her pregnancy she'll be like,'Oh, look how heavy I am!'"

He went on to outline his view that Babs shouldn't restrict her

intake of food:

"If she wants to eat...and eat and eat...fine! It's gonna feed the baby. OK, there might be a McDonalds and a...a load of crap going in as well, I'm not saying it's all good food and nutrition, but...the baby will take what it needs out of that, so..."

[Jim Bob 30, Babs' husband, 2nd baby].

Other partners expressed similar views, regarding cravings, unrestricted intake and pregnancy weight gain as inevitable, indeed desirable, as it would bring nourishment to the baby. Several women as well as their partners expressed a belief in the benefits of following cravings; that this was their bodies' and their babies' way of 'telling them' what they should eat. Although several women specifically referred to their belief that the need to 'eat for two' was untrue, this was interpreted as allowing oneself unrestricted intake, associated with stigmatised gluttonous wanton consumption. Most women described consciously increasing their intake of certain food groups, such as calcium-rich foods, fruit and vegetables, citing this as recommended by pregnancy health professionals. Many women also described 'allowing' themselves more unhealthy foods or 'treats' during pregnancy. Below, Ruth and Graham's descriptions illustrate this overlap of increasing intake of perceived'recommended' foods, alongside consuming more unhealthy, 'treat' foods, common to several participants' accounts. Referring to cultural beliefs about pregnancy cravings, Ruth said:

"Because, I mean, I have been eating healthily. I've been eating a lot more fruit and things, because I keep on getting craving for certain fruits...[] Because they say whatever baby fancies is what you're neglecting, or what you're missing in your diet. And I was like, 'Right, OK'"

[Ruth 28, 1st baby].

Ruth's partner described the changes in her diet

"[Ruth]'s changed, she's eating loads of fruits and grapes and... [pause] She's eating a lot of shite as well to be fair... rubbish. Takeaway crap"

[Graham 31, Ruth's partner].

Dietary advice: 'I'm bright and I know what's good'

All participants were offered a dietetics consultation as part of the high-risk service and though some participants described their experience of this as reassuring, the information regarding healthy eating was described by all women as not new or useful to them. Several women, like Jane, felt stigmatised by the offer of a dietary consultation, offended by the suggestion that she needed advice. In common with others, she simultaneously acknowledged and reproduced the cultural stereotypes she perceived to be associated with excess weight, while resisting the application of them to herself and her husband. She said:

"We're not miserable old fat people or anything, and we do go out and walk and stuff. I don't think the clinic's going to tell me, 'This is what you should be eating and this is what's good for your baby', because I'm bright and I know what's good"

[Jane 32, 1st baby].

Eva described in detail during her interviews her years-long struggle with her weight. In common with Jane and several other participants, she described feeling frustrated and stigmatised by the advice she was given at the specialist antenatal clinic:

"You know, and I understand it's like, you know, they're just doing it because they're trying to help and... But you're like, well, what's the point in telling me... that, 'You're pregnant, so you can't diet... but you're fat, so you're just kinda like...[*tearful, whispering*]... *really bad*', you know what I mean? [...] Like, I can't do anything about it, so you're making a person feel - you know what I mean? - bad about something they've already got an issue with."

Later, she said

"I mean, I know all this... I mean I've studied this so much... like... I could be a dietitian probably! I just can't implement it, for whatever reason, like... know what I mean?"

[Eva 28, 3rd baby].

While acknowledging that dietary advice was well-intentioned, Eva rejected the notion that simple information-giving alone would be useful for her, alluding in this later comment to the complex reasons underlying her size. She considered herself an expert in food and dieting, and was frustrated by judgments which she perceived as underpinning the advice she received. During her three interviews she described how clinical consultations were emotionally and psychologically difficult for her. Her husband Eric recalled how upset Eva had been on several occasions following her antenatal clinic appointments. In common with other participants, Eva and Eric both described their shared perception that the advice to maintain weight in pregnancy would in practice, result in loss of body fat, due to the increasing weight of the fetus. Eric was scathing about this, suggesting that following such advice could be harmful to the baby. He said:

"How do you lose weight when you're pregnant? It's not gonna happen is it? No-one ever went on a diet when they were pregnant. It's the most ridiculous thing I've ever heard of. I mean, after the baby, fair enough. But I mean...during the birth? Do you want to put the baby at risk? No. So...yeah, it's ridiculous [laughs]. People generally tend to gain weight during pregnancy. I mean, why would you want to lose it? Nah, I don't agree wi' it. So they can... [laughs] ... I tried not to swear, but I was saying they can shove it, you know? Their stupid advice."

[Eric 30, Eva's husband].

Postnatal plans: 'I don't want them to have those same issues that I've got'

All of the women and their partners expressed a desire to have a healthier lifestyle and lose weight once their babies were born. In this context, they acknowledged having health concerns related to their weight, in particular about their fitness and their ability to have an active role in their child's life and to fulfil their perceived cultural ideal of a 'fit' parent. In addition to their intention to be good role models, several participants cited their fear that their children may experience stigma due to their parent's size as an incentive to lose weight. Jane said:

"I don't want to have them having a fat mum that picks them up from school. I don't want them to get slagged that their mum and dad are fat."

[Jane 32, 1st baby].

Her husband Ian worried about the connection between parental and offspring size:

"I don't want our kids to be overweight, and...you...you tend to see that. You see that if you've got parents who are overweight, their children tend to be overweight as well... I don't want them to, sort of, have those same issues that I've got".

[Ian 32, Jane's husband].

In addition, a desire to enhance longevity was cited by some participants. One of these women was Rachel, who described herself as having been overweight for most of her adult life, occasionally embarking on diets and losing some weight, but regaining it again during times of stress or unhappiness, when she 'comfort ate'. Whilst she was a participant in the study, Rachel's baby was diagnosed with Down's Syndrome, shortly after birth. In her interview several weeks

later, she said:

> "So on one level…my instinct was, 'I have to get well now, I have to get…fitter' you know? Because I need to be around for longer. Because there's somebody who needs me more."

She continued

> "…And on the other level, I'm expressing every two hours and so it sort of feels like all bets are off and I can eat whatever I want."

[Rachel 38. 2nd baby].

For most participants, like Rachel, early motherhood led to disrupted sleep patterns due to frequent infant feeding, extreme tiredness and domestic disorganisation, with most partners returning to work following limited paternity leave provision. In addition, when interviewed in the postnatal period, several women were unsure as to the ideal time to re-start weight loss efforts, with some citing caesarean section or breastfeeding as a possible reason for delay. Most women were unsure about where to seek advice, having been discharged from the high-risk clinic. They reported having had no discussion with their community midwives about postnatal weight loss and available support services.

Discussion

Focussing on diet, GWG, and the formal care and advice provided by NHS health professionals within a high-risk hospital-based antenatal clinic, this paper has explored the perceptions and experiences of women with a BMI $>40\ kg/m^2$, and their partners. The views and experiences of pregnant women with a raised BMI regarding health and weight have been explored in previous studies (Furber and McGowan 2010; Mills et al., 2011; Smith and Lavender 2011; Stengel et al., 2012; Heslehurst et al., 2013a); however, the views of couples have not previously been explored. Using qualitative methods, the complex histories and accounts that women provide for their weight have been accessed, including how individuals within a couple may experience and resist weight stigma together, or on behalf of a partner. Participants wished to experience a relaxation of the pressure to lose weight, with both individuals within couples drawing on commonly held cultural beliefs, as well as ecological fallacies, regarding pregnancy risk, diet, weight gain and the embodied experience of pregnancy.

Couples in this study expressed concurring views regarding issues of diet and weight in pregnancy, and these were sometimes at odds with formal healthy eating advice. Pregnancy is 'a time when science and society diverge on the topic of weight' (Kraschnewski 2014 e257) and, as the accounts here demonstrate, there exist deeply ingrained beliefs regarding food and nutrition in pregnancy, such as the benefits of following cravings, the need to increase intake of certain foods and the inevitability of weight gain. It has been observed that people on average gain weight in married and cohabitating relationships (Averett et al., 2008), and that there is a tendency for couples' BMIs to correlate (Jacobson et al., 2007; Di Castelnuovo et al., 2009). There are currently no UK guidelines regarding healthy weight gain in pregnancy (NICE, 2010), and a recent review of interventions concluded that 'there remains no evidence-based approach for any specific dietary regimen to improve pregnancy outcome in overweight and obese women' (Flynn et al., 2016 p326). The findings from this study provide further evidence to support the view that it may be more appropriate and effective to focus on healthy eating and exercise in pregnancy, rather than on GWG (Smith et al., 2015). It has been demonstrated elsewhere that partners can help one another manage their weight (Dailey et al., 2011), and this could be investigated in the context of providing support for healthy eating in pregnancy.

However, the dietary advice participants in this study received in pregnancy addressed only 'the simple physics of energy input and output' (Throsby 2007 p.1563), and was experienced as stigmatising and patronising. Several women rejected the notion that they required information and education abut healthy eating, with some discussing emotional or psychological problems relating to their weight, demonstrating the complex interweaving reasons which may cause and maintain increased weight. Blaxter (2004) theorises that although most people understand healthy lifestyle messages, few succeed in enacting these changes in their own lives. In addition, for large women, although pregnancy is a time when health is a concern, the focus tends to be upon future health, with plans to enact changes being made for after pregnancy (Smith et al., 2016). The accounts of partners in this study demonstrate that they too view pregnancy as a 'pause' from efforts to lose weight and from associated health concerns. Partners as well as pregnant women were engaged with health messages and risk discourses for the future, in particular with regard to avoiding increased weight in their children, via personal weight loss, being active, being a good role model and a 'fit' parent.

Obesity is highly visible and is highly stigmatised in western society (Puhl et al., 2008; Brewis, 2014). In his seminal work on stigma, Goffman argues that, although the stigmatised individual feels a deep sense that (s)he is a 'normal person', (s)he nevertheless simultaneously holds the same beliefs about identity as others, and will perceive that those others will not 'accept' him or her on 'equal grounds' (1963 p17-18). Thus, it can be understood how, as Rich observes, 'fighting fat… can be experienced as highly oppressive in everyday life' (Rich et al., 2011 p7). Within their accounts, women and partners defended dietary habits and attempted to normalise body size, employing similiar 'rhetorical neutralisation strategies' (2016; p20) to those used by participants in Jarvie's study of pregnant women with diabetes and with a raised BMI. It can be argued, therefore, that current biomedical approaches to maternal weight management, which primarily locate the 'problem' of obesity with the individual (Unnithan-Kumar and Tremayne 2011) serve to heighten anxiety and increase feelings of stigma (Aphramor and Gingras 2011; McNaughton, 2011). Therefore it is essential to engage women and partners in non-stigmatising relationships in order to discuss these issues and deliver health messages in a timely and sensitive way. This may be achieved through the development of a relationship-centred approach to pregnancy care, by focussing on individual needs and concerns (Scottish Government, 2010a). In addition, as midwives and other health professionals feel ill-equipped to communicate with and care for women effectively (Olander et al., 2011; Oteng-Ntim et al., 2010; Davis et al., 2012; Heslehurst et al., 2013b; Macleod et al., 2013), a framework that considers the needs of all individuals within a relationship may be considered.

Limitations of the study

The study sample was accessed from one specialist clinic in Scotland. Annually, approximately 50% of eligible women decline referral to this service, and an exploration of views of these women would provide further evidence in this area, although they may represent a hard to reach group. In addition, the study sample was relatively small and as the youngest pregnant and partner participants were 26 and 28 respectively, it is may not be representative of the views and experiences of younger couples, who are typically more socially deprived (Robertson et al., 2007; Scottish Government 2010b). Further, although the sample was broadly representative of the population of the Scottish city from which it was derived (predominantly white Scottish), the views of women and partners from a range of ethnic backgrounds have not been explored here.

Conclusion and implications for practice

Increased weight in pregnancy has garnered attention in recent years from the public health community and mainstream media, which identify large women as being to blame for producing larger, 'obesity-prone' babies (Keenan and Stapleton 2011; Jarvie, 2016). Findings from this study suggest that the 'stigmatised pregnancy' which is

experienced by many women with increased weight may also be experienced by their partners on their behalf. Women may feel better supported by a partner than by formal health care provision, and may be alienated by formal health messages, drawing instead from informal health messages and anecdotal support and advice from their partners, families and broader social worlds.

Women with a BMI $>40\ kg/m^2$ are not a homogenous group, and increased weight can occur for many complex reasons (Jebb, 1997). However, all participants in this study shared both an engagement with, and resistance of, the shadow of stigma, as well as an intention to achieve postnatal weight loss, and were focussed on their future health and that of their children. Evidence is required regarding the content and timing of efforts to engage women and partners in health education programmes, but also the ways in which women who experience stigmatised risk during pregnancy, and their partners, might be engaged and receptive to advice. Approaches which draw on ideals of relationship-centred care, and self-efficacy via open discussion with women and families, engaging women and partners by providing them with an opportunity to talk about their beliefs and concerns, could be explored in future practice and research. This would enable sensitive discussion of risk and support healthy behaviours in pregnancy and beyond, and may contribute to a social and cultural shift in attitudes regarding issues around food and health behaviours in pregnancy. Future research may investigate the development of a programme which lasts from pregnancy to the postnatal period, which indeed for many women will precede the pre-conceptual period for a subsequent pregnancy.

Conflict of interest

None declared.

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