Journal of Behavioral Addictions 1(2), pp. 59–67 (2012)
DOI: 10.1556/JBA.1.2012.2.3

The experience of pregnancy in women with a history of anorexia nervosa: An Interpretive Phenomenological Analysis

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(Received: March 14, 2012; revised manuscript received: May 11, 2012; accepted: May 11, 2012)

Background and aims: To explore the experience of pregnancy for women who have a history of anorexia nervosa (AN), in relation to the impact of AN on pregnancy, and pregnancy on AN. *Methods:* Semi-structured interviews were conducted with six women with a history of AN. Data were analysed using Interpretive Phenomenological Analysis. *Results*: Four super-ordinate themes emerged: 'Effortful resistance of AN'; 'The unvalued self, valued other dialectic'; 'In new territory'; and 'Feeling distanced'. *Conclusions*: Various factors motivated the women to try and change their AN behaviours. This was achieved with varying degrees of success. Attempts to manage AN cognitions and emotions were less successful, and this aspect of their illness persisted. Whilst the baby was viewed as worthy of nurturance, the self was not. Pregnancy represented an unfamiliar experience, and was a time of relative isolation and lack of psychological support. Findings are discussed in the context of theory, research and practice.

Keywords: pregnancy, anorexia nervosa, interpretive phenomenological analysis

INTRODUCTION

Anorexia nervosa (AN) is characterised by low body weight (less than 85% of that expected for age and height), intense fear of weight gain, and disturbance in the experience of one's body weight or shape. The restrictive subtype excludes regular binge eating and purging, while these are typical of the binge-eating/purging subtype (American Psychiatric Association, 1994). AN peaks in adolescence, thus is typically present during the early reproductive lifecycle (Micali, 2010). The associated medical and psychological issues mean that pregnancy in active AN is relatively rare (Key, Mason & Bolton, 2000; Morgan, 1999). Nevertheless its occurrence is being increasingly recognised (Hoffman, Zerwas & Bulik, 2011). A number of adverse consequences can occur for mother and foetus (see below), and careful medical and psychological management is needed (Mazer-Poline & Fornari, 2009; Micali, 2010).

Pregnancy is a time of huge physical, psychological and social change for women. Weight, shape and eating habits will invariably alter considerably (Fairburn, Stein & Jones, 1992). A pregnant woman's body is far from the slim 'feminine ideal' of Western society (Johnson, Burrows & Williamson, 2004). Historically, such changes were considered unimportant (Earle, 2003). Although little researched, work now suggests many pregnant women are very worried about their weight and shape (Swann et al., 2009). Although findings are inconsistent, as pre-existing concerns may alter in various ways, it appears that worries about weight and shape rarely disappear if previously present (Duncombe, Wertheim, Skouteris, Paxton & Kelly, 2008). Given the changes experienced in pregnancy, particularly in weight, shape and eating, and the known medical risks and symptoms of AN, women with AN may find pregnancy particularly challenging (Clark & Ogden, 1999). However, the personal experience of pregnancy in women with a history of AN has received little research attention. Although limited, research into pregnancy in AN has focussed on two areas: (1) The impact of AN on the foetus and neonatal outcomes: findings are somewhat contradictory, but women with a history of AN appear to be at increased risk of low birth-weight infants (Micali, Simonoff & Treasure, 2007), although its significance has been disputed (Ekeus, Lindberg, Lindblad & Hjern, 2006). It has also been suggested (although there is little empirical research) that long-term effects on children may occur by adversely affecting intrauterine and perinatal growth, including neural development (Micali & Treasure, 2009). More specific effects are hard to discern as most researchers do not separate eating disorders by diagnosis. (2) The behavioural and cognitive symptoms of mothers with AN during pregnancy: overall behavioural symptoms seem to decrease somewhat during pregnancy, but return to pre-pregnancy levels post-partum (Blais et al., 2000; Crow, Agras, Crosby, Halmi & Mitchell, 2008; Micali, Treasure & Simonoff, 2007). In contrast, cognitive psychopathology remains elevated throughout pregnancy (Micali et al., 2007). Depressive symptoms also appear to be high (Micali et al., 2007).

With the exception of two papers, research on pregnancy in those with a history of AN has used quantitative methods. Shaffer, Hunter and Anderson (2008), used descriptive phenomenology to explore the experiences of women with eating disorders (EDs) including those with anorexia nervosa (AN) during pregnancy and post-natally. They identified five themes: a constant mental struggle to prevent loss of control; a distorted body image; scale-induced trauma; hiding the lived experience; and post-partum fear and panic.

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ISSN 2062-5871 © 2012 Akadémiai Kiadó, Budapest

This work offers an initial insight, but only two of the ten participants had a diagnosis of AN. The analysis was largely descriptive rather than interpretive, focussing on finding common themes in the data rather than asking critical questions which might reveal features overlooked in descriptive analysis. The second study (Tierney, Fox, Butterfield, Stringer & Furber, 2011) investigated both pregnancy and post natal experiences of women with an ED (including those with AN). They identified four themes: fear of failure; transforming body and eating behaviour; uncertainties about the child's shape; and emotional regulation. It was unclear how many participants had a diagnosis of AN as no formal diagnoses were made. Data were analysed using framework analysis (Ritchie, Spencer & O'Connor, 2003), also primarily a descriptive method. Neither study examined only the first (or alternatively only a later) pregnancy, despite the fact that the first pregnancy is likely to be a different challenge developmentally (Valentine, 1982). Both studies focused on pregnancy and the post natal period. In summary, relatively little is known about the personal experience of pregnancy for women with a history of AN, and about how they make sense of and understand this experience. Gaining a detailed understanding is likely to be useful in developing appropriate and effective support for this group of women, who remain somewhat neglected by services and researchers.

The current study used Interpretative Phenomenological Analysis (IPA). IPA (Smith, Flowers & Larkin, 2009) aims to understand the meanings ascribed to experiences, and takes an interpretive as well as a phenomenological (descriptive) stance. Specifically, the current study explored two areas: the impact pregnancy had on participants' previous/present AN, as well as whether AN had an impact on their experience of pregnancy.

METHODS

Participants

Participants were included if they had a history of AN (Diagnostic and Statistical Manual-IV, American Psychiatric Association (APA), 1994). AN had to be present prior to their first pregnancy. Additional criteria were: oldest child younger than 5 years, able to report on first pregnancy if multiparous (the first pregnancy being the main focus of the study), fluent spoken English, and to maintain homogeneity of the sample, white British. Exclusion criterion was current psychosis.

Procedure

Participants were recruited via regional and national ED specific websites, newsletters and groups, and via general advertising. Women opted in, and were screened over the telephone to ensure they met the criteria. The Structured Clinical Interview for DSM Disorders, Patient Version (SCID; First, Spitzer, Gibbon & Williams, 2002) was used to establish lifetime diagnosis of AN (with and without binge eating) according to DSM-IV (APA, 1994).

Ethical approval was granted by the local University Research Ethics Committee. Written, informed consent was obtained from all participants.

The researcher met each participant at their home for a semi-structured interview lasting 60–90 minutes. Prior to the session participants completed the EAT-26 (Garner & Garfinkel, 1979), to establish current cognitive and behavioural psychopathology. Information was obtained on participant's age, occupation, estimated status of AN at conception, marital status, whether or not pregnancy was planned and any difficulties with fertility, any physical problems during pregnancy and age of child or children.

As suggested by Smith et al. (2009) a semi-structured interview schedule was developed and used flexibly in order to allow each participate to describe their experience of their first pregnancy, and to enable the participant and researcher to engage in a dialogue. Participants were asked about: the story of AN in their lives; their experience of discovering they were pregnant; the impact of the pregnancy on their AN, and the impact of AN on their pregnancy. If women had more than one child, or were currently pregnant, the researcher emphasised that the study was about their first pregnancy.

Data analysis

IPA was chosen as an appropriate methodology as it was consistent with the aim of the study, to explore in detail participants' personal experiences of pregnancy/AN, and the meanings they ascribed to this (Smith & Osborn, 2008). Critical questions were asked of the data in order to interpret rather than merely describe the findings. Since IPA is concerned with the human experience of the world in particular contexts at particular times, and is an idiographic approach, small sample sizes are typical, thus enabling a detailed case by case analysis. Although generalisation may be possible, this is typically done cautiously, and is most relevant to the particular group studied. All interviews were recorded and transcribed verbatim with identifying material removed/disguised. The data were analysed according to the principles of IPA (Smith et al., 2009). This involved reading each transcript a number of times, with notes made about what was significant or interesting in the left hand margin of each transcript. The right hand margin was used to note emerging themes, which were then clustered into subordinate and finally superordinate themes. A table of emerging themes (and illustrative quotes) was constructed to assist this process, with analysis moving to higher level interpretations, within and across cases, but remaining grounded in the data as the process proceeded. The process was iterative throughout, with the researcher repeatedly returning to the original transcripts in order to ground, validate and refine the emerging themes.

Credibility and rigour

Attention was paid to credibility and rigour (Angen, 2000; Fossey, Harvey, McDermott & Davidson, 2002). All emerging themes were checked against the original transcripts by the lead researcher's supervisors. Two individual theme tables were shared with fellow IPA researchers for feedback. An audit trial of the analyses (from initial annotation and notes to final group themes) was conducted for each participant, and final themes were successfully and meaningfully triangulated (involving a process of cross-verifying the findings) with existing research, literature and clinical experience.

Reflexivity

Phenomenological methodologies, such as IPA, recognise that a participant's reality is not explored or constructed in isolation. The process is inevitably influenced by the researcher's perceptions, biases and previous experiences (Langdridge, 2007). Reflexivity is the process whereby the researcher takes account of this influence on their research (Finlay & Gough, 2003). The lead researcher kept a reflexive journal throughout the study to explore and understand her position in relation to the research process and findings.

RESULTS

Participants

Ten women contacted the researcher and six were eligible to participate. At conception, four (Claire, Siobhan, Luella and Katherine) had AN, whilst pregnancy 're-triggered' AN for Fleur. In contrast, Adele had recovered by the time she conceived. Descriptive data on all participants can be seen in Table 1.

Super-ordinate themes

Four super-ordinate themes emerged from the data, two with three subordinate themes, and two with two subordinate themes. The presence of each theme in each participant's data can be seen in Table 2.

Theme 1: Effortful resistance of AN

Persistence of AN psychopathology. For all women (except Adele), the core psychopathology of AN was ever-present; pregnancy represented another chapter in the life-story of AN:

> *It's there, and it's always going to be there, you know, I think once you've had an eating disorder, you always have an eating disorder, I don't think there's any cure, because it's a... a mental illness rather than anything else, isn't it?* (Katherine)

All the women made some change (usually small) to their AN behaviour during pregnancy.

> *Um... the only thing that I did manage to do, mostly, was give up taking laxatives.* (Siobhan)

However, AN continued in thoughts and emotions (despite efforts to resist them), and made weight gain and changes in body shape difficult to tolerate:

> *I just tried to ignore them. They were still there, I was watching the scales go up, and it was horrible... Yeah... It's just horrible watching them go up, and up, and up. I felt very out of control of it.* (Luella)

Table 1. Details of participants

Name*	Age	Area of occupation	Age at AN onset	Estimated status of AN at conception***	EAT-26 total score at interview****	Ages of child(ren)	Marital status	Conception	Notes on pregnancy & baby
Claire	30	Sales & deliveries	16	Active AN	50	5 yrs & 3 yrs	Married, not living with husband	Unplanned, no reported difficulties	No reported problems with pregnancy or baby
Siobhan**	29	Voluntary sector	14	Active AN available	Data not	1 yr	Married, living with husband	Planned, no reported difficulties	No reported reported difficulties
Fleur	27	Project administration	19	Pregnancy re-triggered AN	20	2 yrs	Married, living with husband	Planned, no reported difficulties	Severe hyperemesis gravidarum & symphysis pubis dysfunction; no problems with baby
Luella**	23	Arts	13	Active AN	29	2 yrs	Living with long-term boyfriend	Unplanned, no reported difficulties	Severe, early Braxton Hicks; no problems with baby
Adele**	27	Charitable sector	11	Recovered	0	2 yrs	Married, living with husband	Planned, no reported difficulties	Maternal pericardial effusion; no problems with baby
Katherine**	35	Finance	18	Active AN	25	9 months	Married, living with husband	Planned, fertility treatment	No reported problems with pregnancy or baby

* Names, along with other significant identifying details, have been changed throughout this report.
** Pregnant at the time of interview.
*** This is based on the women's accounts, and was not measured formally.
**** EAT-26 scores can range from 0–78; a score of ≥ 20 is considered 'high'.

Table 2. Occurrences of themes in participants' accounts

Participants	Themes								
	Effortful resistance of AN		The unvalued self, valued other dialectic		In new territory		Feeling distanced		
	Persistence of AN psycho-pathology during pregnancy	Effortfully resisting AN (just) for the duration	Acceptability of AN for self, but not for baby	Acceptance of 'pregnancy' rejection of 'fat'	Unfamiliar lack of control	A new meaning of embodiment	Unmet emotional needs	Isolation	Professional support
Claire	✓	✓	✓	✓	✓	–	✓	✓	✓
Siobhan	✓	✓	✓	✓	✓	✓	✓	✓	✓
Fleur	✓	✓	✓	✓	✓	–	✓	✓	✓
Luella	✓	✓	✓	✓	✓	✓	✓	✓	✓
Adele	–	–	–	–	✓	✓	–	–	–
Katherine	✓	✓	✓	✓	✓	✓	✓	✓	✓

Most women described how behaviour that had changed returned once the pregnancy was over.

> *...as I began to lose weight, after I had him, the fatter I started feeling. And as I lost more and more weight, I guess I just... felt huge. And I went and got all these diet books, and I was like I'm going to lose the weight, I was so determined to lose the weight.* (Fleur)

Motivation for change. Several factors motivated participants to try to make changes to AN behaviours, and attempt to resist their AN thoughts and feelings.

> *Yeah, I did struggle with the changing body, yeah, I did find that hard… , but at the end of the day I knew that was what I wanted. To have kids. So I had to motivate myself to do it.* (Claire)

The women all felt a strong sense of responsibility and obligation to protect the baby by trying to change their symptoms:

> *...You're not really thinking about anyone else, and all you think about is food, and so... um... I just had to stop being like that, it was like ''well I can't think about myself anymore, I've got a baby that I need to, that needs to develop and it needs to be born and it needs to be perfect, and so I can't think about myself anymore''.* (Katherine)

Siobhan and Fleur also felt this sense of responsibility on their partner's behalf:

> *And it wasn't just my baby, it was husband's baby as well, and I didn't want to let anyone down...* (Fleur)

Some women feared being judged negatively by others if they did not try to make changes (as with Fleur above). Most women also felt highly responsible for any harm which might come to the baby from continued AN behaviours:

> *Just being scared I'd kill her. By not eating enough. And then it would all be my fault.* (Luella)

Making the pregnancy concrete – either by information finding about the baby's developmental stage or looking at scan pictures – was helpful, and acted as a strong motivation.

Strategies used "for the duration". Participants implemented various practical and behavioural strategies in order to help them make behavioural changes and try to resist AN. These included: adding an extra daily meal; consuming the recommended number of calories and no more; eating new types of food (e.g. carbohydrates); eating at times of the day when the AN thoughts and feelings were less strong; and stopping ED behaviours (e.g. laxatives, vomiting).

> *I always struggle with the inner voice more towards the evening times. So during the day I suppose I was just so busy anyway, it was a lot easier to eat, so I tended to have more of my food during the day and then I didn't have to worry in the evening.* (Claire)

What was particularly striking was that although many changes were objectively small, subjectively participants experienced them as highly significant, and reported them as achievements resulting from an enormous amount of personal effort. Various cognitive or experiential strategies were used to try to manage the persistent AN thoughts and feelings. For example, ignoring the thoughts, and not responding to them.

> *I didn't react to [the feelings], that's the important thing. I didn't let them fester too much. I think the feelings were there, but I didn't respond to them…* (Luella)

For some women, the knowledge they could return to AN behaviours (e.g. restriction, purging) post-pregnancy, acted as a form of reassurance:

> *And the sort of eating thing, and how I eat, that could just sort of be kept on the backburner until after I'd had the baby. And then I'd start thinking about it again and how I was going to get, you know, lose the weight and get back to how I was before.* (Katherine)

Fleur described setting her thoughts aside for the time being:

> *I think I almost... every time a feeling crept in, I almost saw it as a bag that I put to one side for the time being. It was like, you know, that's an issue for later, that's going to have to be dealt with later...* (Fleur)

Siobhan and Claire described actively 'struggling' against their ED behaviours and symptoms, rather than setting them aside:

> *I was fighting the ED more, I was more prepared to challenge it, and I was more worried about the consequences. (*Siobhan*)*

Theme 2: The unvalued self, valued other dialectic

Acceptability of AN for self, but not for baby. All participants, expect Adele, felt that it was acceptable for *them* to suffer the consequences of AN, but its impact was unacceptable for their baby.

> *I suppose it I do it now as a way of, well, just punishing myself and things like that, but I suppose when you're pregnant you don't want to punish the child as well.* (Claire)

This theme appeared related to that of motivation for change, in that the desire to protect the baby from the adverse consequences of AN was an incentive for change.

Acceptance of 'pregnancy', rejection of 'fat'. All participants, except Adele, reported that the idea of 'being pregnant' appealed, and they felt comfortable with the development of a 'bump', as it was a tangible, concrete, obvious representation of the baby. In contrast, 'fat' – weight which they attributed to themselves, not 'baby' – was not a positive experience. 'Fat' was repellent, distressing, unwanted, and unacceptable, a concrete representation of their negative self.

> *I was OK with the changes which I could directly attribute to being pregnant. I was fine with having a big bump, and I quite liked that. Um... but I wasn't OK with putting weight on anywhere else at all... ...I was happy to look pregnant, and I wanted to look pregnant, I just didn't want to have any fat anywhere else, on my legs, or arms, or face, anything like that...* (Siobhan)

Theme 3: In new territory

Unfamiliar lack of control. Pre-pregnancy, several women were accustomed to (and comforted by) being able to maintain strict control over their diets and AN behaviours. Physical pregnancy-related changes thus meant loss of control:

> *It's kind of like… you're gaining weight, but you're totally powerless to do anything about it. You just gain loads of weight, well I do, when I'm pregnant, without doing anything to gain weight... I think your body's just not in control at all when you're pregnant. It just does what it likes, and you can't do anything about it.* (Luella)

For Adele and Siobhan, pregnancy was a time of reduced control over their lives generally. Siobhan attempted to re-establish control via routines and AN behaviours:

> *I think when things feel out of control you just do what you can to get it back, and that might mean being more, more rigid and restricting more, and I did get very – when I was pregnant with Josh – I did get very set in a routine.* (Siobhan)

Conversely, Adele found lack of influence over her situation meant she relinquished attempts at control, which furthered her recovery.

A new meaning of embodiment. For Luella, Adele and Katherine, pregnancy was a time when their bodies had a different meaning. Their bodies now existed in relation to their babies:

> *I just knew that that was going to be the precious, the most precious thing to look after, and actually my body was supporting and nurturing a little person in there, and that was more important to me than anything.* (Adele)

For Katherine nurturing and developing a baby was "fascinating... a miracle", and for Luella, the ceding of her body to the unborn baby was total:

> *It was like it was her body, not my body.*

Siobhan, however, was painfully aware of missing this transformed sense of embodiment and it affected her ability to feel like a "proper expectant mum":

> *I didn't feel like a pregnant woman because... I had a couple of friends who were pregnant at the same time, and, um... it was so different.. I felt like I wasn't, I wasn't a proper mum, or I wasn't a proper expectant mum.... ...I couldn't really feel pregnant... ...I liked the fact that I could exercise, and I felt, um... I think it made me feel quite strong, and like I could fight my body, and I could overcome this, I don't have to lie down because I'm pregnant. But at the same time I wanted to feel pregnant. Um... and I wanted to be able to do what everyone else was doing.* (Siobhan)

Theme 4: Feeling distanced

Unmet emotional needs. Lack of input from professionals (and in Katherine's case, her family) for emotional needs was remarkable. The main focus was on their physical well-being. Siobhan battled for 9 months to get psychological input from a specialist ED service, but only received it in the final weeks of her pregnancy. Luella felt services were entirely physically-focused, preventing her from expressing her need for emotional support. Fleur felt disregarded, dismissed and alone when she voiced concern about her low mood.

> *So I didn't get any help. And I did actually say to my doctor as well, I remember saying to him I felt really depressed and low, and I wasn't offered any help... I felt as if, 'do people really believe me here? Do people believe that I feel...?'... And so I felt, yeah, I felt wretched... Yeah I didn't feel good. I felt completely and totally miserable when I was pregnant.* (Fleur)

Although support was available for Claire, she experienced it as inadequate.

Isolation. Fleur talked about her experience of isolation, compounded by hyperemesis gravidarum:

> *I guess I felt as if... I had been abandoned to be honest... I wasn't asking for a lot, I think. And that's the thing that I feel so let down about. I wasn't asking for a lot, I was just asking for a phone call, or someone to just pop by and see me, and just sit and chat for an hour, you know. I just wanted some contact with the outside world, and I'm not exaggerating when I say that just didn't happen at all.* (Fleur)

For most women isolation seemed to stem from the AN behaviours, which led to shame, fear of being judged, and sometimes conflict with loved ones. Siobhan felt other people didn't know how to approach her, as a pregnant woman with AN, whilst Katherine felt she might have benefited from peer or group support.

In contrast, Adele's experience was one of connection and engagement. This new-found sociability made her feel vulnerable but she also viewed it as refreshing, welcome and

Table 3. Suggestions for support

Participant	Support theme					
	Psycho-logical / emotional support	Dietary / nutritional advice	Group / peer support	Antenatal professionals to have ED training / knowledge	Specific suggestions for all professionals	Specific suggestions for antenatal support
Claire	✓	–	–	–	✓ Professionals to be more approachable	✓ Regular appointments and scans
Siobhan	–	✓	–	✓	✓ Consistency in advice from different professions	✓ More support with breastfeeding
Fleur	✓	–	–	✓	–	–
Luella	✓	✓	–	–	–	–
Adele	–	–	✓	–	–	–
Katherine	–	–	✓	✓	–	–

part of the process of recovery. In becoming a mother, Adele came to understand and empathise with her own mother's experiences and actions in relation to her AN, which reversed the distance AN had put between them. Unlike the other participants, Adele felt that pregnancy represented a time when her recovery was "pushed ... that extra few percent" and that pregnancy had "kick started something positive in me".

Professional support. As well as a desire for more psychological/emotional support a significant theme was greater awareness of EDs amongst professionals. This was felt to be particularly important as many participants had found that information presented with benign intent by professionals (and clearly part of routine advice in pregnancy) was subsequently used to justify continuation of AN related behaviour. See Table 3 for a detailed analysis of the specific suggestions for support made by the participants.

> *...a lot of what the midwives give you is geared towards staying active and not gaining too much weight during pregnancy, and all the health problems which could be caused by gaining too much weight. It's aimed at the general population, and I can see that now. But... I think when you're in the middle of an eating disorder, you could sort of use it to think ''well, it's just as unhealthy if I gain all this weight, and if I gain weight I'll have gestational diabetes and pre-eclampsia and all these things".* (Siobhan)

Claire talked about finding professionals unapproachable, whilst Siobhan and Luella felt they would have benefitted from additional support such as dietary advice and/or support with breastfeeding.

DISCUSSION

Four super-ordinate themes emerged from participants' accounts in this study of pregnancy in women with a history of AN: 'Effortful resistance of AN'; 'The unvalued self, valued other dialectic'; 'In new territory' and 'Feeling distanced'.

Theme 1: Effortful resistance of AN

The majority of participants reported that their AN symptoms were present throughout pregnancy. Participants experienced a difference between *behavioural* and *cognitive/emotional* symptoms. Most made some small changes to the former, but not to the latter. This is consistent with the findings of others (Blais et al., 2000; Crow et al., 2008; Micali et al., 2007). In particular, a large study which assessed symptoms in AN in detail found that behaviour tends to change but cognitive/emotional symptoms remain high (Micali et al., 2007). Some healthy pregnant women also have high levels of concern about their weight and shape (Swann et al., 2009), and these also tend to be stable during pregnancy (Duncombe et al., 2008). This parallels the stability in our sample, although concerns are clearly greater in those with AN (Micali et al., 2007). As in our sample, behavioural symptoms, such as dieting, decrease in healthy pregnant women, although also remain higher in those with AN (Micali et al., 2007).

Participants in our study were very determined to return to their AN behaviour post natally, and several studies find women with AN or EDs quickly resume their symptoms post partum (Blais et al., 2000; Crow et al., 2008). This finding appears in Shaffer et al.'s (2008) qualitative account. In contrast Tierney et al. (2011) identify women who seemed 'cured' by motherhood. It is unclear if "cure" would generalise to our group as Tierney et al. (2011) did not diagnose participants, and several did not have an active ED. Desire to return to dieting post partum has been reported in healthy pregnant women (Earle, 2003), but, unlike those with AN, participants do not view it as an urgent task.

The changes our participants made were achieved only with extraordinary effort, a fact that is not apparent in existing literature. Even when changes were not successful, enormous effort was involved. Significantly, most changes made were objectively small, yet participants perceived them as huge achievements.

Several factors were cited as motivators. The decision to take responsibility for, and prioritise, the baby over their AN, for themselves and others was important. ED vs. child was an overarching theme in Tierney et al. (2011), but less central here. This may reflect Tierney et al.'s (2011) focus on the child in their interview. Giving priority to the baby (over other personal life goals) emerges in Bailey's (1999) qualitative study of normal pregnancy, but as in our data is not a central theme.

Notions that are absent in other studies are our participants' fears that they might seriously harm or kill their baby

by continuing with their ED symptoms. These were extremely distressing for our participants. Some also feared negative judgement by others, who they believed would blame them if the baby was harmed. Similar fears of others are also reported by Tierney et al. (2011).

More practically, participants read books on foetal and child development, and looked at scan pictures, viewing them as helpful in trying to change their AN related symptoms. These strategies reflect the educational approach that might be taken by cognitive behaviour therapy (CBT), and are rare reports of potentially helpful strategies for this group. Participants used a number of behavioural and cognitive/experiential strategies to directly resist AN symptoms, many echo strategies that might be part of CBT, including third wave mindfulness based CBT. Distinctively, however, participants saw them as temporary, completed in the knowledge they would stop using them post partum. This is consistent with the literature (above) that AN returns post partum but is not one that emerges clearly in existing literature. However, it is reminiscent of AN inpatient research, where patients put their AN on hold, planning to return to it once discharged (Offord, Turner & Cooper, 2006).

Theme 2: The unvalued self, valued other dialectic

Participants were unvalued, while their unborn babies were valued and worthy of protection from AN. The self is regarded extremely negatively in AN (e.g. Cooper, Todd & Wells, 2009; Waller et al., 2007) and our participants also held views of themselves as deserving of punishment, not worthy of care and not a person with value. The contrast between this and their view of their baby does not appear to have been described before. It is consistent with the finding that those with AN do not view others as they do themselves (e.g. Cooper, 1997), but the contrast here is particularly extreme, more so than might be seen clinically than that between those with AN and other adults (Cooper, Whitehead & Boughton, 2004).

Participants distinguished being fat from being pregnant. The former was aversive compared to the latter, and they struggled to cope with weight gain that they could not rationalise as pregnancy. This distinction emerges in Tierney et al.'s (2011) study but is not singled out for discussion. Interestingly, the distinction is also made by healthy pregnant women, who may feel pleased by their "bump" but unhappy with additional weight elsewhere (Earle, 2003).

Theme 3: In new territory

Participants no longer feel in control of their eating, weight and their body shape. This is likely to be particularly disturbing for those accustomed to controlling this and other areas of their lives. Shaffer et al. (2008) describe a battle to prevent loss of control, which is similar to this. Control is known to be significant in AN, playing a role in its onset and maintenance (Fairburn, Shafran & Cooper, 1999; Slade, 1982). It is unsurprising perhaps that lack of control in relation to physicality and life more generally during pregnancy is challenging and unsettling for our participants.

Participants described shifts from the embodied familiarity of AN. These included the experience of nurturing another person and feeling that one's body had become the child's. Interestingly, no participant described the two, self and baby, as distinct, an issue which relates more to identity, and perhaps particularly to the feminist and psychodynamic literature (e.g. Young, 1984), where this has been described in healthy pregnancy (although there is minimal research data to support the distinction).

Theme 4: Feeling distanced

Most participants had little or no professional or informal support. All felt their emotional needs went unmet by services. Several participants felt this stemmed from the shame and guilt of their AN, making it difficult to ask for help; others felt let down by family. Most wanted greater support from professionals, in relation to their emotional and psychological needs, as well as more practical support, such as additional dietary advice or support with breastfeeding. Others also commented upon the potential usefulness of group/peer support. AN is associated with reduced social networks (Tiller et al., 1997) and difficult interpersonal and family functioning (McIntosh, Bulik, McKenzie, Luty & Jordan, 2000). Pregnancy seemed to exacerbate this, and some linked this to shame or fear of judgement about experiencing symptoms whilst pregnant. Social support is important in pregnancy outcomes in healthy women, and interventions exist to improve low birth weight and preterm delivery (Orr, 2004). No such research has been reported for AN, although several participants wanted such support.

Theoretically, AN remains difficult to conceptualise (Jansen, 2001; Waller, 2012). Clinically, it is difficult to treat (Fairburn & Harrison, 2003). Cognitive theories have been proposed, and CBT is recommended by the National Institute of Clinical Excellence (NICE, 2004). A distinction between behaviour and cognition/emotion is made by most cognitive theories; this emerged in our participants' accounts. The persistence of cognition (including concern about weight, shape and eating) during pregnancy, together with the presence of negative self beliefs might explain why the disorder alters only minimally during pregnancy, and re-emerges post partum. The term 'cognition', particularly as conceptualised in recent theories (e.g. Cooper et al., 2009) would encompass several of our participants' experiences: exacerbation in loss of control; concern about weight gain that was fat, not baby; weight, shape and eating thoughts and worry; general preoccupation and worry about the baby; fears about stigma and/or rejection by others. In conjunction with work on imagery, it might also explain embodiment changes. Emotionally, participants often reported great distress during their pregnancy; in cognitive theory this is typically driven by cognition, as are the behavioural symptoms reported.

Clinically, cognitive therapy is often recommended for AN, although it is important to note that the evidence base is limited. Encouragingly, participants found several CBT strategies useful, and with expert help, may have experienced more success in managing their AN. Interestingly, all participants appeared highly motivated to change, and it has been noted that pregnancy can be an ideal opportunity to intervene in AN (Madsen, Hørder & Stöving, 2009). Unfortunately, most of our participants experienced difficulty accessing psychological help. This is worrying, given the risk that AN poses, particularly when the patient is pregnant. Participants wanted to see more education for professionals, and this indeed seems important.

This research has some limitations. Sample homogeneity is important in IPA (Langdridge, 2007). All participants had

a history of full-syndrome AN *prior* to conception, but assessing homogeneity (retrospectively) of AN *at the time of* conception might also have been useful. It would also have been useful to have established AN sub-type (restrictive or binge/purging) at the time of conception, as it is possible that the experience of pregnancy is different in the two sub-types. This is likely to have required a larger sample size than studied here, in order to make between group comparisons. However, it may be an important topic for future research. Member checking (in which the researcher returns to participants to present their analysis and interpretations in order to verify, clarify, refine and develop themes), might have been helpful in developing and validating themes, as well as increasing participant involvement in analysis and interpretation. Delay between the experience of pregnancy and participants' reporting may have made for less accurate accounts. However, this is not normally considered particularly problematic in IPA, where reality is not objective and singular, but multiple and shifting, and no one 'correct' or 'true' version of reality exists (Langdridge, 2007).

Future research might usefully use IPA to explore the experience of pregnancy for those with bulimia nervosa (BN), and eating disorder not otherwise specified (ED-NOS). In AN, as well as investigating the impact of sub-type, co-morbidity, such as different personality traits or different co-morbid diagnoses, particularly depression, may be important areas of research and warrant further, more detailed exploration. It also remains unknown as to whether women with AN experience similar challenges during subsequent pregnancies. Alternative qualitative methods might also be useful. Given the relative lack of theory about pregnancy and EDs, which affects our ability to provide adequate psychological help, grounded theory might be useful in providing a more explanatory account. This might be followed by focus groups to identify the most useful types of intervention.

Further work is needed to explore some of the themes that emerged in more detail than was possible here. These include self and identity, including the boundaries of self and baby, and change in embodiment. The discrepancy between the desire for change and the large number of motivating factors identified, but general failure to change is intriguing and requires further investigation. Study of those who have successfully changed their AN psychopathology in pregnancy would be useful here. Work is needed to investigate the experiences of women in subsequent pregnancies, and the experiences of partners, which is overlooked in the literature.

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